

United States Department of the Interior
National Park Service



National Register of Historic Places Multiple Property Documentation Form

This form is used for documenting property groups relating to one or several historic contexts. See instructions in National Register Bulletin *How to Complete the Multiple Property Documentation Form* (formerly 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

X ☐ New Submission ☐ Amended Submission

A. Name of Multiple Property Listing

Carey and Reclamation Acts Irrigation Projects in Oregon, 1901-1978

B. Associated Historic Contexts

Carey Desert Land Act Projects in Oregon, 1901-1950

Federal Reclamation Projects in Oregon, 1902-1978

C. Form Prepared by

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D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation.

(See continuation sheet for additional comments.)

[Signature]
Signature and title of certifying official: Deputy State Historic Preservation Officer

5/26/2017
Date

Oregon State Historic Preservation Office
State or Federal Agency or Tribal government

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

[Signature]
Signature of the Keeper

7/10/2017
Date of Action

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Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C.460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, PO Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503

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E. Statement of Historic Contexts

(if more than one historic context is documented, present them in sequential order.)

The use of irrigation to support agricultural production has been a well-established feature of developed cultures for millennia. It has been the basis of the economies and industrial development of numerous societies throughout history and, particularly in the arid and semi-arid areas of Asia, Africa, and the Americas, has proven formative in the development of communities and populations and the physical landscapes they inhabit.

Irrigation is the artificial application of water to land or soil, most often employed in the cultivation of agricultural crops, the maintenance of landscapes, or the re-vegetation of disturbed areas. In several western states, including Oregon, its systems have provided reliable water supplies to safeguard against drought and to promote higher crop yields and increased food production. Ultimately, irrigated farms supply food to both rural and urban communities, making it available for local use or export, generating growth in other areas. These conditions have promoted economic development, including the support and creation of diverse agricultural and industrial economies, at the local, state, and regional levels. Scientifically, irrigation improves water conditions in soils, increasing the water content of plant fibers, dissolving nutrients and making them available to plants, and helps regulate soil and surface temperatures. These factors improve the quality and output of crops. More practically, irrigation affects farm production in several important ways:¹

1. Increased yields – When irrigated, yields of conventional crops (i.e., crops grown on both dryland and irrigated land) are commonly increased two- to three-fold or more than non-irrigated crops.
2. Crop diversification – Irrigation makes possible the production of a broader range of crops, many of which are considered specialty crops (crops that are generally not viable under dryland agriculture). These are typically higher-value crops.
3. Stability – Irrigated crop yields are more stable and reliable, resulting in greater financial certainty for producers, reducing crop insurance costs, and helping assure that production targets can be met.
4. Diversity – Irrigation fosters diversity in farm production. For instance, irrigated agriculture facilitates the cultivation of crops necessary to support livestock production.

Compared to dryland agriculture, irrigated agriculture demands greater up-front capital investment, but frequently provides a higher return on this investment and further stimulates economic activities in other areas, such as storage, transportation, and processing. Historically, these areas have been key to community growth and development. Beyond agriculture, irrigation systems have also played a prominent role in the histories of mining, hydroelectric power development, municipal water supplies, and sewage disposal.

In North America, indigenous cultures of the American Southwest are known to have employed extensive agricultural irrigation systems for many years prior to European contact. These systems helped these cultures to develop and thrive in otherwise harsh arid environments.² The same can be said about irrigation

¹ Norman D. Kimball and Emery N. Castle, *Secondary Benefits and Irrigation Project Planning* (Corvallis, OR: Agricultural Experiment Station, Oregon State University, May 1963), 3; Irrigation Water Management Study Committee, *South Saskatchewan River Basin: Irrigation in the 21st Century*, 1 (Lethbridge, Alberta: Alberta Irrigation Projects Association, 2002), 140; Stephen A. Thompson, *Water Use, Management, and Planning in the United States* (San Diego, CA: Academic Press, 1999), 145-150, 163. For in-depth statistical analysis see also, the U.S. Department of Agriculture's analysis of 2008 and 1998 Farm and Ranch Irrigation Survey (FRIS) data, published online at <http://www.ers.usda.gov/data-products/western-irrigated-agriculture.aspx>, accessed October 2016.

² In the Salt River valley of Arizona, for example, it is estimated that more than 250,000 acres were irrigated by more than 1,000 miles of canals and ditches prior to the arrival of Europeans. Spanish missionaries and settlers in what are now the states of California, Arizona, New Mexico, and Texas later constructed their own water supply systems in the seventeenth and eighteenth centuries. Notably, Spanish technologies developed after the Moorish conquest were merged with local indigenous practices, resulting in systems that featured water lifting mechanisms, earthen ditches, stone aqueducts, and log flumes. Michael S. Hall, "Irrigation Development in Oregon's Upper Deschutes River Basin, 1871-1957: A Historic Context Statement" (Bend, OR: Deschutes County Community Development Department, 31 August 1994), 1.

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development in the United States during the late-nineteenth and early-twentieth centuries. In the United States, the use of irrigation in agriculture was an important factor in the settlement of the American West and particularly its vast areas of arid and semi-arid lands, which were otherwise considered inhospitable to settlement and agricultural production. Such conditions severely limited agricultural development in these regions. Irrigation was also frequently used in the development of the mining, timber, and cattle industries in the American West during this period. However, consideration of these related topics are outside the scope of this document.

The purpose of this Multiple Property Documentation is to discuss the development of agricultural irrigation by the United States government within the geographic context of the central and eastern portions of the State of Oregon, and to provide a framework for the identification and evaluation of extant irrigation systems in these areas, pursuant to National Register eligibility criteria. Due to the geographical limits of the data collection and analysis that informed this document, as well as the complexities of managing irrigation systems that extend across state lines, this multiple property document applies only to irrigation systems that exist entirely within the boundaries of the State of Oregon.³ For the purposes of this study, an agricultural irrigation system is considered to be an engineered construct of water conveyance features with the intended purpose of diverting a natural flow of water (e.g., from a river, stream, or other drainage) and artificially distributing this water to a specific vicinity to support agricultural production. Commonly referred to as an “irrigation project,” these constructs have ranged in size and capacity from several hundred feet and a mere trickle to hundreds of miles and river-sized flows, depending on when, where, and for what purpose they were created. Nearly all, however, have shared similar features and characteristics that facilitate the inference of historical themes, contexts, and development patterns across time and space, and the identification of common property types. Geographically, they are each typically associated with one of Oregon’s identifiable watershed basins or sub-basins and the principal rivers or streams contained in these areas (Figures 1 and 2).

The typical irrigation project built in Oregon in the late-nineteenth and twentieth centuries consisted of a gravity-based system, usually comprising features that could be placed within one of three categories. Functionally and for the sake of simplicity, these categories are classified as: 1) diversion structures; 2) water conduits or conveyances; and 3) flow control and measuring devices. These categories correlate with the property types presented in Section F. Many irrigation projects also contained a number of other appurtenant features, which supported the operation and maintenance of a given system, or were characteristics of their construction. However, these three categories encompass the features most commonly encountered in a given irrigation system, which were essential components of nearly all irrigation projects in Oregon, regardless of their time period or geography. Differences among irrigation projects were typically only in the materials or design of individual features, or their size and capacity. More specific information about these categories and their definition as property types is provided in Section F.

Historically, an irrigation project’s functionality began with a diversion, which was the structure employed to divert water from a natural source, such as a river or stream. As a property type, diversions consisted of a dam, check, or other blocking structure extended out into a watercourse, which forced a desired water flow into a network of earthen or concrete-lined channels, categorized as water conveyances or water conduits. The largest of these channels, often referred to as the main canal, originated at the diversion and typically served as the main artery of a reverse tributary system. From this primary resource or trunk, the system then branched like a tree to a network of increasingly smaller conduits referred to as laterals, sublaterals, and ditches. It is through this network that water was conveyed from its natural source to an agricultural field for use in cultivation or for livestock. Water control and measuring features, such as headgates and weirs, guided the passage of water through the network and helped ensure that water was equitably delivered to a system’s

³ The primary case study examples that inform this document are the Central Oregon Project and the Vale Project. These two projects were inventoried in their entirety as a means of gathering relevant data, as explained further in Section H of this document. Other projects are mentioned throughout this document to illustrate points, or provide examples. There are two identified irrigation systems that extend across the Oregon border into neighboring states, and therefore to which this multiple property document does not apply. These are the Klamath Project, which exists in California and Oregon, and the Boise Project, which exists in Idaho and Oregon.

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water users and in concert with prevailing water rights. Water flow typically began at the highest point of a project, ending at its lowest, relying upon gravity and hydraulic pressure to drive the system.

Irrigation projects of this type are considered to be historically significant in Oregon for several reasons. On a local level, irrigation provided the commercial and economic basis upon which many Oregon communities were first established and subsequently developed. This importance was particularly true for communities located within the state's arid and semi-arid regions. Namely, irrigation enabled agricultural production in locales where dryland farming was severely limited or not possible and provided an economic basis for population growth and commercial and industrial development. It also figured prominently in the promotion of settlement and colonization activities throughout the state (and not just in arid and semi-arid areas) and was central to land speculation and real estate development at a local level. Without irrigation projects, much of the agricultural production, settlement, and community building that characterized Oregon's history from the 1890s into the mid-twentieth century would not have happened, particularly in its arid and semi-arid regions.

Statewide, the history of agricultural irrigation in Oregon provides testimony to the social and cultural perceptions of settlement in the American West during the late-nineteenth and twentieth centuries. Oregon's irrigation projects represent the formation of policies and legislation by both the state and federal governments, the implementation of such policies at a local level, and their subsequent evolution over time. Such policies began with the ad hoc development of irrigated agriculture based on prescribed water rights in the 1850s and 1860s, followed by attempts to incentivize and regulate irrigation at a state level in the 1870s and 1880s. Thereafter, policies on irrigation development increasingly became national issues that had direct and lasting influences on the growth and development of Oregon's agricultural regions. The Carey Desert Land Act of 1894 (Carey Act) and the Newlands Reclamation Act of 1902 (Newlands Act), for example, both had significant influences on the creation and development of irrigation projects in Oregon, which in turn substantially affected settlement, agricultural production, population growth, and the commercial and economic development of towns and communities throughout the state.

Finally, certain aspects of Oregon's irrigation projects represent the evolution of irrigation technology between the late-nineteenth and twentieth centuries and innovations in the engineering of irrigation systems on an individual basis. These characteristics are evidenced in the design and materials of the property types that compose an irrigation project (presented in Section F) and can vary between private and federally constructed irrigation systems. Several of Oregon's irrigation projects established under the Carey Act, for example, are considered to be among the largest and most successful privately developed irrigation systems in the nation. Others have more infamous reputations. Similarly, several of Oregon's federal irrigation projects were among the first in the country and their implementation served as a testing ground for later developments.

To help in the consideration of Oregon's irrigation projects, the discussion in this section is divided into three principal parts. The first is a brief, general history of irrigation in the United States and its early development in Oregon, leading up to and immediately following the state's adoption of the provisions of the Carey Act in 1901. Often closely associated with early homesteading and settlement efforts, irrigation for the purposes of agricultural production was initially carried out by individual settlers in attempt to tame the land and overcome harsh environmental conditions, and to provide a sustainable livelihood with limited resources. These individual efforts eventually led to the organization of cooperatives and companies, which constructed even larger irrigation projects. Reaching beyond the framework of an individual farm or ranch, the purpose of these larger projects typically was to provide water for use by a distinct population or community, establishing a basis for its founding, initial development, and continued growth over time.

This section is followed by the presentation of two historic contexts relevant to the history and development of federal irrigation projects in central and eastern Oregon. These contexts may be summarized as the following:

1. Carey Desert Land Act Projects in Oregon, 1901-1950 – The Carey Act had a profound effect on Oregon's rural landscape. This context discusses the establishment of the Carey Act, the social,

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cultural, and political trends that led to its passage, and its adoption by the State of Oregon in 1901. The Carey Act provided the first effective federally supported framework for the irrigation development of public lands in Oregon and produced widespread change in the state's arid and semi-arid regions. Areas of central Oregon, in particular, benefited from the proliferation of irrigation projects under the Carey Act, and many of its cities and towns would not exist if not for this legislation and the projects it spawned. Irrigation projects established under the Carey Act also represent a shift in the history of Oregon's irrigation development from individual and cooperatively-owned projects to the emergence of larger corporate enterprises, primarily intent on the speculative development of public lands and a profitable return on capital investment.

2. Federal Reclamation Projects in Oregon, 1902-1978 – The Newlands Act initiated the federal government's direct involvement in the promotion and development of irrigation projects in the American West. Since this time, the United States government has constructed fifteen distinct irrigation projects in Oregon, including twenty-nine dams. As irrigation projects, some have had marked effects on Oregon's physical landscape and the growth and development of individual Oregon communities, and have served as drivers of economic and agricultural growth on both local and regional levels. Moreover, some of the individual components of these projects are recognized as innovative in their engineering design and construction, sometimes at a national level. This section describes the history of the United States' federal reclamation program and its legacy in Oregon.

These two contexts were developed, in part, through close examination of two existing systems within Oregon as case studies, the Central Oregon Project and the Vale Project. The Central Oregon Project belongs to, and greatly informed the development of the first context, "Carey Desert Land Act Projects in Oregon, 1901-1950," and the Vale Project provided the case study subject matter for the second context, "Federal Reclamation Projects in Oregon, 1902-1978." The potential significance of irrigation projects in Oregon is not limited to these two contexts. The organization of irrigation districts following the passage of a revised Oregon Irrigation District law in 1917, for example, is another context that could be explored further, particularly as it pertains to the transition of irrigation projects from private to public ownership. Other possible historic contexts might address irrigation projects in less arid environments, such as the Willamette Valley or the Rogue River basin. Consideration of these and other specific historic contexts are outside the scope of the current study.

The historic contexts described in this section are followed by a presentation of associated property types in Section F. These associated property types expand on the three categories of irrigation features summarized above. Each historic context could be represented by any combination of resources that fall into these categories, and the definition of a historic property nominated under this Multiple Property Documentation may vary depending on the historical significance and structure of the irrigation project that these features represent.

Background: Reclamation Movement in the United States

Irrigation in support of agriculture has existed throughout the United States on both large and small scales since before its founding. In the mid-nineteenth century, the Mormons are generally credited with being the first to establish a successful agricultural economy in the American West based on irrigation. Between 1847 and 1865, Mormon settlers built almost 1,000 miles of canals, which irrigated approximately 1.5 million acres of land in northern Utah. Their irrigation systems were so pivotal to development that the region was sometimes referred to as "the cradle of American irrigation," eventually becoming the home of 65,000 Latter-Day Saints.⁴

In 1865, the Utah territorial legislature became the first jurisdiction to pass laws governing the creation of irrigation districts in the West, and set an important legal precedent concerning water rights. The body passed legislation authorizing citizens to organize irrigation companies and to levy taxes for building and maintaining canals under county government supervision. They also departed from the English common-law principle of

⁴ Hall, 1.

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“riparian water rights” (or riparian rights), which gave all landowners bordering rivers and streams the right to use the water therein.

Under the riparian principle, all landowners have the right to make reasonable use of water flows through or over their property from an adjoining body of water. If not enough water exists to satisfy all users, the proportion of frontage on the water source is typically used to fix allotments. Riparian rights are tied to the water-adjacent property and cannot be sold or transferred, and the water cannot be transferred out of a watershed without due consideration of other water users. Riparian rights depend on consideration of “reasonable use” by other water users, to ensure that the rights of one riparian owner are equitable with others diverting water from the same source.⁵

Instead of riparian rights, the Mormons instituted a doctrine of “prior appropriation for beneficial use,” or “first in time, first in right,” which gave the first appropriator the “rights to as much water as he could put to use for beneficial purposes.”⁶ In other words, the earliest water users gained a legal right to water that was greater than those who came along later, regardless of a property’s relative proximity to a river or stream. In practice, this doctrine can also be traced to the gold-mining camps of California and Colorado in the mid-nineteenth century, and other early mining, ranching, and irrigation projects throughout the West, where it functioned as a simple, legally enforceable system for dividing limited water supplies.⁷ Such practice also ignored the water rights of resident Native American populations, even after the U.S. Supreme Court’s recognition of such “reserved water rights,” from when treaties were signed and Indian reservations created, and especially in the nation’s arid and semi-arid regions.⁸ This interpretation of water rights has had lasting effects on future reclamation in the American West.

Inspired by these applications, late-nineteenth century promoters envisioned irrigation as the best means to achieve successful large-scale settlement in the arid regions of the American West.⁹ Luminaries such as Nathan C. Meeker, agricultural editor for Horace Greeley’s *New York Tribune*, John Wesley Powell, second director of the U.S. Geological Survey (1881–1894) and a celebrated national hero, and William Ellsworth Smythe, founder of the National Irrigation Congress and the journal *Irrigation Age*, all viewed irrigation as necessary to successfully reclaim desert lands in the West and to create an economic base to foster settlement—but often for different reasons.¹⁰ Meeker, along with his publisher, helped disseminate notions of the American West as a “panacea,” which contributed to contemporary beliefs in America’s “Manifest Destiny,” and supported the establishment of utopian communities based on irrigation. Meanwhile, Powell and Smythe conducted studies of the United States’ western lands, urged scientifically planned reclamation and settlement programs specifically designed for the West, and argued for federal sponsorship of reclamation programs before Congress and a national audience. For Smythe, in particular, irrigation represented more than economic development and the physical transformation of the land, but was a means for social reform. He believed America’s arid West was hospitable and provided a refuge and protection for traditional American values based on agrarian ideals, religious tenets, and individual freedoms—a common philosophy at the time.¹¹

⁵ K. Guerin, “Property Rights and Environmental Policy: A New Zealand Perspective” (Wellington, New Zealand: New Zealand Treasury, 2003); Oregon Water Resources Department, *Water Rights in Oregon: An Introduction to Oregon’s Water Laws* (Salem, OR: Oregon Water Resources Department, November 2013), 5-7.

⁶ Hall, 3-4; *Water Rights in Oregon*, 5-7.

⁷ Dan Tarlock, “The Future of Prior Appropriation in the New West,” *Natural Resource Journal*, 41 (2001), 2.

⁸ Michael R. Moore, “Native American Water Rights: Efficiency and Fairness,” *Natural Resources Journal* 29 (Summer 1989), 765 and 770.

⁹ Alfred R. Golze, *Reclamation in the United States* (Caldwell, ID: The Caxton Printers, Ltd., 1961), 6; Hall, 5-6.

¹⁰ In addition to their stated credentials, Powell published *A Report on the Lands of the Arid Region of the United States, with a More Detailed Account of the Land of Utah* in 1879 and Smythe was author of the book, *The Conquest of Arid America*, first published in 1900. Both publications were highly influential, directly contributing to the United States’ reclamation movement, passage of the Newlands Reclamation Act of 1902, and the establishment of the U.S. Reclamation Service as a separate agency in 1907. The U.S. Reclamation Service became the U.S. Bureau of Reclamation in 1923. John Wesley Powell, *A Report on the Lands of the Arid Region of the United States, with a More Detailed Account of the Lands of Utah. With maps* (Washington, DC: Government Printing Office, 1879); William E. Smythe, *The Conquest of Arid America* (New York, NY: Harper & Brothers Publishers, 1900).

¹¹ Hall, 5-6.

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From 1878 to 1902, irrigation expansion was a critical issue in western settlement. Hundreds of irrigation companies were formed by private parties from the financial centers of the eastern United States, and many speculative ventures were pursued during this period. However, few were successful and most failed to survive beyond 10 years. Many proponents of irrigation believed that an absence of federal coordination and control of water resources, including the construction of large-scale infrastructure, was the direct cause of these failures.¹² Most irrigation projects lacked the dams and storage reservoirs necessary to hold water during the non-growing seasons, and not enough water existed to overcome the harsh realities of the American West's arid regions during its long, dry summers. Such infrastructure was financially expensive and difficult to construct, and local and state governments were unwilling to fund, or financially incapable of funding, the large construction projects necessary to build it.

Meeker, Powell, and Smythe, as well as other influential individuals such as Frederick H. Newell, the first director of the United States Reclamation Service, and Gifford Pinchot, the first Chief of the United States Forest Service, were all pioneers of the movement to reclaim the American West and advocated for more centralized, federal involvement in western irrigation as the solution.¹³ Work by these individuals and other advocates eventually persuaded the federal government to enact a series of laws to encourage settlement and development of the American West from the mid-nineteenth century through the early-twentieth century. In the federal appropriations bill of October 2, 1888, for example, Congress directed the U.S. Geological Survey to conduct a survey of irrigable lands of the arid West. The U.S. Geological Survey published its findings in 1890, which became the basis of various bills that would define western irrigation development for years to come. Concurrently, western railroads, especially the Great Northern Railway, sponsored a series of "Irrigation Congresses" to promote the reclamation of western lands and to provide a venue for participants to meet and discuss means by which the federal government could take a more comprehensive role in developing or supporting development of large-scale irrigation projects. Such projects, cooperatively constructed and publicly funded, would be capable of transforming the arid West into a profitable landscape. As with many matters of public policy, however, issues of federal vs. states' rights and public vs. private control of reclamation policy and project implementation hampered efforts to fulfill the visions of these men.¹⁴

The "Reclamation Movement," as it became known, and the common belief in the transformation of the arid West through irrigation, emerged as one of the most powerful forces influencing the development of the American West in the late-nineteenth and early-twentieth centuries. New immigrants and settlers surged westward during this period, drawn by the allure of available lands and the opportunities provided by the American frontier. Irrigation facilitated this migration, enabling the development of public lands in many western states and fostering the establishment and growth of new communities in what were characterized as largely unpopulated rural areas. For Native Americans, this development represented further loss of rights and resources granted to them by the U.S. government.

In Oregon, early efforts at agricultural irrigation were undertaken by individual and cooperative groups of farmers, leading up to and following Oregon's adoption of the Carey Act in 1901. From this early period, irrigation projects undertaken by the State of Oregon and private companies and corporate enterprises emerged under the Carey Act between 1901 and 1958; and the development of federal irrigation projects between 1902 and 1978.

Agricultural Irrigation in Central and Eastern Oregon, 1850 to 1925

¹² Hall, 5; Golze, 6.

¹³ Golze, 6.

¹⁴ Paul G. Claeysens and Jan Tomlinson, "Determination of National Register of Historic Places Eligibility for Historic Agricultural Resources in Central Oregon: Central Oregon Irrigation District" (Bend, OR: Heritage, NW c/o Deschutes and Ochoco NFs, 1 June 2006), E-1; Kelsey Doncaster, Chris Horting-Jones, and Renewal Technologies, Inc. "Sagebrush to Clover: The U. S. Bureau of Reclamation's North Unit of the Deschutes Project, Volume 1: History" (U.S. Department of the Interior, Bureau of Reclamation, Pacific Northwest Region, November 2013), 7.

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Irrigation by non-indigenous peoples first appeared in Oregon in the early 1840s and 1850s with the arrival of the region's first permanent Euro-American residents. The signing of the Oregon Treaty of 1846, followed by the creation of the Oregon Territory in 1848 and passage of the Donation Land Claim Act of 1850, significantly increased the number of settlers immigrating to the Pacific Northwest in the mid-nineteenth century. These events were followed by Oregon's statehood in 1859, the Homestead Act of 1862, and Oregon's adoption of the Swamp Land Act in 1870, which provided additional impetus for settlement in the region.¹⁵ Most new settlers sought land claims in the Willamette Valley, along the Pacific Coast, or in the foothills of the Cascade Range of Mountains. These areas had fertile soils and readily available supplies of water. Such characteristics were well-suited to successful agricultural development, especially for dry farming, and with little need for irrigation. In contrast, settlers who braved the harsher climates of the arid plains and basins of eastern and central Oregon frequently relied on irrigation to enhance cultivation. The result was the introduction of irrigation projects to take advantage of natural water flows to support agricultural production in these areas.

Beginning in the 1850s, agricultural irrigation in Oregon consisted of relatively small irrigation projects. These projects were limited in scale and simple in execution, and most were undertaken by early settlers claiming land under the Donation Land Claim Act or the Homestead Act. These acts were two of the United States government's earliest attempts to legislate settlement of the American West. However, neither act included consideration of planned irrigation. Meanwhile, the Swamp Land Act primarily resulted in the withholding of arable land and water rights in the predominantly semi-arid regions of Oregon by land speculators.¹⁶

The earliest irrigation systems consisted of little more than settlers diverting spring run-off from a river or creek and using this water in an adjacent field or subsistence garden. Somewhat larger systems were created as cultivation occurred on lands farther and farther away from a water source. Homesteaders initially constructed and maintained these systems for their exclusive use, which frequently consisted of little more than a simple diversion structure and a small network of plowed ditches.¹⁷ These relatively small constructs would later evolve into much larger irrigation projects, constructed and operated by farmers working cooperatively. In some cases, settlers with nearby or adjoining fields banded together to form cooperative ditch companies to supply water for their common use.¹⁸

Eastern Oregon

Settlement and irrigated agriculture in Oregon's traditionally arid regions, such as the lowland plains of central and eastern Oregon, progressed slowly through much of the late-nineteenth century.¹⁹ Range-cattle ranching was the first agricultural use in many of these areas, particularly in southeastern Oregon.²⁰ Subsistence farmers from both the Willamette Valley and California soon followed. The first of these farmers cultivated hay and vegetables to support local miners and ranchers, and gold-mining boom towns such as Eldorado City, Malheur City, and other nearby locales. Farmers were initially drawn to the Willow Creek Valley and its

¹⁵ Richard Mark Pinterich, "The Swamp Land Act in Oregon, 1870-1895," *Dissertations and Theses*, Paper 2738 (Portland, OR: Portland State University, 1980), 11.

¹⁶ Pinterich, 102-107.

¹⁷ Doncaster, "Sagebrush to Clover," 7.

¹⁸ Hall, 12.

¹⁹ Malheur Country Historical Society, *Malheur Country History*, Vol. 1 (Dallas, TX: Taylor Publishing Company, 1988), 12-13.

²⁰ William G. Robbins, "The Great Divide: Resettlement and the New Economy: The Coming of Range Cattle," *The Oregon History Project* (Oregon Historical Society, 2002), online document: http://www.ohs.org/education/oregonhistory/narratives/subtopic.cfm?subtopic_ID=33, accessed December 2014. See also, Malheur Country Historical Society, *The Forgotten Corner* (Oregon: Malheur Country Historical Society, 1988).

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tributaries, for example, by the opportunity to supply mines in the Shasta Mining District.²¹ The latter led to the development of one of Oregon's first sizable irrigation projects, The El Dorado Ditch.²²

Passage of the Desert Land Act of 1877 further encouraged the settlement of these and other arid and semi-arid lands in eastern Oregon, shifting their primary use from ranching and mining to irrigated agriculture. With the act, Congress acknowledged the dilemma of settling desert lands and provided federal oversight, but effectively deferred control over reclamation projects to individual states and private initiative. Its purpose was to assist homesteaders. However, the law was frequently subject to exploitation and abuse by large business interests.²³ Under the Desert Land Act, an individual could apply for a desert-land "entry" to reclaim, irrigate, and cultivate arid and semi-arid public lands.²⁴ To obtain full ownership, the land had to be irrigated within three years of filing.²⁵ After the three years, the claimant could receive a patent of ownership upon proof the land was "adequately" irrigated.

In the late 1870s and 1880s, many Oregon settlers homesteaded land claims under the Desert Land Act, utilizing available water resources to establish private irrigation developments. As a result, agricultural production in some eastern Oregon counties increased dramatically, while others still held terrain unsuitable for farming and remained under the control of the livestock industry.²⁶ The arrival of the railroad to eastern Oregon helped overcome some of these obstacles. The Oregon Short Line Railway, established by the Union Pacific, reached eastern Oregon in 1883, effectively opening the region to increased settlement and agricultural growth. Its arrival was followed by connection with the Oregon Railway & Navigation Company in 1884, which provided rail service from eastern Oregon to Portland and the Union Pacific's transcontinental railroad line in Granger, Wyoming. These connections increased the region's accessibility and facilitated the transportation of goods, services, and people into the area. Spurred by the new accessibility provided by the railroad, settlers first arrived in the Snake River basin and lands bordering the Owyhee and Malheur Rivers during this period.²⁷

During this period, speculators and cooperative groups also began building some of the earliest irrigation projects in eastern Oregon, along these waterways. Lands along Bully Creek west of Vale and the north fork of the Malheur River near the towns of Juntura and Agency Valley were irrigated and turned to agriculture in the early 1870s. The first ditches in the Agency Valley were constructed by Native American workers as early as 1873-74, when it was the headquarters of the Malheur Indian Reservation.²⁸ Similarly, the McLoughlin and Nevada Ditches were built to divert water from the Malheur River in 1881-82, and water from the Owyhee River near Nyssa was diverted through the Owyhee Ditch beginning in 1883.²⁹ All three projects were the result of claims filed under the Desert Land Act.

²¹ Malheur Country History, *Malheur Country History*, Vol. 1, 13, 26, 29, and 31; See also, Western Historical Publishing Company, *An Illustrated History of Baker, Grant, Malheur and Harney Counties, With a Brief History of the Early History of the State of Oregon* (Spokane, WA: Western Historical Publishing Company, 1902).

²² Jodi Varon, "Eldorado Ditch," *The Oregon Encyclopedia*. Online document: http://www.oregonencyclopedia.org/articles/eldorado_ditch/#.VJ43rsDA, accessed December 2014; See also, John Croner, "Eldorado City was 'First' in Northern Malheur County." *200 Years in the Making* (Ontario, OR: Malheur Publishing Company, 1976).

²³ Hall, 9; Mary Oman, "The Chinese in Baker County, Oregon," *Oregongenealogy.com* (2005), online resource: <http://www.oregongenealogy.com/baker/chinese.htm>, accessed October 2016.

²⁴ Hall, 9; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal (Central Oregon Irrigation Canal)," Historic American Engineering Record (HAER OR-63/HAER ORE 9-Bend, 1) (Seattle, WA: National Park Service, Columbia Cascades Support Office, 26 May 1998), 3.

²⁵ Claeysens, E-2; Hall, 9; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 3.

²⁶ Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 13.

²⁷ Doncaster, "Sagebrush to Clover," 6; Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 13 and 21.

²⁸ Rich Minor and Stephen Dow Beckham, "Archaeological Investigations in 2004 at Malheur Agency/Agency Ranch Site (35ML1157), Malheur County, Oregon," Report No. 289 (Eugene, OR: Heritage Research Associates for the Bureau of Reclamation, Snake River Office, 2004), 11-13; Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 13-14.

²⁹ Work on the Owyhee Ditch commenced in 1883. The ditch was started as a private canal and formally incorporated as an irrigation company in 1888. To complete the project, bonds in the amount of \$50,000 were issued at the time of incorporation. The project reached full completion in 1896 at an estimated construction cost of about \$150,000. Approximately 30,000 acres of land were made available for irrigation by the ditch. However, only about 10,000 were under cultivation by 1902. The ditch was twenty-six miles long and about twenty feet wide (on the bottom) for the first twelve miles, tapering afterward to an eight foot ditch. It had a fall of twenty

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These irrigation projects and others stimulated agricultural and horticultural efforts in eastern and southeastern Oregon throughout the 1880s and 1890s, and both directly and indirectly advanced livestock interests. In 1890, approximately twenty irrigation projects of considerable size diverted water from the Malheur River within one hundred miles of its mouth. Many of these projects furnished water for livestock or made possible the production of vast quantities of alfalfa and other hay grasses, upon which ranchers depended for winter livestock feeding.³⁰ The region's irrigation projects also had lasting effects on water distribution and the adjudication of water rights. Issues arose during the late-nineteenth century that defined irrigation practices and the planning and implementation of statewide water policy well into the twentieth century.³¹

The economic depression caused by the Panic of 1893 reduced the number of settlers immigrating to Oregon in the 1890s. During this period, Congress passed the Carey Desert Land Act of 1894 (also known as the Carey Act or Federal Desert Land Act) to further encourage the settlement of arid and semi-arid lands in the western states, and the State of Oregon enacted the state's first Irrigation District Act in 1895. Oregon did not adopt the provisions of the Carey Act until 1901. In the meantime, passage of the Irrigation District Act helped make the formation of larger-scale cooperative irrigation projects financially feasible.³²

Following Oregon's adoption of the Carey Act in 1901, irrigation development in the region continued on a relatively small scale through the 1920s. In the Willow Creek Valley, for example, speculators first contemplated the erection of a series of dams for the purposes of calculated irrigation and flood control beginning in 1908.³³ Another commercial enterprise was establishment of the Vale Oregon Irrigation Company. This company constructed a 120-foot-high dam on federal land at Bully Creek west of Vale in 1915.³⁴ The Vale Oregon Irrigation Company and its infrastructure were subsumed by the Willow-Alder Irrigation District in 1916, which itself became part of the Bureau of Reclamation's Vale Project in 1926.³⁵ Prior to the Vale Project, one of the most significant irrigation developments in the Malheur River basin was establishment of the Warm Springs Irrigation District in May 1916, and its subsequent construction of the Warm Springs Dam and Reservoir in 1919. Construction of the dam and its associated distribution system captured additional run-off from the Malheur River's middle fork, expanding this area to over 30,000 acres, and directly influenced the U.S. Reclamation Service's interest in the Malheur River basin and the eventual construction of the Vale Project.³⁶

inches per mile, running from the Owyhee River to the Malheur River, into which it emptied a short distance above Ontario. Malheur Country Historical Society, *Malheur Country History*, v.1, 13 and 45; Western Historical Publishing Company, 384.

³⁰ Western Historical Publishing Company, 735.

³¹ Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 13-14.

³² By the end of 1928, the State of Oregon had advanced interest payments on \$9,384,000 of bonds for 15 irrigation districts under the Irrigation District Act. The total issues per district ranged from \$30,000 to \$1,550,000. These districts covered a total area of about 150,355 acres, of which 70,995 acres were being irrigated. Outstanding bonded debts ranged from \$22 to \$118 per acre, with a weighted average of \$62 per acre. Of these bond issues, only \$2,235,000 of bonds issued by two districts were in good standing in 1928. By 1931, the Oregon's policy of financially assisting irrigation districts in this manner was considered by some to be a failure. Of those irrigation districts that had defaulted on their bond payments, the state had advanced interest payments to two-thirds the number, equivalent to 90% of the total bond indebtedness. It appears that most of these districts comprised Oregon's larger irrigation projects. In particular, numerous irrigation projects proposed after World War I were not carried out, mainly because of the inability to sell bonds. Contemporaries also reported that a larger number of districts, with a smaller aggregate of bond indebtedness, were paying their obligations as due. Wells A. Hutchins, *Irrigation Districts: Their Organization, Operation, and Financing*, Technical Bulletin No. 254 (Washington, DC: United States Department of Agriculture, June 1931), 85-86.

³³ Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 26.

³⁴ Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 47.

³⁵ The 1918 biennial report refers to the Lamberson and Anderson reservoirs. The 1923 biennial report does not mention these reservoirs, instead referring to a partially completed storage and diversion dam on Bully Creek, originally undertaken by the Vale-Oregon Irrigation Company. Percy A. Cupper, *Seventh Biennial Report of the State Engineer to the Governor of Oregon for the Period Beginning December 1, 1916, Ending November 30, 1918* (Salem, OR: State Printing Department, 1918), 11; Percy A. Cupper, *Ninth Biennial Report of the State Engineer to the Governor of Oregon, December 1, 1920 to November 30, 1922* (Salem, OR: State Printing Department, 1923), 18; Rhea Luper, *Tenth Biennial Report of the State Engineer to the Governor of Oregon, December 1, 1922 to November 30, 1924* (Salem, OR: State Printing Department, 1924), 20-21; Rhea Luper, *Eleventh Biennial Report of the State Engineer to the Governor of Oregon, December 1, 1924 to November 30, 1926* (Salem, OR: State Printing Department, 1926), 38.

³⁶ Timothy A. Dick, "Vale Project" (U.S. Bureau of Reclamation), online document:

http://www.usbr.gov/projects/ImageServer?imgName=Doc_1305644424407.pdf, accessed December 2014, 4; Vale Oregon Irrigation District, "Project History of Vale, Baker, and Burnt River, 1943" (Vale, OR: Vale Oregon Irrigation District, prepared for the U. S. Department of the Interior, Bureau of Reclamation, 1943), 1-2 and 33.

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Except for projects such as these, irrigation development in eastern Oregon continued at a regular pace until the allocation of federal funds for construction of the Owyhee Project in the Owyhee River basin and the Vale Project in the Malheur River basin in the mid-1920s. Between 1900 and 1925, the U.S. Reclamation Service conducted numerous feasibility studies and made topographic surveys of irrigable lands in the Owyhee River and Malheur River basins to identify options for reclaiming irrigable lands and for possible reservoir sites. Many reports were issued during these years, produced by the federal government, state cooperative boards, and private companies, which debated the merits of various proposed projects in these areas, and their engineering and financial feasibility. Based on this information, the Bureau of Reclamation recommended the construction of both the Owyhee and Vale projects in 1926, and the President of the United States authorized their construction. These federal reclamation projects consolidated nearly all prior irrigation projects constructed in eastern Oregon, and significantly shaped the region's rural landscapes and the growth and development of its communities.³⁷

Central Oregon

Like eastern Oregon, the first sustained Euro-American presence in central Oregon was an outgrowth of the state's burgeoning cattle industry. In the 1860s and 1870s, stockmen seeking new grazing lands began moving herds of cattle from eastern Oregon into the Deschutes River basin, and ranchers from the Willamette Valley used the basin for summer range. A familiar pattern of settlement and agriculture soon followed.³⁸

The low bench lands along the Deschutes River in the vicinity of what are now Bend and Redmond were among the first areas to be settled. Initial development in these areas largely consisted of land claims homesteaded under the Homestead Act and the Desert Land Act, and frequently involved the diversion of water from the Deschutes River and its tributaries through small-scale ditches.³⁹ Individual efforts eventually led to the construction of larger, cooperative irrigation projects among adjoining landowners and the creation of cooperative ditch companies as the needs of the resident population and their agricultural output increased in size.⁴⁰ Settlement was aided by the completion of the Oregon Railway & Navigation Company railroad line through the Columbia River Gorge in 1882. Between 1906 and 1911, a branch line of the Oregon Railway & Navigation Company line, which was known as the Oregon-Washington Railroad & Navigation Company by 1910, was extended south along the Deschutes River into central Oregon from The Dalles, increasing access and further promoting the region's development.⁴¹

The first irrigated farms in the Upper Deschutes River basin were established by early settlers along what is now known as Whychus Creek in the early 1870s west of present-day Redmond, and in the 1880s along the Deschutes River in the vicinity of what is now Bend.⁴² The diversion of water for private use on individual farms and ranches was followed by the formation of cooperative irrigation companies and other speculative ventures. This development served as the basis upon which many of central Oregon's present communities were established, especially the cities of Bend and Redmond.

Substantial large-scale irrigation development began to occur in the region in the 1890s, with particular focus on the lands of the Upper Deschutes River basin. With the promise of the Carey Act and the Irrigation District

³⁷ Eric A. Stene, "Owyhee Project" (U.S. Bureau of Reclamation), online document: http://www.usbr.gov/projects/ImageServer?imgName=Doc_1305125632747.pdf, accessed December 2014, 3-4; Dick, 3-5; See also, J. D. Fairman (Chairman), *Vale-Owyhee Government Projects* (Nyssa, OR: Vale-Owyhee Government Projects Land Settlement Association, 1929 [reprinted in 5 editions]).

³⁸ Doncaster, "Sagebrush to Clover," 5-6.

³⁹ Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 5.

⁴⁰ Hall, 12.

⁴¹ Doncaster, "Sagebrush to Clover," 6; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 5; See also, Glenn Laubaugh, "The Oregon-Washington Railroad & Navigation Company" (The Pacific Northwest Chapter of the National Railway Historical Society), online document: http://www.pnwc-nrhs.org/hs_or_n.html, accessed December 2014.

⁴² The creek was previously known as "Squaw Creek." Considered derogatory, this name was changed to Whychus Creek in 2006 by order of the Oregon Legislature. Claeysens, E-4; Doncaster, "Sagebrush to Clover," 6; Hall, 2 and 12.

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Act, a large number of speculative development companies and other cooperatives filed applications for proposed irrigation projects in central Oregon beginning in the mid-1890s. The pace of this development rapidly increased after the Carey Act's adoption. In the Upper Deschutes River basin, the earliest of these developments were irrigation projects undertaken by the Three Sisters Irrigation Ditch Company, the Squaw Creek Irrigation Company, the Cline Falls Power Company, and the Deschutes Reclamation and Irrigation Company.⁴³

Irrigation projects of this type continued to be built through the mid-1920s. However, a second generation of large-scale irrigation developments in central Oregon was constructed beginning in the late 1890s and early 1900s, and centered on Oregon's adoption of the Carey Act's provisions. During this period, a large number of speculative corporations and cooperative ventures were organized for the express purpose of claiming and developing lands under the Carey Act. These projects differed somewhat from those that came prior, because they were primarily speculative commercial enterprises, rather than cooperative developments for the purposes of improved agricultural production.

Between 1901 and 1906, seven projects in the Upper Deschutes River Basin were approved under the Carey Act. Work was carried out by development companies on at least five of these irrigation projects prior to the Act's adoption by the Oregon State Legislature. These projects included the aforementioned Deschutes Reclamation and Irrigation Company (Swalley) and Three Sisters Irrigation Company projects, and irrigation projects promoted by the Oregon Irrigation Company, the Pilot Butte Development Company, and the Deschutes Irrigation and Power Company. Companies with previously established irrigation projects, such as the Swalley and Three Sisters Irrigation Company projects, transitioned their existing infrastructure to form Carey Act projects. Meanwhile, the newly established companies generally conducted preliminary work to claim and hold their water rights, until approval for an irrigation project under the Carey Act could be secured.

Historic Context: Carey Desert Land Act Projects in Oregon, 1901-1950

The Carey Desert Land Act of 1894, also known as the Carey Act, and its subsequent amendments represented the next phase of agricultural irrigation in the American West and the federal government's first direct involvement in its implementation. Congress initially was resistant to any form of direct involvement in irrigation projects, instead relying on private interests to independently cultivate public lands. With passage of the Carey Act, however, Congress found a middle ground. The act provided the federal government a means to support irrigation development without assuming the responsibility and costs of constructing large-scale reclamation projects. For the so-called Reclamation Movement, the Carey Act represented an important transition from a complete reliance on private investment, which largely characterized the nineteenth century, to the federal government's exercising a central role in its regulation and management for the first time.⁴⁴

The intent of the Carey Act was to provide Western states the ability to organize large-scale irrigation projects by allowing them to leverage water rights as collateral for the construction of dams, canals, and other infrastructure. Although private investors had found western irrigation attractive, it often did not generate sufficient capital to make the construction of large projects feasible. The Carey Act helped solve this problem. Under the act, each of ten arid western states could arrange for the construction of dams and canals within its boundary by contracting with private developers to build the necessary infrastructure, and by selling water rights to settlers. Settlers, in turn, would fund these projects by purchasing water from the private developers. The individual states were expected to benefit from the addition of taxable acres, increased population, more agricultural products, and improved economic conditions. The act's passage was viewed as a compromise that

⁴³ George B. Archibald, "Central Oregon Project," Report by Carey Act Inspector on the water rights of the Central Oregon Project (The Dalles, OR: U.S. General Land Office, 22 December 1916), 33-34, 43-44, and 367-368; Doncaster, "Sagebrush to Clover," 8; Hall, 16-17, and 30; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 5.

⁴⁴ U.S. Senate Committee on Irrigation. *Private Irrigation Projects, Carey Act: Hearing Before the Committee on Irrigation and Reclamation of Arid Lands, United States Senate*. Washington, DC: Government Printing Office, 1912, 9-10; Claeysens, E-3; Golze, 310; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 4

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would increase local investment and expand government control of reclamation projects, and thereby vastly improve the prospects for irrigation development.⁴⁵

Introduced by Wyoming Senator Joseph M. Carey, Congress passed the Carey Act on August 18, 1894, and subsequently amended the law with revisions on June 11, 1896, and March 3, 1901. The Carey Act authorized the United States government to grant up to one million acres of public lands to each western state that agreed to its provisions, and enabled these states to issue irrigation contracts to private developers. These developers were then expected to design and build irrigation works to serve lands "segregated" by the state from their federal allocation of one million acres. The state also issued a water right to the private developer for its particular project.

A variety of individuals and groups applied for Carey Act contracts. Some applicants were cooperative ventures among individuals, while others were larger commercial enterprises by corporations that expected to show a profit to investors. On receiving a contract from the state, the developer was to construct the infrastructure necessary to irrigate all of the acreage in their segregation. To recoup these construction costs (and earn a profit), developers received a lien, or first mortgage, to the land in the segregation as security. The developers then recruited farmers, ranchers, and other individuals to settle on lands in the segregation, and sell them water rights for the settled acreage. When a settler had paid for the water right in full, the developer was expected to relinquish its lien on the property and the government would allow title to pass to the settler at no additional cost. In addition, under some Carey Act contracts, developers were allowed to charge a company-determined user fee for the construction of irrigation ditches to a settler's lands, and often an annual fee for the continued delivery of water in perpetuity, to cover operating and maintenance costs.⁴⁶

Segregated Carey Act lands were made available to settlers under the rules of the Homestead Act and its subsequent revisions (such as the Desert Land Act). Typically, individuals could file claims for up to 160 acres of Carey Act lands, and would receive an ownership patent to the acreage if they resided on the land and converted at least 1/8th (twenty acres) to irrigated agriculture within ten years. The specific requirements varied from state to state, and other rules sometimes applied.

Developments under the Carey Act never fully realized the promise of transforming the arid American West into an Eden of irrigated farms. Nearly all were plagued with problems. The Carey Act's overall business model was seemingly sound, but few developers possessed the up-front capital necessary to fund construction of adequate water storage and distribution systems. Some succeeded in building functional delivery systems only to discover that insufficient water supplies existed to irrigate the segregated lands. Other projects were plagued by poor, sometimes even corrupt, management. As a result, many Carey Act projects ended in complete failure. Even the most successful typically fell short of their intended goals of total acreages settled and irrigated. Carey Act developments in Oregon, and particularly the Upper Deschutes Basin, are generally considered to have been more successful than those in other states. Several were completed and successfully served at least a percentage of their segregated lands.⁴⁷

The Carey Act in Oregon

The State of Oregon adopted the provisions of the Carey Act on February 28, 1901.⁴⁸ The legislation established a State Land Board to administer the act in Oregon, and made it state policy that Oregon's arid lands were to be reclaimed and settled. Under the act, the State of Oregon relied on private companies to bring about reclamation and settlement, but without becoming liable for any costs. The state was not directly

⁴⁵ Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 4.

⁴⁶ Golze, 310; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 4; U.S. Senate Committee on Irrigation, 10.

⁴⁷ Doncaster, "Sagebrush to Clover," 11.

⁴⁸ Archibald, 138; Doncaster, "Sagebrush to Clover," 8; Hall, 12.

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responsible for the financing or constructing any Carey Act projects. If an irrigation project failed, the State simply reassigned the contract to another development firm.⁴⁹

The State Land Board consisted of the Oregon Governor, the Secretary of State, and the State Treasurer. These three individuals established the rules under which Oregon's Carey Act contracts were implemented and provided oversight for their execution.⁵⁰ The State Land Board set the rules for settler ownership; made independent decisions concerning the size and scope of proposed land segregations and the contracts for their development; and could decide what companies or cooperatives received contracts, and under what terms, at their sole discretion. The body also established and maintained its own desert lands management system, including segregation lists and numbers. The system was intended to track distribution of the federal public lands granted to the State of Oregon for reclamation, irrigation development, and colonization under the Carey Act.⁵¹

Prior to the Carey Act's adoption, it was generally considered uncertain whether water rights in Oregon were governed by the common-law doctrine of riparian rights or the statute-law doctrine of appropriation. The courts uniformly held that litigants had to stand on their rights under one or the other, but not both.⁵² There also existed those issues involving demand for water versus its available supply, and the appropriation of water within the context of an entire river basin or watershed; all issues that had plagued irrigation projects in the late-nineteenth century.

Following the Carey Act's adoption, the state legislature established a definitive state policy in these matters. It chose the doctrine of appropriation to provide maximum benefit to agricultural communities, and because of certain peculiarities of the soil in some regions.⁵³ This policy, along with the establishment of the State Land Board and the Office of the State Engineer, was a significant milestone in the history of irrigation in Oregon, because it helped formalize the planning and implementation of irrigation projects across the state and set the stage for the construction of some of Oregon's largest and most impactful irrigation developments. The Central Oregon Project, for example, was one of the largest irrigation projects initiated under the Carey Act, both in the state and nationwide. Its creation enabled the founding and subsequent growth and development of Bend, Redmond, and other communities in the Upper Deschutes River basin, and provided the basis for agricultural development in the region, which transformed vast portions of the landscape from arid desert to productive farm and ranch lands.

Unlike irrigation projects established prior to 1901, the process for initiating an irrigation development under the Carey Act introduced statewide water-resources management for the first time, involving oversight by the State Land Board and its authorized agents. This oversight began with the segregation of irrigable land. "Segregation lists" under the Carey Act represented a contract between the State of Oregon and a given developer for the sale of water rights on specifically designated tracts of public lands. The State Land Board established a segregation list whenever a developer wanted to improve and sell water rights under the Carey Act for a specific area. Following an initial survey, a developer would approach the State Land Board for permission to irrigate a defined geography. If approved, the two parties would establish a segregation list for the tract and assign it a unique number, and execute a contract outlining its improvement. The State Land Board initially had implemented a policy of greatly limiting the quantity of segregation lists within a single watershed or basin. The purpose of this limitation was to help ensure that, in aggregate, the segregation lists did not contain more irrigable acreage than available water, or more than a constructed system could properly serve. This policy

⁴⁹ Hall, 12.

⁵⁰ Hall, 27.

⁵¹ State Land Board, *Report of State Land Board Relative to Desert Lands, Granted the State Under the "Carey Act" for the Period Commencing October 1, 1902, and Ending September 30, 1904, to the Twenty-Third Legislative Assembly [Regular Session] 1905* (Salem, OR: J. R. Whitney, State Printer, 1904) 11.

⁵² Archibald, 330.

⁵³ Ibid.

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was not strictly followed, however, which often led to later legal difficulties among developers, settlers, and the State Land Board.⁵⁴

To divert water for a segregation list, developers had to construct a dam or other diversion on a river or stream. Between 1902 and 1905, the Oregon Legislature passed several regulations that structured water allocation under the Carey Act based on filing a “notice of intention to appropriate water” at the proposed point of diversion. A copy of this notice had to be posted at the proposed diversion point and recorded with the county clerk’s office (for the jurisdiction in which the diversion was located). Barring any objections, the claimant would then obtain approval from the Oregon Office of the State Engineer for development of the water appropriation. This process was initially conducted at little or no cost.⁵⁵

The Oregon Office of the State Engineer was created in 1905.⁵⁶ Prior to its establishment, the State Land Board appointed a “selecting agent” and an engineer to administer an application submitted under the Carey Act. The appointed engineer was paid for by the developer, and represented both the applicant and the State of Oregon in preparing and furnishing data to the U.S. Department of the Interior.⁵⁷ The appointed officials were responsible for investigating the proposed segregation and determining the feasibility of irrigating it, based on the available water supply. Their results were reported and reviewed by the State Land Board, which then decided whether to issue an irrigation contract.

The State of Oregon required initial construction of a segregation list’s diversion and irrigation system to begin within six months of a posted notice, and the work was expected to be carried through until completion. Many notices were filed and water rights legally claimed. However, Oregon had no effective method for tracking the actual allocation or use of water rights until 1909. The reality was that the State Land Board’s estimation of water use, based on the legal allocation of water rights, was often sorely inaccurate; and demand far exceeded the actual flow of water in some areas.⁵⁸ Much of this disparity was not fully understood until more detailed studies of entire watersheds were later carried out by the Oregon Office of the State Engineer and the U. S. Reclamation Service in the mid-1910s and 1920s.

Upon the successful improvement of a segregation list, a developer applied to the Oregon Office of the State Engineer for certification of the project. The State Engineer investigated the project to determine its adequacy and, if certified, the State Land Board forwarded the project to the U. S. Department of Interior, General Land Office in The Dalles, to apply for a legal “patent.” The issuance of patent represented the transfer of the segregated land from the public domain to private ownership, and was essentially the last step in the Carey Act process. On receipt, the General Land Office reviewed the request, obtained approval from the U.S. Secretary of the Interior, recorded the filing, and issued a patent for the segregated lands.

In Oregon, settlement on Carey Act segregated lands required that individual settlers file an application for a 40, 80, 120, or 160-acre tract. Applications were furnished for free by the developer, or were sent upon request. The settler then contracted with the developer to furnish water to each forty-acre parcel, obtaining a perpetual water right. Contracts between the settlers and the developer typically cost \$400 to \$2,000 for each forty acres. In some cases, this sum could be financed over five years at six percent interest with a twenty-five percent down payment, and often also included additional annual fees to cover the continued costs of water delivery and system maintenance. To obtain title to the land, the settler had to cultivate a portion of the property within three years of the date of filing. There were two options for meeting the cultivation requirement. The settler could cultivate at least 1/8th of the irrigable acreage and reside on the property for a minimum of ninety days, or cultivate a quarter of the irrigable acreage, build a house of at least 200 square feet, and reside on the property for period of not less than seven days.⁵⁹

⁵⁴ Such legal difficulties often pertained to the sale of water to non-Carey Act lands, as well. Archibald, 157.

⁵⁵ Archibald, 237.

⁵⁶ Archibald, 139.

⁵⁷ Archibald, 56.

⁵⁸ Archibald, 328-329.

⁵⁹ Archibald, 139.

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Oregon's initial adoption of the Carey Act was repealed on February 24, 1909, and a new law was enacted to replace it. This new law was commonly referred to as the "Water Code." The new law created the Oregon Desert Land Board, which superseded the former State Land Board in handling all the state's Carey Act affairs. The new board held its first meeting on May 27, 1909. The new law required the recognition of all existing water rights and determined the ownership of prior claims through a court adjudication process. It established a formal process for certifying and tracking these rights, including those obtained before the state began issuing permits and certificates under the new law. This process of adjudication was carried out over the course of the next ten years.⁶⁰

The State of Oregon continued to accept applications for irrigation developments under the Carey Act until June 30, 1950. At this time, the state decreed that the Carey Act had provided ample time for interested water users to have staked a water-rights claim, and ended the eligibility opt-in period to receive irrigation water.

Oregon's Carey Act Projects

By 1904, the State Land Board had established contracts for twenty-three segregations under the Carey Act. Four of these were approved by the U.S. Secretary of the Interior, including three in the Upper Deschutes River basin and one in the Harney Valley.⁶¹ By 1909, the State Land Board reported that a total of 432,203 arid acres had been selected by the state for reclamation under the Carey Act's provisions.⁶² This acreage included four additional projects in the Upper Deschutes River basin, a 12,037-acre segregation by the Portland Irrigation Company in the northern part of Lake County, a small holding by the Brownwell Ditch Company along the Columbia River near Umatilla, and a segregation by the Warner Lake Irrigation Company in the Warner Valley drainage of eastern Lake County.⁶³

The segregations in the Upper Deschutes River basin, in what was then Crook County, were the most prominent of Oregon's Carey Act projects, and were often the primary focus of discussions and publications on western irrigation and the Carey Act's implementation in Oregon at that time. By 1907, the Upper Deschutes River basin contained seven Carey Act projects, covering a total area of 194,138 acres.⁶⁴ Each project relied on water from the Deschutes watershed, and all irrigated lands were situated in the basin's south end. The Deschutes River was the primary water source for five of these projects with no provisions for additional water storage, instead relying on the river's natural flows to adequately meet the needs of their respective water users.⁶⁵ This latter condition would later prompt the federal government to become involved in the region's water management and lead to the construction of the region's federally sponsored irrigation projects.

Most irrigation projects in Oregon established under the Carey Act were of two distinct types, "cooperative ventures" and "commercial investment enterprises." According to Michael Hall, author of the historic context "Irrigation Development in Oregon's Upper Deschutes River Basin," the first type represented companies formed from groups of farms and ranches that banded together to cooperatively share resources and more efficiently irrigate their lands. Many of Oregon's earliest irrigation systems were of this type, and typically were developed under the Desert Land Act of 1877 and the subsequent General Revision Act of 1891. Several of these earlier irrigation projects were reorganized under the provisions of the Carey Act, following its adoption and implementation. The Squaw Creek Irrigation Company⁶⁶ and the Deschutes Reclamation and Irrigation

⁶⁰ The authority of the State Land Board and the Desert Land Board to administer and enforce the provisions of Oregon's Carey Act contracts was repeatedly contested. Archibald, 64 and 139.

⁶¹ Phil F. Brogan, "The Watering of the Wilderness," *The Bend Bulletin* (4 February 1931), 1; Hall, 12.

⁶² John H. Lewis and Percy A. Cupper, *Irrigation in Oregon*, U.S. Department of Agriculture, Office of Experiment Stations, Bulletin 209 (Washington, DC: Government Printing Office, 1909), 33.

⁶³ Lewis, 33 and 36.

⁶⁴ Hall, 12.

⁶⁵ Doncaster, "Sagebrush to Clover," 9.

⁶⁶ The Squaw Creek Irrigation Company was initially established in 1895, based on 1892 water rights on Squaw Creek. Following passage of the Carey Act, the Squaw Creek Irrigation Company contracted with the State Land Board for the reclamation of 11,766.84 acres along this drainage. In 1919, the company was subsequently reorganized as the Squaw Creek Irrigation District,

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Company⁶⁷ are two examples of cooperative ventures that progressed in this manner. In contrast, commercial investment enterprises were businesses incorporated following the Carey Act's adoption and heavily depended on its provisions. These developments customarily were much larger in scope than cooperative ventures and leveraged more investment capital. Developments of this type included the Three Sisters Irrigation Company's Tumalo Project,⁶⁸ a segregation by the Arnold Irrigation Company,⁶⁹ and the Central Oregon Project.⁷⁰ Both of these development types possessed similar physical components, such as the design and function of their irrigation systems, and primarily differed in only their legal and financial organization. Irrigation projects

following the reenactment of Oregon's Irrigation District Law in 1917. The Squaw Creek Irrigation District changed its name to the Three Sisters Irrigation District in 2003, in response to legislation passed by the State Legislative Assembly in 2001 (ORS 271.600). The name change came at the request of Oregon's federally recognized tribes to eliminate the use of the term "squaw" for the designation of a public property or use. Scott E. Stuemke, "Three Sisters Irrigation District Main Canal Pipeline and Watson Reservoir Hydroelectric Power Project: Phase I Field Survey and Section 106 Evaluation, Deschutes County, Oregon," Report No. SES 2009-004 (Bend, OR: Prepared for the Three Sisters Irrigation District and The Deschutes River Conservancy, 28 April 2009), 2; Cupper, *Ninth Biennial Report of the State Engineer to the Governor of Oregon, 1920-1922*, 16; Claeysens, E-5; Hall, 13-14.

⁶⁷ Established as a cooperative venture in 1892, the Deschutes Reclamation and Irrigation Company contracted with the State Land Board under the Carey Act in 1904 and was the only company to have fully completed a Carey Act project by 1913. Known as the Swalley project, the company issued 4,800 shares of stock in 1904, upon contracting with the state, divided into 96 blocks as additional water users joined the system. The original filing under the Carey Act was for the segregation of 6,638 acres of land north and west of Bend, likely equivalent to the company's previously existing holdings. The State of Oregon, however, only approved the segregation of 1,280 acres under the Carey Act contract. Between 1910 and 1915, the Swalley project's main canal was enlarged. By 1931, it was about thirteen miles long with a 3.5-mile lateral extension and approximately 3,600 acres were reported "under cultivation," after the filing of several additional segregations. The remainder of the company's original 6,638 acres was recorded as fully reclaimed and irrigated in 1933. The shareholders of the Deschutes Reclamation and Irrigation Company reorganized the company as the Swalley Irrigation District in 1994. Archibald, 33-34; Doncaster, "Sagebrush to Clover," 8; Hall, 12-13 and 15.

⁶⁸ The State Land Board entered into an agreement with the Three Sisters Irrigation Company on December 5, 1902, for the planned reclamation of 27,004.83 acres of their project on Tumalo Creek. Known as Segregation List No. 13, this agreement was Oregon's third contract under the Carey Act. Like other Carey Act projects of this period, the Tumalo Project was beset with problems that hindered its successful development, including unbridled boosterism, promotion by outside interests not familiar with local conditions, under-capitalization, and poor engineering studies. The company's management also reportedly misrepresented the extent of the project's infrastructure, the number of acres reclaimed, and its various costs. Following investigations into the company's practices, the State Land Board requested that the company's application for a second segregation of lands be delayed. The Three Sisters Irrigation Company was subsequently acquired by the Columbia Southern Irrigation Company in November 1905 and then immediately by the Columbia Southern Irrigation Company in 1906. The Columbia Southern Irrigation Company's development became known as the "Tumalo Project" in 1913. It had the distinction of being Oregon's first failed Carey Act project, having been taken over, reconstructed, and operated by the State of Oregon because of mismanagement and fraud. The Columbia Southern Company proved incapable of designing and building a workable project, and settlers in the project area eventually filed complaints with the State Land Board. The State Land Board sued the company, seeking to cancel its reclamation contract in 1909. The board initially lost the lawsuit, but prevailed two years later. In 1911, the entire project was deeded to the Oregon, Washington & Idaho Finance Company, which prepared financial and engineering reports on the project. In February 1913, the Oregon Legislature passed the Columbia Southern Act, authorizing \$450,000 to reorganize and construct the project. Between June 1913 and December 1914, the State of Oregon improved the Tumalo Project with the construction of two dams, a reservoir, a feeder canal, a diversion canal and other improvements costing a total of \$425,000. The project's original reclamation plans had involved the diversion of the regular flow of Tumalo Creek, starting from the vicinity of Broken Top Mountain and ending at the Deschutes River several miles below Bend. When the state assumed control of the project, these plans were modified to include the storage of Tumalo Creek's flood waters in a reservoir located at a natural basin known as Wimer Flat on the project's eastern extent. This reservoir was supplied by a canal diverting from Tumalo Creek about three miles above its mouth. Claeysens, E-7; Doncaster, "Sagebrush to Clover," 8. The State of Oregon operated the system until 1922. Today, it is administered by the Tumalo Irrigation District. Archibald, 48; Claeysens, E-7; Doncaster, "Sagebrush to Clover," 11; Hall, 12.

⁶⁹ The Arnold Irrigation Company incorporated on December 27, 1904, and contracted with the State Land Board under the Carey Act for the reclamation of approximately 5,000 acres south of Bend. The company was promoted by C. C. Hutchinson. The development of the project began in April 1905 and progressed through 1910. It involved the construction of a diversion on the Deschutes River at the upper portion of Lava Island about six miles southeast of Bend, a flume at the head of the system, and a main canal known as the "Arnold Ditch." Water was first delivered through the Arnold Canal in 1911. The project's main canal initially terminated at Silver Lake Road in Bend, where it intersected with laterals owned by other companies. These companies were the Pine Forest Ditch Company, which was established November 2, 1908, and irrigated about 10,000 acres southeast of Bend, and the North Irrigation Company, which was established December 2, 1908, and watered about 2,000 acres south of Bend, and the Bend Company. The Arnold Irrigation Company later absorbed each of these companies. The Arnold Irrigation Company was reorganized as the Arnold Irrigation District in 1936. It presently serves 4,381 acres south and east of Bend. Archibald, 35 and 356-357; Doncaster, "Sagebrush to Clover," 8 and 10; Hall, 16; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 6; See also, Arnold Irrigation District, "About Us." Online document: <http://www.arnoldirrigationdistrict.com/index.php/about-us/>, accessed January 2015.

⁷⁰ Doncaster, "Sagebrush to Clover," 9.

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constructed as commercial investment enterprises tended to contain infrastructure that was larger in size and scale, due to the greater amount of capital investment involved in such projects—they covered greater geographic areas. However, this distinction was not always a consistent marker, especially as older cooperative ventures were restructured and recapitalized as corporations to take advantage of the Carey Act's legal provisions.

Settler Recruitment

Large-scale settler recruitment programs, often referred to as “colonization” programs, were crucial to the success of irrigation projects conducted under the Carey Act and other federal policies. Because Carey Act developers depended on the sale of water rights to recoup their costs, many planned and executed aggressive promotional campaigns to attract as many settlers to their lands as possible. The revenues generated through settlement often also provided for payments on bonds, allowed a developer to collect operational and maintenance assessments, and helped to keep up with maintenance. Some recruitment programs relied on direct advertising in newspapers and major media outlets, particularly in communities in the East and Midwest. Others were more obscure, appearing in technical and travel literature, and many were less than completely truthful in characterizing agriculture in the arid West and the potential for success. The promotional programs typically appealed to individuals and families that aspired to the high ideals of William E. Smythe and others, promulgating the utopian visions of the American West, as first portrayed by boosters in the late-nineteenth century.⁷¹

Eastern and central Oregon, in particular, experienced a period of unprecedented population growth during the early-twentieth century, due to colonization recruitment efforts. Much of this so-called “homesteading boom” resulted from an increase in Homestead Act claims by dry-land farmers seeking land for the cultivation of wheat. However, it can also be attributed to the increased availability of irrigation water throughout these regions.⁷² Developers of lands segregated under the Carey Act actively carried out their own recruitment campaigns, and were equally supported by interests in the communities they served. The Deschutes Irrigation and Power Company, for example, pursued an aggressive advertising campaign to attract settlers. An example advertisement read:

“FREE LAND IN OREGON. In the richest grain, fruit and stock section in the world. Thousands of acres at actual cost of irrigation. Deeds issued from the State of Oregon. WRITE TODAY. Booklet and map free. Deschutes Irrigation and Power Company, 610-11-12 McKay Building, Portland.”⁷³

Beginning in 1923, the Tumalo Irrigation District likewise promoted a colonization program that offered a forty-acre farm for a down payment of about \$250, and a total investment of \$2,500. Appealing to settlers' conception of the American dream, advertisements read: “We Want You, If you are Ambitious To Own a HOME on a Farm.” According to some contemporary accounts, the Deschutes River basin was reported to be the best advertised region for settlement in the United States in the early-twentieth century.⁷⁴ Also in the 1920s, a statewide and regional recruitment effort was carried out by the combined local chambers of commerce, the railroads, major businesses, and business and trade organizations. The Oregon State Chamber of Commerce and the Portland Chamber of Commerce helped coordinate the program.

Railroad companies were especially aggressive in conducting promotional campaigns designed to lure hopeful farmers to Oregon's agricultural hinterlands.⁷⁵ Their reasons were often twofold: to encourage development of lands to which they held title (and could sell at a profit), and to establish viable agricultural communities that would then utilize their railroad lines for the transport of goods and services. The railroads developed and widely distributed brochures and other advertisements touting Oregon's eastern plains and central basins as a

⁷¹ Hall, 48.

⁷² Ibid.

⁷³ Oregon Department of Transportation, “Deschutes Irrigation and Power Company Canal,” 8.

⁷⁴ Hall, 48.

⁷⁵ Doncaster, “Sagebrush to Clover,” 11, 68.

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farming paradise. They further supported these claims by building thousands of miles of branch lines into previously underserved areas. In 1909, for example, the Union Pacific Railroad and the Great Northern Railway launched a highly competitive and tumultuous race to be the first to bring railroad service directly to the Deschutes River basin. Subsidiaries of the two firms, the Great Northern Railway's Oregon Trunk Railroad and the Union Pacific's Deschutes Railroad Company, each began building secondary lines from the respective railroad lines in the Columbia River Gorge south toward Bend. Under an agreement with its opponent, the Deschutes Railroad Company terminated its line at the Oregon Trunk Railroad's newly platted townsite of Metolius in the upper basin's north reaches, in what would become Jefferson County. The Oregon Trunk Railroad, in turn, agreed to allow the Union Pacific access to its line south of Metolius. It reached Bend in the fall of 1911.⁷⁶

Most notably, the railroads arrived in the Deschutes River basin following and contemporary to the construction of Oregon's first Carey Act projects in the region. Their construction facilitated the emigration and settlement of farmers and other developments in the basin, including these projects, by providing ready access for the receipt and distribution of goods and services to faraway markets.⁷⁷

Historic Context: Federal Reclamation Projects, 1902-1978

By 1900, the need for irrigation development in the western states became a national issue. Although the Carey Act produced some successful results, states and local jurisdictions still struggled with the development of arid and semi-arid public lands, and various constituent groups called for increased federal involvement. Without large storage reservoirs and other sophisticated infrastructure, in many areas there was still not enough water available to irrigate farmable lands through the long, dry summer months at the end of a growing season. Western states were generally unwilling or incapable of financing large irrigation infrastructure programs to resolve these difficulties. The issue was so pronounced that pro-irrigation planks were even included in the platforms of all major political parties.⁷⁸

Congress remained embroiled in these debates. The central question during this period was whether the federal government should assume a more direct role in the development of irrigation projects or continue to defer responsibility to the individual states. Efforts to promote a national reclamation act received broad support in the 1890s and at the turn of the century. However, many politicians in Eastern states objected to funneling more federal dollars out west, and ranchers in western states believed that public lands should remain open for cattle and sheep grazing. In addition, Eastern and Midwestern farm organizations feared that the rapid expansion of irrigated land in the West would return the nation to the agricultural depression of the 1890s.⁷⁹

Newlands Reclamation Act of 1902

A significant shift in this debate occurred when Theodore Roosevelt became President of the United States, following the assassination of President William McKinley on September 14, 1901. Roosevelt supported the establishment of a federal multi-purpose water development program, and his endorsement was important to

⁷⁶ Doncaster, "Sagebrush to Clover," 12.

⁷⁷ According to Doncaster, one contemporary report indicated the average Jefferson County, Oregon, farmer owned around 270 acres, and typically farmed in excess of 400 acres. Doncaster, "Sagebrush to Clover," 12.

⁷⁸ Claeysens, E-3; Hall, 10.

⁷⁹ Donald J. Pisani, "Federal Reclamation in the Twentieth Century: A Centennial Retrospective," *The Bureau of Reclamation: History Essays from the Centennial Symposium, Volumes I and II* (Denver, CO: Bureau of Reclamation, U.S. Department of the Interior, 2008), 612; Claeysens, E-3; Doncaster, "Sagebrush to Clover," 13.

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the enactment of new federal legislation on July 17, 1902.⁸⁰ Known as the Newlands Reclamation Act of 1902, this legislation initiated the federal government's direct involvement in the promotion and development of irrigation projects in the American West, which would come to have a profound impact on the United States' vast areas of arid and semi-arid lands and the growth and development of individual communities throughout the country. Federal irrigation projects conducted under the Act served as drivers of economic and agricultural growth on both local and regional levels. They involved tremendous amounts of capital investment, which bolstered local economies and attracted new workers to some of the nation's most underdeveloped regions and inaugurated new commercial and industrial development. Moreover, many federal irrigation projects fostered innovation in engineering design and construction, and were often recognized for their advancement of irrigation technology, sometimes at a national level.

Three prominent individuals were the principal promoters of a greater federal role in Western irrigation and the passage of the Newlands Act. These individuals, Frederick H. Newell, George W. Maxwell, and Francis G. Newlands, had long advocated for the passage of a federal reclamation act and supported President Roosevelt's position. Newell was the chief hydrographer for the U.S. Geological Survey, served as Secretary of the American Forestry Association, and later became the chief engineer of the U.S. Reclamation Service and its first director. In the 1890s, he had conducted many of the water resources studies of the western states for the U.S. Geological Survey and published Congressional reports on his findings. George W. Maxwell, a California attorney experienced in western irrigation, was the founder of the National Irrigation Association, established in 1897. The National Irrigation Association was the first national organization concerned with the reclamation movement in the United States and was highly involved in organizing nationwide support for a federal reclamation act. Francis G. Newlands was a member of the U.S. House of Representatives from Nevada and primary author and sponsor of the Newlands Act, which was introduced to Congress in 1902.⁸¹

Maxwell and Newlands first formulated a draft of the national reclamation law in 1901 with technical support from Frederick Newell. However, strong opposition in Congress prevented its initial passage. When the bill was reintroduced in 1902, President Roosevelt helped cobble together the legislative alliances that made passage of the act possible. Roosevelt, who signed the bill into law, believed that reclaiming arid lands would promote the agrarian ideals of Thomas Jefferson.⁸²

The Newlands Act established the U.S. Reclamation Service as a new branch of the U.S. Geological Survey and charged the service with the development of irrigation projects in the arid West. Intended to support the livelihood of individual family farms, the act initially authorized funding for the construction and maintenance of irrigation projects in thirteen western states. This development included the construction of dams and extensive canal systems typically beyond the capability of projects initiated under the Carey Act and what they could achieve. Provisions of the Newlands Act authorized the financing of new irrigation infrastructure by setting aside money from the sales of semi-arid public lands, and through the sale of water to local users. The newly irrigated land would be sold and the proceeds placed in a revolving fund to support more such projects, known as the Reclamation Fund. The Reclamation Act also gave the U.S. Secretary of the Interior the power to select projects, determine the size of farms, withdraw from entry the public lands needed for farms or towns, purchase or condemn existing dams and canals, approve construction contracts, and set the amount each farmer owed the government as well as operation and maintenance charges.⁸³

As a means to help limit federal involvement, the law also provided that local water-user associations would eventually assume operation and maintenance responsibilities of federally constructed irrigation projects. As originally envisioned, water users that subscribed to an irrigation project would repay the federal government the construction costs of a project within ten years, in addition to paying fees for ongoing operation and

⁸⁰ Hall, 10.

⁸¹ Shelly C. Dudley, "The First Five: A Brief Overview of the First Reclamation Projects Authorized by the Secretary of the Interior on March 14, 1903," *The Bureau of Reclamation: History Essays from the Centennial Symposium, Volumes I and II* (Denver, CO: Bureau of Reclamation, U.S. Department of the Interior, 2008), 290; Hall, 10.

⁸² Dudley, 290; Hall, 10; Robbins.

⁸³ Doncaster, "Sagebrush to Clover," 13; Hall, 10; Pisani, 616.

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maintenance expenses. This money would be placed into the Reclamation Fund. Once the construction costs were paid in full, the U.S. Reclamation Service turned over control of a project to a local water-user association or irrigation district, while still retaining title to the property and the irrigation infrastructure. Later amendments to the Reclamation Act extended the repayment period, and authorized the transfer of project operations and maintenance expenses to local irrigation districts as soon as construction was completed.⁸⁴ The law also placed 160-acre limitations on single ownerships, a requirement that was often ignored, and reclamation officials had to navigate widely varying state and territorial water laws to implement each project.⁸⁵

The Newlands Act's passage marked a significant change in American domestic policy toward irrigation development. Illustrative of Progressive Era politics, the act was the first in a series of policies, programs, and initiatives that emphasized engineering and technology as a means to solve the social and economic problems of the period. Historians have recognized it as a significant break with nineteenth-century laissez faire land policies that stressed individualism and self-sufficiency. Instead, proponents believed that the construction of federally supported dams would assist homesteaders in transforming the West's arid and semi-arid lands into productive farms, which would in turn support new communities. Newlands and Maxwell viewed the federal government's support of settlers and their collective efforts to establish productive irrigation projects as important to withstanding the trials of the settlement process. They believed that sufficient water supplies enabled settlers to successfully engage in intensive agriculture on a small scale, making it possible for them to achieve economic stability and social equality. In this way, reclamation was perceived by some as providing the basis for a new civilization in the American West.⁸⁶

Even prior to the Newlands Act, government engineers had already conducted numerous surveys and investigative studies to identify irrigation development opportunities in the western states, and potential dam sites and irrigable farmlands in particular. Following the Newlands Act's passage, the U.S. Reclamation Service prepared a list of potential projects for consideration and initiated a series of additional studies for those that appeared financially and technologically feasible. The U.S. Reclamation Service considered certain criteria, such as water supply, storage facilities, alignment of canals, and the selection of feasible lands in their deliberations.⁸⁷ When further study indicated a potential development could be built at a reasonable cost and that cost that could be repaid by water users, the U.S. Reclamation Service would recommend a project to the U.S. Secretary of the Interior for funding and construction. If the Secretary concurred, the project would then be recommended to Congress. At this stage, Congress could pass legislation authorizing the expenditure of funds for the project's construction and define its intended purpose. Local boosters frequently lobbied their congressmen to express support for a particular irrigation development. This support often played a significant role in selecting which areas were surveyed and studied for possible projects, and also influenced the ultimate selection of a project for construction.⁸⁸

Reclamation Before 1942

By 1907, the U.S. Reclamation Service had authorized a total of twenty-five federal irrigation projects throughout the western United States. This same year, the service's operations were removed from the authority of the U.S. Geological Survey and established as an independent agency under the U.S. Department of the Interior. The agency was again reorganized as the Bureau of Reclamation in 1923.⁸⁹ The Bureau of

⁸⁴ Amendments to the Reclamation Act extended the period of repayment to 20 years, then 40 years, and finally to an indefinite time period, depending on a district's ability to pay. Doncaster, "Sagebrush to Clover," 13; Hall, 10; and Robbins.

⁸⁵ Robbins.

⁸⁶ Hall, 11.

⁸⁷ Doncaster, "Sagebrush to Clover," 13; Dudley, 290.

⁸⁸ Doncaster, "Sagebrush to Clover," 13-14.

⁸⁹ Hall, 11; Doncaster, "Sagebrush to Clover," 8; See also, William D. Rowley, *The Bureau of Reclamation: Origins and Growth to 1945, Volume 1* (Denver, CO: Bureau of Reclamation, U.S. Department of the Interior, 2006) and Andrew H. Graham and William D.

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Reclamation experienced its greatest expansion and completed many of its largest and most influential reclamation projects between 1923 and 1940, especially in the Pacific Northwest. During this period, the agency developed the largest of its 180 completed projects, spanning seventeen states, including several in Oregon. Elwood Mead was commissioner of the agency during this period (1924-1936) and the agency's success is often credited to his leadership.⁹⁰

One of the most important amendments to the Newlands Act was the Warren Act of 1911. This act allowed the U.S. Reclamation Service to sell surplus water to landowners outside the government projects, sometimes blurring the lines between federal and private irrigation projects. The Warren Act also permitted the U.S. Reclamation Service to contract with private companies, water-user associations, or irrigation districts to pay for either part of a dam or part of the water stored behind a dam. Proponents of the legislation argued that the American West's major rivers contained few ideal dam sites and that the U.S. Reclamation Service could build infrastructure to serve twice as much land as could be irrigated within a federal reclamation project, and with only a little more money. Since the money was paid into the Reclamation Fund, the same as repayments on federal projects, providing water to private irrigation projects was cited as yet another source of valuable income. The law proved enormously important to the Bureau of Reclamation and, by the 1950s, the federal government irrigated nearly as much land outside its projects as within.⁹¹

Despite these successes, the Bureau of Reclamation encountered difficulties through the late 1920s and 1930s, as repayments from water users on already-constructed irrigation projects were lower than expected. This shortfall was primarily due to the Great Depression, severe drought, and other factors, and their effects on project settlers. The hardships experienced by many farmers during the Great Depression caused the livelihoods of some to drop below subsistence levels, and also meant that irrigation systems were not adequately maintained.⁹² A government survey of federal irrigation projects settled between 1931 and 1940 revealed desperate poverty in many areas and an increasing number of settlers leaving their claims. At the Vale-Owyhee Project, for example, sixty percent of the project's original settlers left their farms during this period. The study also found that seventy-five percent of homes on the project cost less than \$350 and fifty percent had two rooms or less, even though the average-size farm family numbered five people at the time. Forty percent of these same settlers could not afford to dig wells to provide adequate drinking water and had to obtain water from five miles away or more, in some cases.

Other conditions remained beyond the Bureau of Reclamation's control. A 1936 study, for example, revealed that some Oregon farmers, who had originally settled within federal irrigation projects in the 1920s, left their farms in the 1930s because they had only homesteaded for speculative reasons and had never intended to settle permanently.⁹³ Congress amended the Newlands Act to restructure the Reclamation Fund several times and extended the repayment periods to help alleviate these difficulties. However, revenues continued to decrease and the Reclamation Fund verged on bankruptcy by the early 1930s. At the same time, detractors of the agency demanded that the Bureau of Reclamation's operating budget be drastically reduced.⁹⁴

Relief for the Bureau of Reclamation and its programs arrived with the election of Franklin D. Roosevelt as President of the United States in 1932. During his term, Roosevelt implemented his "New Deal," which was a series of domestic programs enacted in the United States between 1933 and 1938. New Deal programs

Rowley, *The Bureau of Reclamation: From Developing to Managing Water, 1945-2000, Volume 2* (Denver, CO: Bureau of Reclamation, U.S. Department of the Interior, 2012).

⁹⁰ Jeff LaLande, "U.S. Bureau of Reclamation," *The Oregon Encyclopedia* (Portland, OR: Portland State University and the Oregon Historical Society, 2015), online document: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/, accessed January 2015.

⁹¹ Pisani, 617.

⁹² Christine Pfaff, "The Bureau of Reclamation and the Civilian Conservation Corps: A Legacy Revealed," *The Bureau of Reclamation: History Essays from the Centennial Symposium, Volumes I and II* (Denver, CO: Bureau of Reclamation, U.S. Department of the Interior, 2008), 739; Pisani, 619.

⁹³ Pisani, 619.

⁹⁴ Donald C. Swain, "The Bureau of Reclamation and the New Deal, 1933-1940," *Pacific Northwest Quarterly*, 61:3 (July 1970): 137; Doncaster, "Sagebrush to Clover," 18.

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focused on providing relief to the unemployed and poor, helping the economy recover to normal levels, and reforming the nation's financial system. The Bureau of Reclamation benefited from several of these programs, receiving large amounts of funding for the construction of new irrigation projects, as well as labor and supplies. The President and other top officials recognized that the construction of new irrigation projects provided much-needed work for the nation's unemployed during this period, and helped its agricultural industries recover from the Depression's devastating effects. Lobbying on behalf drought-stricken regions, which were the first to benefit from proposed new irrigation projects, further contributed to the federal government's efforts to revitalize the agency.⁹⁵

After 1935, there was tremendous growth in the amount of lands irrigated by federal irrigation projects. Between 1920 and 1935, the acreage of lands irrigated by these projects increased only modestly, from approximately 1.2 million acres to 1.6 million acres. By the end of World War II, however, federal projects had irrigated twice as much land as was within government projects in 1920. By 1941, there were forty-six completed federal irrigation projects in the American West and another twenty-seven under construction. This amount was more than double the number of projects under consideration in 1920 alone, and preliminary surveys were completed for an additional forty-eight projects.⁹⁶

An important characteristic of Bureau of Reclamation-designed irrigation projects was that variations in the functional types of a system's various components were kept to a minimum. Standardized designs were used whenever possible. For example, only three types of water conveyance structures were proposed for use in the Deschutes Project in central Oregon: siphons, drops, and flumes. Similarly, the project's headgates were limited to being either single-gate or orifice-type turnouts. The Vale Project utilized a similar selection of standardized engineered designs. Individualized plans were prepared for only a few structures requiring special consideration due to difficult or unusual site conditions. With few exceptions, irrigation structures at Bureau of Reclamation projects were constructed of reinforced concrete rather than wood, reflecting a policy preference to minimize maintenance or replacement costs.⁹⁷

Civilian Conservation Corps

During the 1930s and 1940s, the Civilian Conservation Corps (CCC) was one of several New Deal programs that benefited the Bureau of Reclamation and the construction of their many irrigation projects, including several in Oregon. The CCC was organized in 1933 and was originally called the Emergency Conservation Work program. The intent of the CCC was to employ unemployed single men between the ages seventeen and twenty-five who were United States citizens, and to help these men develop job skills while working on "conservation and development of the natural resources of the United States, its Territories and insular possessions." For the most part, these were discouraged men, unsuccessful in securing jobs because they had no work experience. Native Americans were at first not eligible to participate in the program, but this restriction was eventually lifted because of the dire conditions on many reservations.⁹⁸ As many as 85,000 Native Americans are said to have participated in CCC programs by 1942.⁹⁹ Enrollment was also expanded to include "local experienced men," who served as technical foremen on work projects, and a limited number of World War I veterans. The latter were selected by the Veterans Administration and assigned to special camps operated less stringently than others. Enrollees were assigned to structured work camps for periods ranging from six months to two years and employed on projects identified by the U.S. Department of the Interior and the U.S. Department of Agriculture. The U.S. Department of War (now the U.S. Army) was responsible for transporting, housing, and feeding the men.¹⁰⁰

⁹⁵ Doncaster, "Sagebrush to Clover," 18-19.

⁹⁶ Pisani, 618.

⁹⁷ Doncaster, "Sagebrush to Clover," 49.

⁹⁸ Calvin W. Gower, "The CCC Indian Division: Aid for depressed Americans, 1933-1942," *Minnesota History* (1972), 3-13, online document: <http://collections.mnhs.org/MNHHistoryMagazine/articles/43/v43i01p003-013.pdf>, accessed October 2016.

⁹⁹ Donald L. Parman, "Indian Civilian Conservation Corps," *Native America in the Twentieth Century: An Encyclopedia*, ed. Mary B. Davis (New York, NY: Routledge, 1996), 252,

¹⁰⁰ Doncaster, "Sagebrush to Clover," 22; Pfaff, "A Legacy Revealed," 739.

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The Bureau of Reclamation was granted its first CCC work camp in 1934 at Lake Guernsey, a reservoir of the North Platte Project, in Wyoming. The agency's participation in the program was expanded to include a total of forty-six separate camps at its height during the summer of 1935. Between 1935 and May 1941, the number of operating Bureau of Reclamation camps fluctuated between thirty-four and forty-four. Thereafter, the Bureau of Reclamation's CCC camps were gradually closed as irrigation projects were completed and the threat of war in Europe and East Asia increased. By June 30, 1942, only seven camps remained at projects, and they were discontinued shortly thereafter.¹⁰¹

In Oregon, the CCC provided labor necessary to develop and improve several of the state's Bureau of Reclamation projects. These irrigation projects employed workers from the CCC camps listed in the table below (Table 1). Other less permanent "spike camps" were also established for several of these projects. Spike camps were usually smaller and made up of tents that could be easily dismantled. They were typically utilized when it became more efficient to house workers closer to a work area, rather than to transport them to/from the permanent camp on a daily basis to an otherwise distant or remote location.¹⁰² At each irrigation project, CCC enrollees were under the direct supervision of Bureau of Reclamation personnel during the Monday through Friday 8-hour workday, while War Department staff controlled and directed their off-hours in camp. If adverse weather conditions were encountered, CCC enrollees made up any lost work time on Saturdays.¹⁰³

Initially, work undertaken by the Bureau of Reclamation's CCC camps focused on rehabilitating the storage, distribution, and drainage systems of older projects. Work activities typically consisted of returning weed and silt-filled canals and laterals to their designed shape; replacing decaying wood structures with concrete; adding new water control structures; building bridges over canals; eradicating weeds and rodents; reconditioning operating roads; placing riprap on canal and lateral banks; and sealing porous canals with earth or concrete linings. As the agency's CCC program expanded, the type of project work undertaken by enrollees became broader and more varied, and included developing supplemental water supplies and constructing new irrigation projects. For example, CCC forces were used to clear timber and debris to prepare for construction of the Wickiup Reservoir as part of the Deschutes Project in 1938 and the construction of a rock masonry parapet wall for the Agency Valley Dam as part of the Vale Project in 1938-1939. CCC crews were also responsible for largely constructing the lateral systems of the Vale Project's Willow Creek unit.¹⁰⁴

Table 1. Civilian Conservation Corps Work Camps in Oregon

<i>Project Name</i>	<i>Camp Name</i>	<i>#</i>	<i>County</i>	<i>Date Occupied</i>	<i>Date Terminated</i>
Deschutes	Wickiup	BR-75	Deschutes	July 1938	October 1938
	Wickiup	BR-76		April 1939	August 1941
	Wickiup	BR-77		April 1939	July 1942
	Redmond No. 1	BR-88		July 1938	May 1942
	Redmond No. 2	BR-89		July 1938	May 1942
	Redmond No. 3	BR-90		July 1938	May 1942
Owyhee	Ontario	BR-42	Malheur	October 1935	May 1942
	Nyssa	BR-43		October 1935	June 1941

¹⁰¹ Pfaff, "The Bureau of Reclamation and the Civilian Conservation Corps: A Legacy Revealed," 737 and 750.

¹⁰² Pfaff, "A Legacy Revealed," 745; Christine E. Pfaff, *The Bureau of Reclamation's Civilian Conservation Corps Legacy: 1933-1942* (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, February 2010), E-5.

¹⁰³ Pfaff, "A Legacy Revealed," 739; Doncaster, "Sagebrush to Clover," 22.

¹⁰⁴ C. C. Ketchum, "Project History of Vale, Baker, and Burnt River, 1943" (Vale, OR: Vale Oregon Irrigation District for the Bureau of Reclamation, 1943), 36-37; Doncaster, "Sagebrush to Clover," 25 and 32; Pfaff, "A Legacy Revealed," 741 and 744.

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<i>Project Name</i>	<i>Camp Name</i>	<i>#</i>	<i>County</i>	<i>Date Occupied</i>	<i>Date Terminated</i>
Umatilla	Stanfield	BR-44	Umatilla	October 1935	June 1938
Vale	Vale	BR-45	Malheur	October 1935	October 1940

The CCC program had a significant impact on the Bureau of Reclamation's irrigation developments in the 1930s and 1940s and assisted in furthering the agency's goals through the Great Depression. Enrollees from CCC camps provided inexpensive yet necessary labor for the maintenance and repair of the Bureau of Reclamation's older irrigation projects and helped develop supplemental water supplies and construct new infrastructure.¹⁰⁵

Reclamation in the Postwar Era

Federal reclamation work was largely suspended during World War II, but quickly resumed following the cessation of hostilities. As during the 1930s, the paramount concern following the war was job creation and the livelihoods of individual farmers. Government officials predicted that over 14,500,000 Americans would be unemployed at the end of the war and that a permanent increase in public spending would both help fulfill these employment needs and contribute to sustained economic growth, necessary to prevent the United States from lapsing back into economic depression.¹⁰⁶

Agencies such as the Bureau of Reclamation, the U.S. Corps of Engineers, the U.S. Forest Service, and the Soil Conservation Service all had plans ready for implementation within three months of the war's end. In 1945, the Bureau of Reclamation requested authorization for 415 irrigation and multiple-purpose water projects in seventeen western states. The number of projects by state varied. However, together they were expected to add 11,000,000 acres of newly cultivated lands and provide supplemental water to as much acreage already under cultivation. In Oregon, this included the Deschutes Project, which had been approved for the irrigation of 20,000 new acres. In total, the lands affected by the Bureau of Reclamation's proposed postwar projects amounted to twice the acreage irrigated in 1945. The Secretary of the Interior also estimated that the postwar work provided by these projects would equal one year's employment for at least 1.5 million returning veterans.¹⁰⁷ Between 1946 and 1964, the Bureau of Reclamation opened over 2,800 farms on federal reclamation projects in Wyoming, Idaho, Washington, Oregon, California, and Arizona, many of these for veterans.¹⁰⁸

The Bureau of Reclamation's annual budget allocation went from \$50 million in 1946 to \$120 million in 1947; and from \$200 million in 1948 to over \$300 million in 1950. With these vast budget increases, the agency no longer had to rely on the proceeds from land or water sales, or oil leases, for the construction of large-scale irrigation projects. In the postwar era, irrigation projects as a concept became a symbol of national economic growth and a method to avoid future economic depressions. The Bureau of Reclamation's mission also began to include the creation and growth of water-based recreation areas and facilities. These approaches would characterize the Bureau of Reclamation's activities in the arid and semi-arid regions of the American West through the 1960s and 1970s.¹⁰⁹ Today, the Bureau of Reclamation supervises or oversees the distribution of water to more than 31,000,000 urban and rural residents in the West, including one-fifth of the region's irrigated agriculture. It is the largest wholesaler of water in the country and the second-largest producer of hydroelectric power in the West.¹¹⁰

¹⁰⁵ Pfaff, "A Legacy Revealed," 737.

¹⁰⁶ Pisani, 619.

¹⁰⁷ Harry W. Bashore, "Bureau of Reclamation," *Annual Report of the Secretary of the Interior for the Fiscal Year Ended June 30, 1944*, Harold L. Ickes, ed. (Washington, DC: U.S. Government Printing Office, 1944), 5; Pisani, 620.

¹⁰⁸ Brian Q. Cannon, "Farms for Veterans: Reclamation Settlement Policies and Results Following the World Wars," *The Bureau of Reclamation: History Essays from the Centennial Symposium, Volumes I and II* (Denver, CO: Bureau of Reclamation, U.S. Department of the Interior, 2008), 677.

¹⁰⁹ Ibid.

¹¹⁰ Pisani, 631.

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Federal Reclamation Projects in Oregon

Irrigation projects constructed by the Bureau of Reclamation have had a significant impact on the history and development of Oregon since the agency's founding in 1902. A total of 15 irrigation projects have been constructed in Oregon since this time, including 29 dams. Nearly all are located in the state's most arid regions, and some are quite large in size and scale.¹¹¹ Following passage of the Newlands Act, the U.S. Reclamation Service initially focused on the possibility of irrigation development in Oregon's arid eastern plains.¹¹² The Umatilla Project, authorized in 1905, was among the earliest irrigation developments carried out by the U.S. Reclamation Service in Oregon. Even though this project is one of the earliest in Oregon, government surveys and investigative studies had been initiated many years prior to determine the feasibility of their irrigation development opportunities.¹¹³

The Umatilla Project was constructed between 1906 and 1908 and included an area of 17,000 acres along the south bank of the Columbia River, east of the Umatilla River. Early plans called for the irrigation of 60,000 acres. Water for the irrigation of about 10,000 acres was diverted from the Umatilla River near the town of Echo, and stored in the Cold Springs Reservoir, 24.5 miles to the north.¹¹⁴ Construction of the Cold Springs Dam and Reservoir began in 1907. The Bureau of Reclamation later expanded the project substantially with completion of the Maxwell Diversion Dam in 1912-1915 and the West Extension Canal in 1912. The latter involved the consolidation and incorporation of lands owned by the Northern Pacific Railroad and the Oregon Land and Water Company, and irrigation developments constructed by the Maxwell Land and Irrigation Company, the Western Land and Irrigation Company, and J. S. West. In conjunction with construction of the West Extension, the Bureau of Reclamation built the Three Mile Falls Diversion Dam in 1914. The dam proved a unique structure for its time because it was a multiple-arch structure. The McKay Dam was likewise constructed in March 1923 to provide additional water for irrigating the Umatilla Project.¹¹⁵

Following completion, water users from the Umatilla Project's West Extension formed the first irrigation district associated with the Umatilla Project, called the West Extension Irrigation District, on June 10, 1919. Organized from the former Umatilla Water Users' Association, the Hermiston Irrigation District followed on December 15 of the same year. Both districts entered contracts with the Bureau of Reclamation for the ongoing operation and maintenance of their respective portions of the Umatilla Project—the Hermiston Irrigation District on April 9, 1921, and the West Extension Irrigation District on April 27, 1926. The latter included transfer of the Three Mile Falls Diversion Dam to the irrigation district. The Stanfield Irrigation District likewise contracted with the agency for lands in the Umatilla Project on October 4, 1923, and the Westland Irrigation District was organized in April 1926.¹¹⁶ Happenings like these exemplify the relationships and interchange between the U.S. Reclamation Service (and later the Bureau of Reclamation), its construction of federally funded irrigation projects, and those private irrigation cooperatives and companies that may have existed previously.

Establishment of the Umatilla Project did not address the reserved water rights of Native American tribes on the Umatilla Reservation, which were clarified by the U.S. Supreme Court in *Winters v. United States* in 1908. Thereafter referred to as "Winters Rights," these were (and in many cases still are) water rights implicitly reserved by a treaty, statute, or executive order for use by an established American Indian reservation. Appropriation of water that belonged to American Indian reservations continued largely unabated through

¹¹¹ LaLande: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/

¹¹² Doncaster, "Sagebrush to Clover," 14.

¹¹³ Doncaster, "Sagebrush to Clover," 14; Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 3; LaLande: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/

¹¹⁴ Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 3.

¹¹⁵ Eric A. Stene, "Umatilla Project" (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, 1993), 3 and 5-7; LaLande: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/

¹¹⁶ Stene, "Umatilla Project," 4.

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much of the twentieth century until further definition of these reserved water rights was provided by the U.S. Supreme Court beginning in the 1960s. Legal struggles related to these water rights continue to the present.¹¹⁷

Central and Eastern Oregon

The Bureau of Reclamation initiated surveys and investigations of other potential irrigation developments during this period, as well. The arid and semi-arid regions of eastern and central Oregon were of particular interest, and the agency conducted a series of studies beginning in 1905 to evaluate the feasibility of irrigation in these areas. Debates over the feasibility of irrigation development in some locations lasted into the 1920s and 1930s, and most of the agency's large-scale projects in Oregon were not initiated until this period. The first major development in Oregon in the late 1920s was the Owyhee Project. At 417-feet high, the Owyhee Dam was the tallest in the world when completed in 1932 and the proving ground for a pioneering concrete-dam design and construction method, which would later be used in the construction of the Hoover Dam.¹¹⁸ In eastern Oregon, the Owyhee Project was followed by construction of the Vale Project in the 1930s and 1940s.

The Bureau of Reclamation began considering irrigation development along the Owyhee River near the Oregon-Idaho border in 1903-05 by surveying irrigable lands and possible reservoir sites at Duncan's Ferry and Red Butte. Irrigation development in the nearby Jordan Valley may have influenced this attention, and other public and private studies were carried out in 1909. Meanwhile, the Bureau of Reclamation simultaneously began investigating the potential for irrigation development along the Malheur River in 1904.¹¹⁹ Known as the Malheur Project, this study first contemplated the construction of what would later become the Warm Springs Dam and Reservoir and the irrigation of downstream lands in the Harper and Little Valley areas. These sections would later become units of the Vale Project. Citing excessive construction costs, however, the Bureau of Reclamation initially abandoned these plans, declaring the Malheur Project infeasible.¹²⁰ Neither the Owyhee Project nor the Malheur Project would move forward until at least 10 years later.

Despite these setbacks, the Bureau of Reclamation's interest in the region's irrigation development continued into the 1910s and 1920s. During this period, the agency coordinated with both state and private entities to identify and study potential irrigation development opportunities. For example, the federal government collaborated with the Oregon State Engineer and resumed consideration of the Owyhee River basin in a second study completed in 1916. Both the Bureau of Reclamation and the State of Oregon contributed \$5,000 to the effort, which was characterized as "Oregon Cooperative Work." The study recommended an irrigation project of approximately 23,000 acres, including the construction of a new dam on the Owyhee River. Subsequent studies were commissioned in 1921 and 1924, and the Owyhee Project finally received Congressional authorization in December 1924. President Calvin Coolidge approved the final project on October 12, 1926, following a recommendation from the U.S. Secretary of the Interior.¹²¹

In 1922, the Bureau of Reclamation likewise contracted with the Warm Springs Irrigation District to again examine the feasibility of irrigation development in the Harper and Little Valley areas of the Malheur River basin. This occurred after the agency had already assisted the irrigation district with construction of the Warm Springs Dam and Reservoir and the district's irrigation distribution and drainage systems in the late 1910s. Based on the investigation's positive findings, the Bureau of Reclamation conducted its own study in August and September of 1924, which became the basis of the Vale Project. This study examined the project's potential agricultural and economic viability and included: soil and land classification surveys, studies of

¹¹⁷ William Canby, *American Indian Law in a Nutshell* (Eagan, MN: Thomson West, 2004), 431; N. Bruce Duthu, *American Indians and the Law* (New York, NY: Penguin Group, Inc., 2008), 105; John Thorson, Sarah Britton, and Bonnie G. Colby, eds., *Tribal Water Rights: Essays in Contemporary Law, Policy, and Economics* (Tucson, AZ: University of Arizona Press, 2006), 78-79.

¹¹⁸ LaLande: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/

¹¹⁹ Stene, "Owyhee Project," 3; See also, Jedediah Rogers and Christine Pfaff, "Owyhee Dam Historic District," National Register of Historic Places Registration Form (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, June 2010), online document: http://www.nps.gov/nr/feature/weekly_features/2010/OwyheeDamHD.pdf, accessed January 2015.

¹²⁰ Dick, "Vale Project," 3.

¹²¹ Stene, "Owyhee Project," 4.

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drainage conditions and water requirements, the collection of data about crop yields in adjoining areas, studies of meteorological factors having agricultural or economic importance, and studies of transportation facilities and market conditions.¹²² The Bureau of Reclamation's investigations found the Vale Project to be feasible and economically viable, and the agency contracted with the Vale Oregon Irrigation District for the project's construction on October 22, 1926.¹²³

After World War I, commercial clubs and other like-minded organizations in Ontario, Vale, and Nyssa collaborated to help promote the cause of reclamation in the Owyhee and Malheur River Valleys and help with settler recruitment. Some work in this regard had been done before the war, but momentum increased after 1918 and in 1926 when the federal government initiated the construction of the Owyhee and Vale Projects. Following the projects' authorization, the U.S. Reclamation Service asked the citizens of Malheur County to establish a local agency to colonize the newly irrigated lands. The Ontario Commercial Club was the primary organizer of this task and exemplified other organizations of this kind. Committees were formed to write and publish pamphlets and other forms of advertisements, which were distributed nationwide. The Ontario Commercial Club also joined with the commercial clubs of Harper, Vale, and Nyssa to raise funds, matched by the county, to hire a sales agent. Land appraisals, sales prices, and other conditions were strictly controlled to prevent speculation. The work of the combined commercial clubs was instrumental in the settlement of each project.¹²⁴

Similar to the Vale Project, the Bureau of Reclamation worked with the State of Oregon and other local jurisdictions to begin investigations for potential development of the Upper Deschutes River basin in central Oregon in the mid-1910s. Known as the Deschutes Project, these investigations were based on organizational divisions previously made by the U.S. General Land Office, which would later define reclamation of the area. Land along the upper Deschutes River in Deschutes County was referred to as the South Unit, while land along the downstream area of the lower Deschutes River in the Crooked River Canyon in present Jefferson County was referred to as the North Unit.¹²⁵ Later studies undertaken for the Deschutes Project would further divide this area into four distinct undertakings: North Unit, West Unit, South Unit, and East Unit. The South Unit and portions of the North Unit considered areas irrigated by the Central Oregon Project, which was privately being developed under the Carey Act, and at least one proposal considered assuming control of the Central Oregon Irrigation Company's North Canal Dam and Pilot Butte Canal to irrigate portions of the East Unit. In the end, only development of the North Unit, now known as the North Unit Irrigation District, was fully realized.¹²⁶

The Deschutes Project was a cooperative development carried out by the U. S. Bureau of Reclamation and the State of Oregon, which involved the use of water from the Deschutes River below Benham Falls for the irrigation of lands in the Upper Deschutes River Basin. In 1913, the Oregon Legislature accepted the Reclamation Act of 1902 and indefinitely withdrew the Deschutes River from further appropriation until a cooperative study between the state and federal governments could be completed.¹²⁷ The U.S. Reclamation Service and the State of Oregon initiated a comprehensive investigation of the Upper Deschutes River basin in 1913-14. This investigation resulted in a report entitled the *Deschutes Project*, published in December 1914. The report concluded that many aspects of the proposed project would directly affect the Central Oregon Irrigation Company's development of the Central Oregon Project at that time, including the possible establishment of a reservoir at Crane Prairie.¹²⁸

¹²² J. B. Bond, H. K. McComb, and G. H. Rogue, "Report: Warm Springs Project – Oregon (Malheur Secondary), General Investigations" (Boise, ID: U.S. Department of the Interior, Bureau of Reclamation, January 1924); Dick, "Vale Project," 3.

¹²³ Ketchum, "Project History of Vale, Baker, and Burnt River, 1943," 27.

¹²⁴ Malheur Country Historical Society, *Malheur Country History*, Vol. 1, 43.

¹²⁵ Oregon Department of Transportation, "Deschutes Irrigation and Power Company Canal," 5.

¹²⁶ Oregon State Engineer, *Deschutes Project* (Portland, OR: U.S. Department of the Interior, United States Reclamation Service in cooperation with the State of Oregon, December 1914); Archibald, 52-54.

¹²⁷ Hall, 31.

¹²⁸ Archibald, 54-55.

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The Bureau of Reclamation initiated a second round of investigations of the basin in 1921. Most of these investigations focused on the feasibility of constructing one or more reservoirs on the Deschutes River south of Bend for irrigation and hydroelectric projects. These inquiries resulted in reports issued in multiple volumes by the Bureau of Reclamation in 1935-37, entitled the *Deschutes Investigation, Oregon*.¹²⁹ The investigations comprised: a comprehensive investigation of all reservoir sites in Deschutes Basin above Bend to furnish supplemental water for existing and new irrigation systems; consideration of the North Unit, including land classifications and the most practicable routes for a main canal and distribution system; consideration of alternative plans for pumping water from the Deschutes River; and water storage possibilities on the Crooked River.¹³⁰ The information provided in this report would become the basis of the Deschutes Project, authorized in November 1937.¹³¹

In the 1930s, economic and climatic conditions in Oregon helped convince government officials to provide assistance through the construction of these and other federal reclamation projects. While most of the country's farm populations were leaving farms prior to the Great Depression, the populations of some of Oregon's irrigated agricultural areas actually increased from 1920 to 1930, most notably in Deschutes County. These increases were so large that supplemental water supplies were desperately needed. Drought conditions that became progressively worse during the growing seasons of 1929, 1930, and 1931 further strained available water supplies, causing circumstances to reach crisis levels.¹³² To complicate matters, many of Oregon's private irrigation districts suffered financially following the Stock Market Crash of 1929 and faced bankruptcy during the Depression.¹³³

Beginning before World War II and continuing after, Congress charged the Bureau of Reclamation with rescuing some of these hard-pressed irrigation projects. The agency improved or enlarged old dams, constructed new ones, rehabilitated outdated delivery systems, and built several new irrigation projects. Two Oregonians in particular, Marshall Dana and Robert Sawyer, are recognized for their efforts to help steer Bureau of Reclamation funding and projects to the State of Oregon during this period.¹³⁴ Dana was a long-serving journalist with the *Oregon Journal* and a prominent civic leader from the 1920s through the 1950s, and Sawyer was editor of the *Bend Bulletin* from 1919 to 1953, a judge in Deschutes County during the 1920s, and an active member of many reclamation-friendly organizations. Both served as one-time presidents of the National Reclamation Association.¹³⁵

Post-World War II Oregon

The Crooked River and the Rogue River Basin Projects were among the largest federal reclamation projects constructed in Oregon by the Bureau of Reclamation in the post-World War II period. For the Crooked River Project, the Bureau of Reclamation's involvement began with the repair and rehabilitation of the privately built Ochoco Dam in 1949-50. The original dam had been constructed by the Ochoco Irrigation District in 1918-21. Known as the Ochoco Project, this work was later incorporated into the Crooked River Project's authorization in 1956. Construction activities on the Crooked River Project itself began in November 1957, including erection of the Prineville Dam and Reservoir, the Ochoco Main Canal and related water distribution works, and the

¹²⁹ C. C. Fisher, *Deschutes Investigations, Oregon: 1934-1936*, Part I, II, and III (Washington, DC: U.S. Department of the Interior, Bureau of Reclamation, 1936); C. C. Fisher, *Deschutes Investigations, Oregon: Plainview Project from Suttle Lake* (Washington, DC: U.S. Department of the Interior, Bureau of Reclamation, 1937); C. C. Fisher, *Deschutes Investigations, Oregon: South Unit Project* (Washington, DC: U.S. Department of the Interior, Bureau of Reclamation, 1937); Hall, 31.

¹³⁰ "Progress of Investigations of Projects," *Reclamation Era* 26:5 (May 1936), 128.

¹³¹ Robert Autobee, "Deschutes Project" (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, 1996), 7, online resource: https://www.usbr.gov/projects/ImageServer?imgName=Doc_1303397201233.pdf, accessed January 2015.

¹³² Hall, 31.

¹³³ LaLande: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/

¹³⁴ Ibid.

¹³⁵ Northwest Digital Archives, "Guide to the Marshall Newport Dana Papers, 1869-1969" (Portland, OR: Oregon Historical Society Research Library), online document: <http://nwda.orbiscascade.org/ark:/80444/xv76615>, accessed January 2015; Northwest Digital Archives, "Guide to the Robert W. Sawyer Papers, 1903-1959" (Eugene, OR: Special Collections and University Archives, University of Oregon Libraries), online document: <http://nwda.orbiscascade.org/ark:/80444/xv99188>, accessed January 2015.

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Barnes Butte and Ochoco Relift Pumping Plants. The Bureau of Reclamation dedicated the Crooked River Project in 1962 and contracted with the Ochoco Irrigation District for its operation and maintenance.¹³⁶

Congress provided initial authorization for the Rogue River Basin Project, based on previously completed investigations and reports, on August 20, 1954. This initial authorization was for the rehabilitation and betterment of existing infrastructure located in the Medford Irrigation District, the Rogue River Valley Irrigation District, and Talent Irrigation District. These irrigation districts and the irrigation companies that preceded them were responsible for much of the project's construction activities under the Bureau of Reclamation's supervision, including rehabilitation of Four Mile Lake and erection of the Fish Lake Dam and Reservoir. Additional authorization for construction of the Talent Division of the Rogue River Basin Project was subsequently provided on August 20, 1954. The Talent Division included construction of an irrigation delivery system and flood control and hydroelectric power facilities. The Bureau of Reclamation transferred the bulk of project facilities to the respective irrigation districts for operation and maintenance on January 1, 1961.¹³⁷ Among the Rogue River Basin Project's major milestones were development of Howard Prairie Reservoir in the Cascades and major expansion of Emigrant Creek Dam in the southern Bear Creek valley. Moreover, the project's Green Springs Power Plant is the only Bureau of Reclamation hydroelectric power-generation facility in Oregon.¹³⁸

Oregon Reclamation Today

By the 1950s-60s, the Bureau of Reclamation faced increasing pressures from public advocates and local agencies over the environmental impacts of more dams, and other large irrigation infrastructure. Even by the 1910s and 1920s, people had questioned the long-term economic benefit of adding vast acreages of irrigated lands to the nation's already highly productive farmlands. Compared to other western states, Oregon received fewer large federal irrigation projects, likely due to the state's physical, economic, and political environments. In addition, some of the Bureau of Reclamation's Oregon projects proved to be of marginal profitability in comparison to those in other states. These issues, combined with local users' inability to pay fees for services and the difficulty of "making a go of it" on only 160 allotted acres, resulted in the effective end of new large-scale federal irrigation projects in Oregon and elsewhere in the West during this period.¹³⁹ The construction of the Upper Division of the Baker Project, the Crooked River Extension of the Crooked River Project, the Rogue River Basin Project's Agate Dam, and the Bully Creek Extension of the Vale Project in the 1960s were among the Bureau of Reclamation's last large-scale undertakings in the state.¹⁴⁰

Today, the State of Oregon hosts 15 federal reclamation projects, which irrigate over 1 million acres. The following is a list of these projects and their associated construction dates.¹⁴¹ This listing of projects is provided here as a historical summary of federal reclamation work in Oregon. Please see the information in Section F regarding "Registration Criteria" and the footnote on Table 2 for additional information regarding limitations on the application of this MPD to individual federal reclamation projects.

¹³⁶ Toni Rae Linenberger, "The Crooked River Project" (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, 2001), 8 and 10-14, online document: http://www.usbr.gov/projects/ImageServer?imgName=Doc_1303160384628.pdf, accessed January 2015.

¹³⁷ Kelsey Doncaster, "Oregon State Level Historic Documentation, Hyatt Prairie Dam Rogue River Basin Project" (U.S. Bureau of Reclamation, Columbia-Cascades Area Office, 17 June 2015), 8-9; Toni Rae Linenberger, "Rogue River Basin Project" (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, 1999), online document: http://www.usbr.gov/projects/ImageServer?imgName=Doc_1305577527450.pdf, accessed January 2015, 12-14 and 18.

¹³⁸ LaLande: http://oregonencyclopedia.org/articles/u_s_bureau_of_reclamation/

¹³⁹ Ibid.

¹⁴⁰ William Joe Simonds, "The Baker Project" (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, History Program, 1997), online document: http://www.usbr.gov/projects/Project.jsp?proj_Name=Baker%20Project, accessed January 2015; Dick, "Vale Project;" Linenberger, "The Crooked River Project;" Toni Rae Linenberger, "Rogue River Basin Project."

¹⁴¹ See: <http://www.usbr.gov/projects/FacilitiesByState.jsp?StateName=Oregon>, accessed January 2015.

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Table 2. Federal Reclamation Projects in Oregon¹⁴²

<i>Project Name</i>	<i>Date(s) of Construction</i>	<i>Acres Irrigated</i>
Arnold Project	1948-1951	4,300
Baker Project	1931-1932 and 1965-1968	26,300
Burnt River Project	1936-1939	15,600
Crescent Lake Dam Project	1954-1957	8,000
Crooked River Project	1949-1950, 1958-1961, and 1966-1970	20,000
Deschutes Project	1938-1949 and 1956-1957	98,000
Grants Pass Project	1949-1950 and 1953-1955	10,000
Owyhee Project	1928-1939	118,000
Rogue River Basin Project	1955-1966	35,300
Tualatin Project	1972-1978	17,000
Umatilla Basin Project	1906-1908, 1923-1927, 1933-1938, and 1993	30,000
Vale Project	1926-1927, 1930-1942, and 1962-1964	35,000
Wapinitia Project	1958-1959	2,100

Each of these projects represents the United States government's direct involvement in the promotion and development of irrigation projects in the American West. Many of these projects have had tremendous impact on Oregon's physical landscape and the growth and development of individual Oregon communities, and have served as drivers of economic and agricultural growth on both local and regional levels. Some of the individual components of these projects are also recognized as innovative in their engineering design and construction, sometimes at a national level.

Conclusion

Whether sponsored by the federal government or constructed by it directly, federal irrigation projects have had a tremendous effect on the development of Oregon's arid and semi-arid areas. The water supplied by these systems supported the creation and growth of successful agricultural production, which in turn provided the necessary foundations for economic, industrial, and community development in many areas. The historical significance of many of Oregon's Carey Act and Federal Reclamation Projects derive from these associations. Some may also represent technical innovations in engineering or science, or the changes in the laws and policies of water rights management over time at the local, state, or federal levels. Nearly all have resulted in vast changes to Oregon's physical landscape and significantly influenced the history of its people.

¹⁴² Please note that this MPD is only applicable to the nomination of those irrigation projects (in whole or a portion thereof) where a project-specific context has been added to this main document. The two exceptions are the Central Oregon Project, belonging to the historic context "Carey Desert Land Act Projects in Oregon, 1901-1950," and the Vale Project, belonging to the historic context "Federal Reclamation Projects in Oregon, 1902-1978." The information contained in this MPD is considered sufficient for nomination of facilities in the Central Oregon Project and Vale Project without the addition of a project-specific addendum.

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F. Associated Property Types

(Provide description, significance, and registration requirements.)

Property Type and Sub-Type Outline

- I. Dams
- II. Water Conduit/Conveyance Structures
 - a. Canal
 - b. Lateral/Ditch
 - c. Pipe/Pipeline
 - d. Tunnel
 - e. Flume
 - f. Chute/Raceway/Drop
 - g. Siphon
 - h. Drain
- III. Flow Control and Measuring Devices
 - a. Headgate
 - b. Check Structure
 - c. Wasteway
 - d. Weir
 - e. Submerged Orifice
 - f. Measuring Flume
 - g. Weir Box
 - h. Pump
 - i. Screen
 - j. Valve/Vent
 - k. Other

Introduction

National Register guidance defines a property type as a “grouping of individual properties characterized by common physical and/or associative attributes” and considers property types to be the key link between historic contexts and individual resources. This section outlines the general typology of property types commonly associated with Oregon’s irrigation projects and the applicable National Register evaluation criteria for each. Properties associated with Oregon’s irrigation projects that may be eligible for National Register listing consist of buildings, structures, and objects built for the storage, diversion, and delivery of water for agricultural purposes. These properties are often encountered as part of carefully engineered linear systems with multiple primary and contributing elements, or as smaller groupings of two or more related resources. Properties associated with irrigation projects are most likely to be classified as historic districts, due to the number of elements present in a nomination area, and depending on their context and associations. Primary elements of these systems may also possess singular importance and be recognized as historically significant individually based on their own merits.

As introduced in Section E, irrigation projects in Oregon typically contain the following basic categories of elements. These categories represent the property types most often encountered in Oregon’s irrigation projects, grouped according to their respective functionality and role in a system’s design:

1. A diversion structure (e.g., a dam or other blocking structure) that extends out into a watercourse to force water into an irrigation system.

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2. Water conduits and conveyances (e.g., one or more canal, lateral, or ditch) that function to distribute water from a diversion structure to agricultural fields.
3. Flow control and measuring devices (e.g., headgates and weirs) for regulating and measuring the flow of water through an irrigation project.

This Multiple Property Documentation considers the historical significance of irrigation projects in Oregon as represented by resources within each of these defined categories, including a plethora of subtypes in each group. The identified property types and subtypes are outlined in the preceding list and further discussed in more detail in the following sections. In general, historically significant diversion structures are typically individually National Register-eligible (as defined below in the Property Type: Diversion Structure), but may be identified as a contributing resource in a historic district. Historically significant water conduits and conveyances are typically National Register-eligible as the primary resource anchoring a historic district, but could be individually National Register-eligible (as defined below in Property Type: Water Conduit/Conveyance Structures). Historically significant flow control and measuring devices are typically only National Register-eligible as contributors to a historic district (as defined below in Property Type: Flow Control and Measuring Devices).

Property Type Variation

Oregon's irrigation projects vary in the periods and locations of their development. In general, however, most share a common purpose (i.e., agriculture) and reflect relatively minor differences in irrigation technology over time. Because of these circumstances, the property types that comprise Oregon's irrigation projects tend to be consistently among varying systems and retain many similarities in their individual characteristics and features. The property types defined in this section were derived from comparisons of these similar design elements and categorically represent the individual components, each with their own function, most likely to exist as part of Oregon's irrigation projects.

A wide variation of designs and configurations may exist within a given property type, despite this consistency. The result is a range of subtypes that help more specifically identify and define individual resources. The specific design and materials used to build Oregon's irrigation projects were influenced by many factors. These included a system's purpose and desired longevity; geographic constraints such as topography, geology, and climate; builders' knowledge and skills; and available resources and economic means. Irrigation projects built by the U.S. Bureau of Reclamation, for example, tend to feature more standardized designs and engineering than private ventures constructed under the Carey Act. Similarly, the design of irrigation systems evolved as knowledge of hydraulic principles improved and engineers gained more experience with different geographic settings, or new materials and technologies became available. Such circumstances are discussed within the context of each identified property subtype.

Defining the Nomination Area

In their entirety, Oregon's irrigation projects consist of complex systems that can span up to several hundred miles and often comprise thousands of individual resources. Or they may consist of much smaller systems with only a handful of related components. These resources, both large and small, range in type from massive dams and many miles of canals and laterals, to smaller, more localized systems. They are typically far flung, spanning multiple political jurisdictions (i.e., crossing state, county, and/or municipal boundaries) and management jurisdictions (i.e., managed by multiple irrigation districts, each with its own jurisdictional area), and their size and extent make it difficult to view a system in its entirety on the ground. It is also common for different parts of an irrigation system to possess highly varying levels of integrity. A nominated property, therefore, is not required and should not be expected to contain all of the property types and subtypes summarized in this section or the entirety of an irrigation system, and would only need to contain a concentration of resources sufficient to convey its historical significance.

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At the same time, individual irrigation features are parts of highly integrated systems where the function of one item supports and enhances the function of another. For example, a spillway has no function unless it is integrated into the design of a dam; a siphon has no function if it is not attached to canals or pipelines at both ends; and so on. Because of this, the function of individual facilities, and thus their ability to convey historical significance, is not clearly comprehensible without reference to the other elements. In most cases, individual features (especially secondary items like the smaller water conveyances [i.e., flumes, chutes, raceways, drops, wasteways, siphons, and drains] and flow control and measuring devices) are not considered individually eligible for the National Register unless they represent a distinctive engineering feat or other critical element to the development of an irrigation system. These secondary water conveyances, flow controls, and measuring devices can all be contributing elements to larger historic districts. Their individual nomination should be the exception, not the rule.

A property nominated to the National Register under this Multiple Property Documentation may comprise all or part of the conveyance system of an irrigation project. In most cases, a nominated property is likely to be a historic district consisting of a dam, canal, or lateral/ditch as its "principal resource" with other resources from the three property types categories as contributing elements. The extent of a property and the quantity of resources that it contains will depend on the property's integrity and its ability to convey its historical significance. For example, a segment of a canal or lateral, may be considered eligible for National Register listing under Criterion A in the area of agriculture as a representative segment of the irrigation project of which it is a part if it was (1) central to the project's development and operation during its period of significance, (2) has a high degree of integrity, and (3) contains a combination of other associated property types, such as checks, headgates, and weirs, as contributing elements. This concentration of elements should reasonably capture and demonstrate the function of the larger irrigation system (i.e., present a microcosm of the system) and fully convey its historical significance. A canal or lateral segment may also be nominated to the National Register if it retains importance that is in addition to, more specific than, or otherwise distinct from the irrigation project of which it is a part. Design elements (if distinct from the rest of the system), association with the founding of a community or the development of an agricultural region or locale, association with a significant person, or association with a discreet event are all reasons why a canal or lateral segment might be considered historically significant. Such a combination of elements should typically be considered a historic district. Resources may also be considered eligible for National Register listing, either individually or as a historic district, regardless of their classification, due to their rarity (e.g., the last remnant of an irrigation project) or another distinctive quality. However, nomination of any property on a stand-alone basis other than a dam, canal, or lateral/ditch should be infrequent. In particular, flow control and measuring devices should almost never be nominated as stand-alone properties, as they do not usually possess enough unique significance to be considered individually eligible for listing in the National Register.

Boundaries should be drawn to include the entirety of an eligible property, identified by the extent of contributing elements associated with one or more principal resources, per guidance provided in the National Register Bulletin *Defining Boundaries for National Register Properties*. Wherever practical, boundary demarcations should align with the evident distribution of intact resources or correspond to the presence of other natural or cultural features. Secondarily, historic and legal boundaries may be used to define the limits of a nominated property, when these boundaries encompass the eligible resource and are consistent with its historical significance and remaining integrity. In many cases, a combination of these boundary features may be most appropriate. Areas undefined by natural and cultural features or historic or current legal boundaries should include an area that encompasses the full extent of the eligible property and a reasonable buffer providing for its protection. Resources associated with an eligible property, but located slightly distant or physically separated from a property, may be included as contributing elements within a noncontiguous area or listed individually. An example of a noncontiguous area would be resources that share a visual association or those that once possessed a direct physical connection, but are now disconnected due to subsequent alterations or changes in the landscape.

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This MPD focuses on just those parts of irrigation systems that direct and control the flow of water for growing crops. Many other buildings and structures are often developed at the same time as irrigation facilities and are directly integrated into their design (e.g., power plants). Once constructed, irrigation facilities also require maintenance, and the districts and agencies operating these facilities need offices for housing staff, warehouses for the storage of supplies, bridges to cross canals to allow farmers to continue to access fields, and other buildings and structures. Nevertheless, these kinds of facilities not directly involved in water conveyance are not covered by this MPD.

Historic Districts

Because of the systemic nature of irrigation facilities, it is anticipated that most properties associated with irrigation projects will be nominated for National Register listing as a historic district. To qualify as a historic district, such a property (whether an entire irrigation project or a representative portion) must contain a significant concentration or linkage of resources united historically by plan, function, or physical development. This collection of resources should exist as a significant, distinguishable entity, although its component parts need not possess individual importance. These elements would be considered the historic district's contributing resources. As contributing resources, they must have been constructed together or within a defined period of significance, and must relate to one or more of the historic contexts associated with the irrigation project. As many property subtypes identified in this section are generally perceived as "secondary" contributing elements of a larger system and not as a principal resource, the classification of a property associated with an irrigation project as a historic district provides an appropriate level of recognition for many such resource types.

Contributing resources should always retain association with a principal resource (such as a main canal or lateral) that represents the historical significance of the property. The inclusion of a principal resource is required if the historic district consists of only part of an irrigation project. The type, size, or length of the principal resource and the number of contributing resources (i.e., both principal and secondary) included in such a nomination may vary, as long as the resources together sufficiently represent the historical significance for which the historic district is nominated. For example, a short length of canal or lateral could serve as a nominated historic district's principal resource and would be considered of sufficient length, if the historic district also included other principal or secondary resources, such as the segments of one or more laterals, headgates, check structures, or other appurtenant features, that together adequately represented an irrigation project's function and historical significance. The inclusion of a longer canal or lateral segment would be necessary, if few contributing resources were present in the nominated historic district, and more were needed to represent these qualities.

Registration Criteria

Elements of Oregon's irrigation projects (and related properties) may be listed in the National Register under one or more criteria, criteria considerations, and areas and periods of significance. Under Criterion A, properties associated with an irrigation project may be listed in the National Register at the local and state levels of significance primarily, but not exclusively, in the areas of Agriculture, Commerce, Community Planning and Development, Economics, Exploration/Settlement, Industry, Invention, and Law. One or more of these areas of significance may apply when an property falls within the period(s) of significance presented in this Multiple Property Documentation and is associated with early homesteading and settlement efforts in central and eastern Oregon, following implementation of the provisions of the Carey Act or Newlands Act; represents an important shift in the history of Oregon's irrigation development; had substantial impact on Oregon's physical landscape; or is associated with agricultural production on a local or regional level that influenced the founding, initial development, or continued growth over time of a given community or population.

Local or state significance may also be established within any of these same area(s) of significance for notable persons under Criterion B or for the potential to yield information under Criterion D. Properties may be listed in the National Register under Criterion C at the local, state, or national levels in the area(s) of Architecture,

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Engineering, and Landscape Architecture, if they are recognized as innovative in their engineering design and construction, particularly as it may have pertained to the advancement of irrigation technology and its development.

One or more periods of significance may be established for a nominated property, depending on the property's area(s) of significance. These periods of significance should be consistent with the historic contexts outlined in Section E. They may include the property's original construction and period of maximum development or continued improvement over time. The latter may include changes to an irrigation system that did not result from a specific capital improvement or program, but still represent a system's growth and development. Administrative policies or events that influenced the irrigation project may be used to establish the beginning and end of a period of significance in such cases.

Properties listed in the National Register using this Multiple Property Documentation must meet the following general registration requirements. More specific registration requirements for each property type are provided in the following sections:

General Registration Requirements

1. A property must demonstrably retain significant association with an irrigation project that relates to one or more of the historic contexts established by this Multiple Property Documentation in the State of Oregon.
 - a. Because of the variability between individual projects, this MPD will only be applicable to those Carey Act projects and federal irrigation projects in Oregon that have been covered in more detail in an addendum to this main document. There are two exceptions to this registration requirement: the facilities included in the Central Oregon Project, which is a Carey Act project; and the facilities in the Vale Project, which is a federal Reclamation Act project. Detailed investigations of those two irrigation projects, including historical research and complete inventory of their respective conveyance systems formed the basis of the historical and physical data provided in this MPD, serving as case studies to inform research for the two provided contexts, and therefore have been covered in sufficient detail in this document to provide for an adequate evaluation of the facilities in those projects.
 - b. This MPD will only be applicable to those irrigation projects contained entirely within the State of Oregon. Two federal irrigation projects cross Oregon State lines: the Klamath Project, which includes portions of both California and Oregon; and the Boise Project, which includes a small sliver of land in Oregon but is almost entirely based in Idaho. The evaluation of these multistate projects is beyond the scope of the current MPD.
2. A property must be defined as a historic district or individual resource that possesses one or more of the property types or subtypes of Oregon's irrigation projects, as defined by the associated property types described in this section.
3. The property's age must fall within one or more of the periods of significance defined in this Multiple Property Documentation, and it should retain sufficient integrity to convey its historical significance. Generally, a property will possess several of the following seven aspects of integrity, as specified in NPS Bulletin 15, *How to Apply the National Register Criteria for Evaluation*. Integrity considerations applicable to specific property types and sub-types are presented in the discussions of each property type presented below:
 - a. Location – A property should remain in the location in which it was originally built, or retain its original alignment.

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- b. Design – A property should retain the combination of elements that convey its original design, including plan, orientation, materials, style, and structural systems. Alterations owing to repairs or regular maintenance are to be expected for some property types. Minor changes of this kind do not detract from a property's integrity, if they are compatible with its original design and are made in-kind with similar materials. In general, repairs to water conduits/conveyances (e.g., to prevent leakage) and the in-kind replacement of the deteriorated components of flow control and measuring devices (e.g., at checks, headgates, or weirs) do not constitute a loss of integrity, if the property's overall design and configuration is not substantially altered. This exception would apply to minor repairs and in-kind replacement only, and to contributing or secondary resources, in particular. Changes that significantly alter a property's design or introduce wholly new design elements outside a property's period of significance are considered a loss of integrity. Integrity considerations specific to certain property types are outlined in the appropriate description sections below.
- c. Setting – The physical environment in which a property was constructed contributes to the integrity of a resource and should reflect the characteristics it possessed when built, including landscape, and topography, whenever possible. Relationships among multiple associated properties must be retained (e.g., such as between canals and laterals and their associated headgates, checks, and weirs), if a group of resources together are intended to convey historical significance as a coordinated system and not as individual features. A property should also retain proximity to or its spatial relationships with the community, region, locale, or other resource with which it is associated, if the presence of such is central to its historical significance.
- d. Materials – A property should retain the materials with which it was built. For some property types, the partial in-kind replacement or repair of materials does not necessarily constitute a loss of integrity. Replacement with non-original or modern materials may be acceptable if the materials are compatible, meaning they sufficiently replicate or resemble the original materials. As with integrity of design, repairs to water conduits/conveyances and the in-kind replacement of the deteriorated components of flow control and measuring devices do not constitute a loss of integrity, if the resource's materials are replaced in-kind or are compatible. Integrity considerations specific to certain property types are outlined in the appropriate description sections below.
- e. Workmanship – A property must retain the physical evidence of the distinct methods and technologies used in its construction. These qualities must be retained, even if the property has undergone periodic repairs or regular maintenance. Depending on the property type, it is likely the same methods were used to repair resources as were used to construct them.
- f. Feeling – The property should reflect the aesthetic or historic sense of its period of significance sufficient to convey its historical significance, whenever possible. Integrity of feeling is enhanced by continued use of the property as an irrigation feature, but this is not absolutely required. The property should be recognizable as belonging to the temporal period in which it was created.
- g. Association – The property should retain a direct relationship with the irrigation project for which it was constructed. It is not required that the irrigation project remain in current use. However, the property's physical features must continue to exhibit the characteristics and features present at the time the association was made (i.e., the property appears as it did when association with an event or person was established). If central to its historical significance, the property must also retain a direct association with the community, region, locale, or other resource for which it is recognized as being important.

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4. A property is not required to retain its original use, if it continues to meet the registration requirements outlined in this document. For example, irrigation water does not need to still be running through the nominated portion of an irrigation project to qualify it for National Register listing.
5. Integrity should be judged against the requirements of the National Register criteria under which the property is nominated.
6. The property must meet at least one of the four National Register eligibility criteria (A-D) at the local, state, or national level of significance.
 - a. Criterion A – Properties eligible under Criterion A must illustrate important historical events, themes, or patterns through an association with an established irrigation project. For a property to be eligible under this Criterion, it must strongly represent one or more of the historic contexts presented in this document and retain demonstrable association with the agricultural and economic development that resulted from the construction and operation of an irrigation project. This threshold may be attained by a group of resources or an individual resource. A diversion dam or main canal, for example, may individually qualify for listing under this Criterion if it was principally important to an irrigation project. Properties such as laterals, water control structures, or privately built farm ditches likewise may be individually eligible under Criterion A, if they are the primary resource in an irrigation project, were directly associated with the founding or development of a community or region, or possessed significance distinct from a larger irrigation project of which they are a part. Such properties are more likely to be defined as secondary features that may be eligible as contributors to a historic district, but would not individually meet this criterion. In a historic district, decisions to include or exclude contributing elements of a property would be made on an individual basis.
 - b. Criterion B – To be eligible under Criterion B, a property must be associated with a person who was principally important to the realization or development of an irrigation project, or represents the singular contribution of an individual significant in engineering or irrigation history. For example, an irrigation project envisioned and built by an individual, who is considered historically significant for using irrigation to found an agricultural community and setting a precedent for irrigation development in the region, may be eligible under this Criterion. Irrigation projects and their associated resources typically would not be eligible under this Criterion, unless an individual was solely responsible for a property's development.
 - c. Criterion C – Properties eligible under Criterion C must demonstrate significant engineering, planning, or design values. Examples of different types, styles, periods or methods of construction; good examples of the work of an important engineer or architect; or properties of high artistic merit may qualify. The earliest, best preserved, largest, or sole surviving example of a particular property type, or a property exhibiting an innovative or experimental approach to water engineering may be eligible. Under Criterion C, properties may also have unique values or they may be good representative examples of a type of property. In the latter case, properties must possess "distinctive characteristics," the common features or traits of that type, period, or method of construction. They must also retain a high degree of integrity. It is equally important to differentiate those resources significant at the national level for their unique technological and/or engineering aspects, and those significant at the state or local level as good representative examples within an irrigation project. Any of the defined property types or subtypes may be found significant in this regard. However, dams, canals, or other principal resources, which resulted from large capital improvement programs and exemplify important contributions to engineering technology, would be the primary candidates for consideration under Criterion C.

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- d. Criterion D - Properties associated with irrigation projects may be eligible under Criterion D for information they contain about important scholarly and scientific issues useful in interpreting the past. Such key research issues, for example, could include historical changes in the landscape of an irrigation project, settlement patterns, and water engineering technology. The properties most commonly deemed eligible under Criterion D are archeological sites, but buildings, structures, and objects can also, if infrequently, be found National Register-eligible for their information potential. Archaeological resources are not addressed by this Multiple Property Documentation. For all other property types, the physical properties of the resource must be or have been the principal source of information to be listed under Criterion D.

When nominating a property associated with an irrigation project, it is important to consider the entirety of the irrigation system with which it is associated and to identify the full array of property types the system contains. Conducting a survey of an entire irrigation project, however, may not always be feasible or necessary. A solid understanding of an irrigation project's development history and a property's function within a project, based on primary and secondary research, may be sufficient to determine the property's historic significance and whether it adequately conveys this significance. Properties that contain one or more of the property types and subtypes discussed in this section, which retain integrity and relate to the historic contexts presented in this Multiple Property Documentation, may be considered for National Register listing.

Property Type: Dams

The diversion of water by irrigation projects in Oregon was typically accomplished by one of several primary methods. The most common method employed was by means of an initial diversion at the head of an irrigation project, which diverted water from a stream or river into a principal canal or ditch. Dams were constructed to redirect an entire flow of water into an irrigation system or to impound water within a pond or reservoir to be released at a later time, or to divert only part of a water flow into an irrigation project (and not for storage), allowing residual water to flow over or through the structure. Less commonly, other types of diversion structures were engineered below the water level of a natural lake or pool, to reroute water through tunnels or other conduits. All of these water diversion types are commonly associated with other devices for regulating the amount of water passing over or through a structure. With some systems, no water flow regulation was attempted.

Similar to dams, check structures (sometimes known as check dams, weirs, or simply as "checks") function to divert water from a stream or river, or a canal, ditch, or lateral into a secondary conduit. These resources are considered a subtype of the "Flow Control and Measuring Devices" property type rather than a Diversion Structure. They differ from dams in size and location. They are much smaller in size and singular in function, and most often occur through the course of an irrigation system and not at its head. Check structures are solely intended to temporarily redirect a flow of water and not to permanently block or impound it.

During the eighteenth and nineteenth centuries, most dams in the United States were constructed for municipal storage, water power, flood control, or irrigation. A few were built by local governments, but most were privately constructed. None were built by the federal government, except to facilitate river navigation. With few exceptions, all dams during this period were classified as "low dams" (a reference to their size) and incorporated little in the way of modern engineering. Most were built of earth, wood, or stone (or a combination thereof). By the end of the nineteenth century, however, increased industrial development and problems associated with erecting masonry dams, specifically, led to the formal study of dam engineering. For example, Edward Wegmann, an early innovator in bridge design, is known for being one of the first to publish on the subject, issuing the first edition of his classic text on *The Design and Construction of Dams* (1888). It was not until early in the twentieth century that engineers began to design dams for more than one purpose, and at greater size and complexity. Furthered by demands for hydroelectricity and the establishment of increasingly

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large irrigation projects in the American West, it was during this era that fully engineered “high dams” were introduced, marking huge advances in engineering technology.¹⁴³

Dams vary in size and scale, design, and construction, depending on their function and engineering. They are generally classified according to a combination of their function and design, resulting in a wide array of dam types. A general summary of common dam types is presented below, ordered by their defining characteristics in these areas.

Dam Functions

The functions of a dam can be generally classified as follows:

- **Storage Dams** – Storage dams, also known as impoundment dams, capture and store water from river systems during periods of surplus, storing it for later use during dry summer months or to provide a predictable, equalized supply of water for a particular use. Storage dams may provide water supplies for industrial or domestic use, or to create improved habitat for fish and wildlife. They may also store water for hydroelectric power generation, irrigation, or for a flood control project. Storage dams are the most common dam type, and nearly all dams provide this function regardless of their intended purpose.
- **Diversion Dams** – A diversion dam diverts all or part of a natural water flow through an intake into a canal or other water conveying conduit, for use in an irrigation project or for hydroelectric production, or to direct water into a storage reservoir or impoundment. A diversion dam typically is of low height and has a small storage reservoir on its upstream side.
- **Detention Dams** – Detention dams are typically constructed for flood control. Their primary purpose is to retard a river’s flow during periods of flooding by storing water in temporary reservoirs; thus the effect of sudden flooding is reduced and water can be released gradually at a controlled rate, protecting downstream areas. A dry dam is a variant of this dam type. Designed exclusively to control flooding, it normally holds no water and allows a river channel to flow freely, except during periods of flooding.
- **Saddle Dike** – A saddle dike is an auxiliary dam constructed to confine water in a reservoir diverted by a primary storage or diversion dam. Its purpose is to hold water at a higher elevation or to limit the extent of a reservoir for increased efficiency. Such an auxiliary dam is typically constructed in a low spot or “saddle” through which water in a reservoir would otherwise escape. A low dike or levee that creates a shallow lake, to capture water runoff or prevent inundation or flooding, might also be referred to as a property of this type.
- **Debris Dams** – A debris dam is constructed to retain debris such as sand, gravel, drift wood, and other debris from flowing through a river or other water conveyance.

Usually found at an irrigation project’s initial diversion from a water source, a dam’s most common purpose in an irrigation project is to raise a river or stream’s water level and force a desired flow into the irrigation project’s main canal or ditch, usually through a headgate or other intake structure. The Central Oregon Irrigation District’s North Canal Diversion Dam (Figure 3) and Central Oregon Canal Dam on the Deschutes River and the Vale Oregon Irrigation District’s Harper Dam on the Malheur River (Figure 4) are excellent examples of this property type.

Dams are also employed to impound water in reservoirs and ponds for later use in irrigation projects during periods of low precipitation. Facilities of this type are typically located some distance from the irrigation project (or systems) with which they are associated, and often several miles upstream from a project’s primary

¹⁴³ David P. Billington, Donald C. Jackson, and Martin V. Melosi, *The History of Large Federal Dams: Planning, Design, and Construction in the Era of Big Dams* (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, 2005), 89.

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diversion. Located within the same watershed as the irrigation project, their locations were purposefully selected to take advantage of specific qualities relating to an area's geology, geography, and water source, conducive to water impoundment. Water is collected by these dams during periods of low water usage and released during periods of low precipitation, or when additional water is needed to supplement a river or stream's natural flow. The Beulah (Agency Dam) and Warm Springs Reservoirs are two examples of this property type in eastern Oregon. Together, they provide water to both the Warm Springs Irrigation District and the Vale Oregon Irrigation District. The Crane Prairie and Wickiup Reservoirs fulfill a similar purpose in the Upper Deschutes River basin, between them serving four irrigation districts along the Deschutes River.¹⁴⁴

In addition to irrigation, dams frequently serve several other concurrent purposes and their functions are often closely coordinated with other parts of an irrigation project. Besides water diversion and storage, flood control and hydropower generation are a dam's most common alternative functions. For example, smaller downstream, diversionary dams are used to regulate and control the flow of water released by larger impounding dams located upstream, for use in irrigation systems; while impounding dams provide both water storage and flood control by controlling the release of water during a given season. Check structures serve a similar function, by reducing the velocity of water flowing through a canal or ditch, to facilitate its diversion into a secondary conduit.

Dam Designs

A dam's design depends on the desired amount of water being diverted or impounded to establish an adequate water flow through an irrigation system, its geographic location, and the size of the river or stream being diverted. They can be constructed of many different materials, such as: earth, earth-covered rubble or log cores, wood, masonry, steel, concrete, or a combination of one or more of these materials. The earliest irrigation projects typically employed dams constructed of wood or stone. These were later replaced with more modern, engineered structures constructed of concrete or steel.

A dam's structure and design generally can be classified as one of the following commonly known types:

- **Gravity Dams** – Gravity dams are massive-sized dams designed, by their weight alone, to hold back large volumes of water. It is the force of gravity pulling vertically down on the dam that provides resistance against the horizontal pressure of water exerted against it, either in a reservoir or a river flow. A gravity dam's design may be based on sophisticated engineering design, or on the simple principle of accumulating as much material as possible to ensure the dam will not tip over, slide, or rupture. Gravity dams typically have a large mass, which increases their long-term stability. They may be of earthen, concrete, or stone construction, sometimes with a concrete outer layer (or membrane), and may possess an engineered design or a non-engineered design, depending on their creation, purpose, and function.¹⁴⁵ Also known as "embankment dams," typical variations of gravity dams include earthen dams and rock-filled dams.
 - **Earthen Dams** – An earthen dam is constructed of successive layers of earth (or soil) built up and compacted, using the most impervious materials to form a core and placing more permeable substances on the upstream and downstream sides. Crushed stone or concrete is commonly used to face the dam, to prevent erosion and limit leakage.
 - **Rockfill Dams** – A rockfill dam is similar to an earthen dam, except it is constructed of large rocks at its core. A dry rubble cushion and an impervious outer membrane are then placed over the core. This cushion helps the distribution of water pressure against the membrane, and to limit seepage. The membrane usually consists of concrete or stone. In early rockfill dams, steel

¹⁴⁴ The Crane Prairie Reservoir serves the Central Oregon Irrigation District, the Lone Pine Irrigation District, and the Arnold Irrigation District, while the Wickiup Reservoir serves the North Unit Irrigation District.

¹⁴⁵ Billington, 49-57.

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and timber membranes were also sometimes used. Rockfill dams typically have foundations stronger than those for earthen dams.

- Arch Dams – An arch dam has an engineered design consisting of a curved plan, with its convexity towards the upstream side. This design helps transfer water pressure and other forces to the dam's abutments, similar to the function of a Roman arch. In contrast to gravity dams, arch dams do not rely exclusively upon mass to resist hydrostatic pressure. For example, an arch dam in a narrow canyon with hard rock foundations can withstand the same press of water as a much more massive gravity dam, allowing the thickness (and hence bulk) of the dam's profile to be much less than a gravity dam of the same height. Arch dams are typically located in narrow canyons with strong flanking embankments, which are capable of resisting the pressures transferred to them by the arch design. The Hoover Dam on the Colorado River (NRHP 4/8/1981, NHL 8/20/1985) and the Owyhee Dam in eastern Oregon (NRHP 9/23/2010) are two of the best examples of arch dams in the United States.¹⁴⁶
- Buttress Dams – Buttress dams are engineered structures that feature a sloping deck or wall of relatively thin masonry or concrete on the upstream side of a dam, supported by a series of buttresses placed perpendicularly across its downstream side. The buttresses function as structural compression members, transferring water pressure from the upstream sloping deck through to the dam's foundation. The number of buttresses and their spacing may vary, depending on the dam's size and design. In contrast to gravity dams, buttress dams are not solid monoliths that present a continuous, solid cross-section extending the structure's length. Frequently referred to as "hollow dams," they instead present a series of empty spaces between the buttresses, requiring much less material than gravity dams of comparable height. Compared to arch dams, they also are not limited to placement in narrow canyons.¹⁴⁷ There are three discernible types of buttress dams: flat-slab dams, multiple-arch dams, and massive-head dams.
 - *Flat-slab Dams* – Buttress dams that utilize a flat surface at the dam's upstream face are called flat-slab buttress dams.
 - *Multiple-arch Dams* – In a multiple-arch buttress dam, the deck slab is replaced by horizontal arches supported by buttresses. The arches usually have relatively small spans and are made from concrete.
 - *Massive-head Dams* – There is no deck slab in a massive-head buttress dam. Instead, the upstream edges of the buttresses are flared to form massive heads that span the distance between the buttresses.
- Steel Dams – A steel dam is an experimental dam type from the early twentieth century, which relied on steel plating set at an angle on its upstream face and load-bearing support beams on its downstream side for its structure. Steel dams were intended to be a less expensive construction technique, in comparison to masonry, concrete, or earthen construction, but sturdier than timber dams. Considered obsolete today, two types of steel dams were common: direct-strutted steel dams and cantilever steel dams. In a direct strutted steel dam, water pressure is transmitted directly to the dam foundation through inclined struts. In a cantilever steel dam, structural bents support the upper portion of a steel deck to form a cantilever truss. In general, steel dam designs never reached the potential for which they were envisioned. Some designs were considered quite costly, due to the need for additional structural elements, and steel's corrosive quality in water increased maintenance costs and reduced a dam's operational lifespan. Contemporary steel dams are most often employed as temporary coffer dams during the construction of permanent dams.

¹⁴⁶ Billington, 58.

¹⁴⁷ Ibid.

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- **Timber Dams** – Timber dams consist of structures constructed entirely of wood. They were commonly constructed during settlement of the West in the mid to late nineteenth century, due to their ease of construction. However, few remain from this early period. They became less common in the twentieth century because of their short operational lifespans and high costs, due to deterioration. Structurally, most timber dam types have height limitations, and must be kept constantly wet to maintain their water retention properties and limit deterioration. Common variations of timber dams are the pile dam, timber crib dam, and the timber plank dam. Pile dams are constructed of timber piles driven vertical into the ground, then interweaved with wood mesh. Timber crib dams are constructed of heavy timbers or dressed logs in the manner of a log house, and the interior filled with earth or rubble. Timber plank dams can possess a variety of construction methods, utilizing heavy timber planks placed to retain water.

In theory, the key distinctions between various dam design types is simple to discern, based on these definitions. In practice, however, such distinctions are often blurred by a dam's engineering, which was intended to meet the unique specifications of particular location or circumstance. For example, a dam may possess enough material mass to be considered a gravity dam, but was also built along a curved axis like an arch dam. Known as "curved gravity dams," these dams possess elements of both the gravity and arch dam traditions.¹⁴⁸ In fact, most engineers recognize that nearly all dams possess at least some qualities of a gravity dam to function properly; even the thinnest of arch dams utilize their mass plus gravity to resist water pressure at points nearest to their foundations. This relationship between the engineering of "gravity" and "arch" actions in curved dams became an important component in the development of dam designs in the early twentieth century.¹⁴⁹

Secondary Features

Secondary to a dam's function and design, the amount of water diverted by a dam is controlled by a combination of spillways and gates, which are integral components of the structure. The types and quantities of these features depend on the dam's size, purpose, and configuration, particularly as it pertains to its geographic location and the engineering involved to divert water into an associated irrigation project, reservoir, or other impoundment. Gates regulate the amount of water that passes from the diversion into an irrigation project's main canal or ditch, or that passes over a spillway back into a river or stream's main channel. Trash grates (sometimes referred to as trash racks) and fish screens limit the passage of fish and debris into the system, and spillways facilitate the release of water through a dam, relieving undesirable hydraulic pressure, providing flood control, or otherwise helping regulate the amount of water passing into an irrigation system. Other features associated with dams include cleaners (mechanical and passive), fish ladders, and wing walls.

Dams are one of the most important components of an irrigation project, due to their pivotal role in the origination of water. Without diversion dams, for example, most of Oregon's irrigation projects would not exist. Dams may be National Register eligible individually or as contributing resources in an irrigation project.

Significance

Diversion structures, especially dams, are typically an irrigation system's most prominent feature and, along with canals, are often the most recognizable property type associated with a system's history and development. Unlike many other elements associated with an irrigation project, dams are often singularly responsible for the provision of water to an irrigation system. Because of their prominence, they are sometimes already individually recognized as historically significant within their community or by a local jurisdiction or federal agency. In Oregon, for example, the Owyhee Dam in Malheur County is listed in the National Register of Historic Places and the North Unit Dam in Deschutes County has been formally determined NRHP eligible, while their associated irrigation systems remain largely unevaluated.

¹⁴⁸ Ibid.

¹⁴⁹ Billington, 58-59.

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Registration Requirements

1. All diversion structures must meet the aforementioned general registration requirements.
2. Diversion structures may be historically significant individually or as contributing resources in a larger property. They are most likely to be considered historically significant under Criterion A or C.
3. Under Criterion C, diversion structures may be recognized as important engineering features or for their innovative designs or construction methods. To individually qualify for listing under Criterion C, they must exemplify the distinctive characteristics of a certain type of dam or method of construction; embody the work of a significant engineer or builder; dominate the irrigation project in terms of their size and function; or represent an influential technological advancement or innovative design solution. Integrity of location, design, materials, and workmanship would be of primary importance.
4. Engineered diversion structures constructed of wood or stone are likely to be National Register-eligible under Criterion C for their design and construction, especially if they were constructed before the 1920s. Structures existing from this period are rare, due to their loss from deterioration or replacement.
5. A dam constructed in the late-nineteenth century or earlier (pre-1900) that retains a high degree of integrity is likely individually eligible for National Register listing, due to the relative rarity of the property type from this period.
6. Non-engineered dams (i.e., those constructed without a prescribed design) are unlikely to be individually National Register-eligible, but may contribute to an eligible property. They often occur as relatively small, locally constructed structures with a vernacular design (e.g., earthen dams), and are generally considered to lack the qualities or characteristics that would make them individually eligible.
7. If one or more engineered flow-control devices are an integral feature of a dam or other diversion structure's original design and function, the integrity of these features should be consistent with the registration requirements for the flow control and measuring devices property type presented below. The in-kind replacement or reconstruction of component parts for the purposes of repair and regular maintenance should not necessarily be considered a loss of integrity, and a feature does not need to remain in its original use. Headgates, for example, do not need to retain all five of their basic components in original condition (i.e., headwall, stem, paddle or slide, frame, and handle) to be considered contributing resources. The reconstruction of a headgate's metal frame or the in-kind replacement of paddles, slides, or stems due to deterioration are an expected maintenance activity and should not constitute a loss of integrity.

Property Type: Water Conduit/Conveyance Structures

The underlying structure of Oregon's irrigation projects is formed by extensive, linear water distribution systems of man-made water conduits and conveyance structures. These features most commonly occur as one of eight identifiable property subtypes: canals, laterals/ditches, pipes/pipelines, tunnels, flumes, chutes/raceways/drops, siphons, and drains. These subtypes are typically constructed together in differing combinations, and their type and configurations frequently vary. Water conveyance begins at a diversion structure, where water is redirected through a main canal into laterals, and then through headgates or other flow-control structures into sublaterals and ditches, leading to individual farms. Some irrigation projects consist of a single trunk line or a "main canal," with diversions into smaller laterals to individual points of delivery. Most irrigation projects, however, consist of more-complex branching networks, which are structured around a main canal, but divert into progressively smaller laterals, sublaterals, and ditches. Tunnels, flumes, siphons, and

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pipelines may function in the place of some water-conveyance structures in these systems, depending on the terrain traversed, by providing water flow past natural obstacles. The “point of delivery” is generally considered to be the end of an irrigation project’s conveyance of water, where it becomes the responsibility of an individual property owner (e.g., it enters a farmer’s field or pasture), and is the point where the delivery system’s historical significance shifts from the irrigation project to that of a farm, ranch, or other similar property type.

Subtype: Canal

A canal is a large, excavated channel that carries and distributes water from a natural water source or reservoir to agricultural fields to provide water for crops and livestock. There is usually only one “main canal” in a given irrigation project, although a system may contain other conduits of sufficient size or importance to be considered in this category. Canals are usually the largest water conduits in an irrigation project and should be considered as principal resources to which other contributing resources would be associated as part of a National Register-eligible property.

The component parts of a canal generally include an excavated channel and flanking embankments or berms created by the canal’s construction. The latter consist of compacted soils excavated from the canal or newly introduced, intended to be water-tight and to direct the water flow. These embankments typically carry ditch roads or other means of access typically required for conducting routine maintenance or inspecting a given irrigation project, which are an additional character-defining feature. A canal’s size and dimensions depend on the desired amount of water to be carried through the canal to adequately supply end-user allotments. The core of a gravity-based system, a canal typically has the largest dimensions at its highest elevation near its initial diversion. Its dimensions gradually decrease to its smallest size at the irrigation system’s lowest elevation. Although important to a canal’s engineering, comparative differences in the size and dimensions between one canal and another should not be perceived as a measure of relative significance.

The cross-section or profile of a canal varies, depending on the material through which it passes and the method of its construction. Canals constructed through rock are typically rectangular in profile with side slopes as steep as 1:0.5. If constructed of earth, a canal’s shape is usually more trapezoidal with side slopes varying from 1:1 to 1:5, depending on the material.¹⁵⁰ In practice, canal builders often designed canals to limit costs, rather than to achieve maximum hydraulic efficiency. Most earthen canals (and laterals) were originally excavated manually or with mechanical scrapers to have trapezoidal bottoms and long side slopes, with rounded berms mounded up on each side of the cut. Many lose their original shape over time, due to erosion, resulting in rounded bottoms. The primarily volcanic-rock construction of the Central Oregon Project’s Pilot Butte Canal (Figure 6) and the primarily earthen Central Oregon Canal are excellent examples of a rectangular-profile canal and the Vale Project’s Main Canal (Figure 7) is a good example of a trapezoidal-profile canal. Earthen canals excavated with more modern machinery typically have trapezoidal-shaped bottoms, with steep side slopes and flat broad berms.¹⁵¹

Most canals are unlined, or were initially lined with extra layers of non-porous clays at the time of their construction. Some, however, have been subject to aggressive programs of canal-lining to minimize seepage losses, either as part of their initial construction or through their operation and use. Lined canals generally carry more water by moving it faster, exhibit less scouring of their banks and bottoms during periods of high flow, and are less prone to leakage. In the late-nineteenth and early-twentieth centuries, most canals were lined with randomly coursed stone paving or cobblestone, usually dry-laid. In the twentieth century, concrete and shotcrete (gunite) became more readily available and was the preferred method for canal linings.¹⁵² In the Central Oregon Project, for example, rock was dry-stacked along several portions of both the Pilot Butte Canal and the Central Oregon Canal to prevent the sides of these canals from eroding. Other sections have been patched with concrete and other materials to reduce leakage through the sometimes porous character of the

¹⁵⁰ JRP Historical Consulting Services, 86.

¹⁵¹ Ibid.

¹⁵² Ibid.

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lava rock through which they were constructed. Similarly, the Vale Oregon Project's Main Canal was lined with concrete in several locations to mitigate water-seepage issues.

Subtype: Lateral/Ditch

Laterals and ditches are secondary conduits in an irrigation system, which typically branch from a system's main canal, or from other laterals. They are similar to canals in their design and construction, but are often smaller in size. Laterals range in size from being as large as canals (and with the same characteristics) to small field ditches. They typically have earthen construction, but may be built of concrete or another material. Laterals often lead to one or more "sublaterals" or "field ditches," which are secondary, tertiary, or quaternary conveyances from the lateral. The latter are typically the final conveyance in an irrigation system, leading up to and sometimes beyond the system's point of delivery to a farmer's field. The term "ditch" is often used interchangeably with the terms "canal" and "lateral," though "ditch" frequently refers to the smallest conduits in an irrigation system (Figure 8).

Subtype: Pipe/Pipeline

Pipes and pipelines are common structures used for water conveyance in nearly all irrigation projects. In early projects, they were selectively utilized as components of open-canal and lateral systems to fulfill a specific need or function. They were also commonly used as components of dams and check structures, or to facilitate the passage of water through flumes, headgates, and other appurtenances. Nowadays, underground pipelines are slowly replacing traditional canals and laterals as the primary means of water delivery in an irrigation project. With rising concerns about water conservation and maintenance costs, many older irrigation projects have begun slowly converting their older open canal and lateral systems to fully piped water distribution networks. Many have been upgraded to support the installation of center-pivot irrigation systems. Often funded by grants from the U.S. Bureau of Reclamation, most irrigation projects have approached this conversion process incrementally, installing as much pipe each season as funding allows. These changes affect nearly all of Oregon's existing irrigation projects.

The earliest forms of pipe used in irrigation projects were constructed of wood. Pipes were fashioned by hollowing out the core of logs, or built from narrow lengths of wood banded together with metal bands or cable. The latter are referred to as "wood-stave pipes." Capable of ranging in size from a few inches to over 16 feet in diameter, wood-stave pipes were the most common type of pipe used by irrigation projects through the late-nineteenth and into the early-twentieth centuries. Similar to wood barrels, wood-stave pipes were constructed by arranging beveled redwood slats into a circle to form the pipe's diameter. Metal tension bands were then placed around the circular structure and tightened to hold the staves together. The size and configuration of a wood-stave pipe could be easily modified for particular circumstances, and they could be buried in underground trenches, installed on the ground surface, or placed across heavy timber trestles.¹⁵³ Because of their wooden construction, the materials used to construct wood-stave pipes also had a low perceived value as a resource, and were often simply abandoned (often underground) when they were replaced or their use discontinued.

Riveted iron and steel pipes were used as an alternative to wood-stave pipes beginning in the mid-nineteenth century and continuing through the 1930s. Because of their ability to withstand much higher hydraulic pressures, riveted iron and steel pipes were commonly used to construct water conduits associated with mining activities and hydroelectric plants, in addition to irrigation. The pipe could be delivered pre-assembled in sections or transported in flat sheets and rolled on site, to reduce transportation costs. A protective coating, such as bitumen, asphalt, mineral rubber, or galvanizing, was often added to prevent deterioration and extend the pipe's service life.¹⁵⁴

¹⁵³ JRP Historical Consulting Services, 87-88.

¹⁵⁴ Walter H. Cates, "History of Steel Water Pipe: Its Fabrication and Design Development" (April 1971), online document: <http://www.steeletank.com/Portals/0/pubs/history%20of%20steel%20water%20pipe%20hi%20res.pdf>, accessed January 2015, 3.

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Lock-bar steel pipe, which was introduced by a New Jersey Company in 1905, almost fully supplanted the use of riveted steel pipe in water systems by 1930. Considered more durable and available at lower cost, this technology involved the mating together of two semi-circular steel plates with H-shaped clamps to create single lengths of pipe. The Lock-bar design effectively eliminated water leakage through rivet holes and seams, and its smooth interior surfaces greatly increased water-carrying capacity, due to fewer friction surfaces. As a result, the use of Lock-bar pipe and several other new pipe designs, which employed emerging electronic welding processes, caused the gradual decline of riveted steel pipe installations in irrigation projects, especially after 1915.¹⁵⁵

Automatic electric-welded steel water pipe was developed in the 1920s, followed by a wide range of variants in the 1930s and 1940s. In 1939, a group of men representing steel pipe manufacturers, known as the "Steel Water Pipe Manufacturers Technical Advisory Committee" (SWPMTAC), was formed under the sponsorship of the American Water Works Association (AWWA). SWPMTAC has prepared AWWA's standards for metal water pipe ever since. This committee, which still exists, continues to maintain and update standards and manuals for the benefit of the water-works industry.¹⁵⁶

Reinforced concrete pipe was employed by several irrigation projects in the early-twentieth century, but did not necessarily find widespread application until the 1940s. The use of concrete pipe during construction of the Umatilla Project in 1906 is an early example. During World War II, it was used in irrigation projects as a substitute for steel. Because domestic use of steel was limited, manufacturers turned to using other materials for pipe production. Concrete pipe became readily available during this period and received wide acceptance, particularly for its low cost and simple field joints with permissible levels of leakage.¹⁵⁷

In the late twentieth century, piping improvements began to eliminate or significantly alter the outward character and operation of many of Oregon's open lateral irrigation systems. These improvements typically have involved laying pipe within existing, open-water conveyance structures and burying the pipe with overburden from the original canal or lateral construction. In other areas, new trenches have been excavated and the pipe installed, straightening a water conduit's path and bypassing the typical zigs and zags of older systems, which were fully dependent on topography and having to maintain a constant down-sloping grade. Today's pipelines utilize pipes made of modern alternative materials. Polyvinyl chloride (PVC) and high-density poly-ethylene (HDPE) are two common materials used. Pipes made from these materials and others have proven advantageous to irrigation projects because they reduce seepage losses to nearly zero, thereby reducing water loss and increasing the available water supply for agriculture (Figure 9).

Subtype: Tunnel

Tunnels facilitate the passage of canals and laterals through mountains, hills, and other geologic features, where an engineered solution is needed to shorten an irrigation system or to bypass an otherwise unavoidable obstacle. They vary in size and configuration. However, most typically occur as features of the largest irrigation projects, which could afford the costs of greater initial capital investment. A tunnel's design was determined by geologic conditions and the amount of water to be carried, and tunnels were often constructed only when less expensive means of conveyance were unworkable. Tunnel construction through solid rock was considered the most desirable. Under other conditions, tunnels were lined with concrete, brick, or timber.

A tunnel's minimum size is generally about five to six feet high and six to eight feet wide. Greater quantities of water could be carried by larger tunnels, and a tunnel's shape depended on the stability of the material through which it passed and whatever proved most economical. A tunnel's profile was typically engineered to provide the best resistance to external pressures. Many tunnels feature semi-circular arched roofs, vertical sides, and a

¹⁵⁵ Cates, 3-4.

¹⁵⁶ Cates, 4.

¹⁵⁷ Ibid.

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horizontal floor. Those passing through firm earth or soft rock typically have a structure featuring a more horseshoe shape, whereas tunnels through soft earth often appear nearly circular.¹⁵⁸

Because of their high capital cost, tunnels were most commonly constructed by the U.S. Bureau of Reclamation for their irrigation projects and are less commonly found in private irrigation developments. The Bureau of Reclamation's Vale Project, for example, features 5 separate tunnels constructed along the Vale Main Canal (Figure 10) and the Deschutes Project has two tunnels along the North Unit Main Canal through the Smith Rocks.

Subtype: Flume

Flumes are typically employed in an irrigation project when it is necessary to cross a depression, skirt a hillside or grade, or bypass a section of porous soil. They most commonly consist of water conduits constructed from framed wood, metal, or concrete boxes carried on a trestle or other substructure across an intended obstacle (Figure 11). On steep hillsides, for example, these structures were built on benches cut into the sloping grade. Flumes are often smaller in size than adjoining canals and laterals, but can carry the same volume of water because they often have less frictional resistance along their surfaces. They are also at greater risk from damage caused by slides, winds, and fire, which has led many to be replaced by tunnels, benched canals, or inverted siphons.¹⁵⁹

Flumes may be constructed of wood (either frame or timber), steel, or concrete, and are typically associated with intake and outtake structures of concrete or another related material. Wood was extensively used for flume construction in the late-nineteenth and early-twentieth centuries, if for no other reason than it was commonly the only material readily available and was the cheapest in cost.¹⁶⁰ Wood flumes were employed continuously in the construction of several of Oregon's irrigation projects through the 1950s, although steel and concrete alternatives were also available. In general, wooden flumes are not known to have a long service life before needing to be replaced. Flumes constructed of pine were expected to last a maximum of 10 to 15 years, or up to 15 to 25 years if built from redwood. The application of creosote to mitigate deterioration and leakage sometimes extended these timeframes.¹⁶¹ The usual intermittent flows in wood flumes commonly caused shrinkage, swelling, and warping of the lumber, due to seasonal changes in temperature and moisture. These characteristics often made it impossible to keep wood flumes tight and prevent leakage, which would in turn affect the structure's substructure and footings.¹⁶²

Many of Oregon's earliest flumes were designed as rectangular wood boxes with a width approximately twice the expected water depth. Wood-stave flumes, comprised of semicircular forms, were equally common (Figure 12). The Central Oregon Project's wood-stave pipe, for example, which carried the Central Oregon Canal over the dry river bed north of Alfalfa, Oregon is a good example of this latter structural type. Originally built circa 1907-1911, several remnants of this wood stave pipe remain intact, including a section of its support trestle located on the grounds of what is now the Brasada Ranch resort (Figure 13). The original stave pipe was replaced by the Powell Butte Siphon in 1978, an inverted concrete siphon, which currently services the irrigation system.

Semicircular riveted metal flumes were introduced in the late nineteenth century as an alternative to wooden construction. Likewise, non-riveted galvanized steel flumes began to appear in the early twentieth century. The latter were touted as having smooth joints, which provided a relatively unobstructed flow through the conduit.

¹⁵⁸ JRP Historical Consulting Services, 87.

¹⁵⁹ JRP Historical Consulting Services, 86-87.

¹⁶⁰ R. Hardesty Manufacturing Company, *A Handbook of Irrigation Equipment, Catalog Number 12* (Denver, CO: The R. Hardesty Manufacturing Company, 1925), 12.

¹⁶¹ JRP Historical Consulting Services, 86-87.

¹⁶² R. Hardesty Manufacturing Company, 13.

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Semicircular steel flumes were developed for faster and easier construction, and several patented types were on the market by the 1920s.¹⁶³

Beginning in the 1920s and 1930s, concrete in turn became an increasingly more common material for flumes, largely due to its lower costs and greater design possibilities.¹⁶⁴ Concrete offered certain advantages over wood, but required extremely rigid and secure foundations to avoid cracks and leakage on account of settlement, and because of its greater dead weight in proportion to the water it carried.¹⁶⁵ The U.S. Bureau of Reclamation, in particular, employed precast-concrete flumes in many of its projects, beginning in the 1920s. For some of its projects, reinforced concrete flumes were the most expensive but also the most permanent. Concrete flumes were typically built on reinforced concrete trestles with the side walls of the flume acting as girders to support the flume between trestle bents.¹⁶⁶ The Deschutes Project's Crooked River flume, which carries the North Unit Main Canal across the Crooked River, is one of the best (and largest) examples of a concrete flume in Oregon.¹⁶⁷

Subtype: Chute/Raceway/Drop

Chutes, also referred to as "raceways," "drops," or "falls," are conveyance structures inserted into a canal or lateral whenever there is a sudden change in elevation. Their placement was intended to control the passage of water through the elevation change, by reducing its velocity and protecting the conduit from damage by scouring. The size and configuration of these structures depends on the size of the water conduit and the local topography (i.e., the elevation change). Their design typically consists of a breast wall across the conduit, combined with vertical wing walls along its upstream intake, to guide the water flow into the chute, a slide of varying length, and an apron at the downstream outtake, to prevent erosion. The slide is commonly concaved, trapezoidal, or V-shaped, depending on its construction material, to create a channel for the water flow. Riffles or other irregularities are sometimes incorporated into the slide's design to slow the descent of the falling water.

Intact chutes are most commonly constructed of board-formed concrete, but may also be built from other durable materials such as steel, wood, or rock. The U.S. Bureau of Reclamation, for example, established standardized designs for the concrete chutes in its Vale Project in eastern Oregon, where a series of concrete drops facilitated elevation changes along many of its earthen laterals (Figure 14). The earliest chutes were constructed of piled rock, to enhance the natural flow of a water conduit over an elevation change and to limit erosion. The Central Oregon Project has several intact "falls" of this type, created from the region's naturally occurring lava rock (Figure 15). Steel chutes are equally uncommon, but were sometimes utilized in difficult locations or for extreme elevation changes. Chutes are often combined with check structures, weirs, and other control features to regulate the flow of water into a structure, and outtake structures and aprons to limit erosion at its exit.

Subtype: Siphon

Similar in function to flumes and chutes, siphons are a common method for carrying an irrigation project's water flow across valleys and other natural drainages, or to overcome an extreme change in elevation. Unlike these other features, however, siphons are capable of causing water to flow uphill and over long distances without pumps, and can be buried underground. Water flow through a siphon is the function of water pressure caused by an irrigation system's natural flow combined with the pull of gravity. "Inverted siphons" are probably the most common type of siphon found in an irrigation project. They are characterized by their U-shaped flow path, which causes the siphon to dip below the elevations of both its intake and outtake.

¹⁶³ JRP Historical Consulting Services, 86-87.

¹⁶⁴ JRP Historical Consulting Services, 86-87; R. Hardesty Manufacturing Company, 12.

¹⁶⁵ R. Hardesty Manufacturing Company, 13.

¹⁶⁶ JRP Historical Consulting Services, 86-87.

¹⁶⁷ Doncaster, "Sagebrush to Clover," 45 and 47.

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Siphons essentially consist of large pipelines engineered to take advantage of these hydraulic properties. They vary in overall length and diameter, depending on the desired quantity of water flow, and the distances and elevation changes needed to be achieved. Most siphons consist of large, riveted steel or concrete pipes set on poured concrete footings at regular intervals. The pipe is designed to expand and contract with changing temperatures, and is often subject to routine maintenance, repairs, and component replacements, due to deterioration from internal water flow and external weathering. Such alterations tend to occur on a regular basis, therefore the integrity of siphons must be carefully considered. Large poured-concrete intake and outtake structures anchor a siphon at its beginning and end. These structures typically have wide wing walls and aprons to direct water flow into the siphon and prevent erosion, and are often fit with check structures, headgates, weirs, or other water control and/or regulating structures.

Typical examples of siphons in Oregon irrigation projects are found in the Vale Project, the Central Oregon Project, and the Deschutes Project. The Vale Project's Bully Creek and Chicken Creek siphons are good examples of large, above-ground siphons with riveted steel construction on concrete footings from the early 1930s (Figure 16). The Central Oregon Project's Powell Butte Siphon exemplifies more modern construction practices as an underground, inverted siphon from the late 1970s. Finally, two large siphons constructed for the Deschutes Project—Sherwood Canyon Siphon and Willow Creek Siphon—represent the use of concrete in siphon design. The latter, in particular, combines both concrete and riveted steel pipe in its construction.

Subtype: Drain

According to the U.S. Bureau of Reclamation's *Drainage Manual* for water resources, adequate drainage is extremely important to the development and maintenance of an agricultural field's soil and its support of successful plant growth.¹⁶⁸ The drainage of an irrigation project can be either natural or artificial. Most land in an irrigation project has some natural surface and subsurface drainage. However, manmade or artificial drainage is required when an area's natural drainage is inadequate. Drains are water conduits whose primary purpose is to carry excess water away from irrigated agricultural fields to prevent rising water tables and flooding.

Drains may consist of an open channel, buried pipe, natural drainage, or a combination of one or more of these elements. Open-channel drains are similar in design to canals or laterals within an irrigation project, and are sometimes associated with pumps and collection structures that help divert surface or subsurface groundwater into the drainage system. They can be constructed of natural soils and bedrock, masonry, metal, or wood. Buried pipes are the equivalent of an irrigation system's pipelines. Whether a drain is open or piped is largely dictated by its size and purpose, the topography and physical condition of an area's soils, and an irrigation project's annual operation and maintenance costs. Drains most often terminate in natural drainages that carry a water flow back into its original watershed.

A drain classification was first instituted by the U.S. Bureau of Reclamation in 1920. This classification categorized drains into three classes according to their size and relative importance. Class I or "deep drains" were the largest and most significant, with Class III being the smallest and least significant. The agency's current drainage manual identifies 5 different types of drains, based on their function. These include relief, interceptor, collector, suboutlet, and outlet drains.¹⁶⁹

Relief and interceptor drains have the principal function of controlling groundwater levels following irrigation. They form the upstream portion of an irrigation project's land-drainage system, and may be constructed as either open-channel or piped drains. In turn, collector drains receive water from subsurface relief or interceptor drains and from farm surface drains carrying irrigation surface waste and storm runoff. Suboutlet drains have

¹⁶⁸ U.S. Department of the Interior, Bureau of Reclamation, *Drainage Manual: A Water Resources Technical Publication* (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, revised reprint 1993), 2.

¹⁶⁹ U.S. Department of the Interior, Bureau of Reclamation, *Drainage Manual*, 9.

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the principal function of conveying water from collector drains to the outlet drain. In general, they are formed by natural drainages, such as topographically low draws and creeks, but can also consist of engineered channels. These drains typically receive inflows from a number of collector drains and canal and lateral wasteways. Outlet drains convey collected water away from an irrigation project. Similar to suboutlet drains, outlet drains usually consist of a natural channel in a topographically low area, or an engineered channel when there is no natural channel.¹⁷⁰

Significance

In conjunction with diversion structures, water conduits and conveyance structures form the backbone of any irrigation project. They provide the means to transfer, transport, and deliver water through an irrigation project and ultimately to its water users. These properties may be considered historically significant because they directly contributed to the agricultural development of an area or were associated with the settlement, population growth, and economic successes or failures of a local community. Canals and laterals, in particular, are often significant features of the physical landscape, which both define an irrigation project's geographical limits and are frequently important and highly recognizable features of a community or region. Tunnels, siphons, flumes, and drains contribute to these systems and their engineered landscapes. They support an irrigation project's functionality through diverse terrains and geologies, and are sometimes individually recognized as important landmarks on their own account.

Registration Requirements

1. All water conduit/conveyance structure must meet the aforementioned general registration requirements.
2. Water conduits/conveyance structures may be historically significant individually or as contributing resources in a larger property. They are most likely to be considered historically significant under Criterion A or C. To be considered individually eligible under Criterion A, a water conduit/conveyance structure should be significant in an Area of Significance other than or in addition to Agriculture (Exploration and Settlement, for example). Under Criterion C, a canal or lateral should represent a significant concentration of intact, contributing elements that together display the functioning of a conveyance, or should represent the last intact segment of a canal or significant lateral.
3. Canals and laterals may be recognized as historically significant individually or as contributors to the irrigation project of which they are a part. To be considered contributing properties, laterals must exhibit a high degree of integrity and either serve as the principal resource of a property, be associated with a principal resource, or incorporate a large number of contributing appurtenant features. Canal and lateral segments recognized for historical significance under Criterion A may be considered to have sufficient integrity if, at a minimum, the segment retains integrity of location, association, and (if applicable) setting remain substantially intact.¹⁷¹
4. The inclusion of an entire length of a canal or lateral in a nominated property is not required when a segment of either sufficiently conveys a property's historical significance; the length of a canal or lateral segment may vary, depending on its ability to convey historical significance and whether it is the principal resource in a grouping or historic district. At a minimum, a canal or lateral segment must be

¹⁷⁰ Ibid.

¹⁷¹ Under certain circumstances, integrity of setting may not be of primary importance. For example, a segment nominated under Criterion A in the area of Exploration and Settlement need not display integrity of setting relative to the time of the associated community's settlement, as it is expected that the composition of that town would develop over the intervening decades. In this example, the presence of non-historic buildings within the relevant community, even if nearby or adjacent to the canal, should not be considered to diminish the integrity of the resource, since the integrity of association would be considered to override the loss of integrity of setting.

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long enough to represent its original function (i.e., the conveyance of water over distance) and demonstrate its functional relationship and connectivity to other contributing elements. As the primary resource in a grouping or historic district, a shorter length of canal or lateral may be considered of sufficient length if the eligible property also includes other principal or secondary resources, such as the segments of one or more laterals, headgates, check structures, or other appurtenant features. The inclusion of a longer canal or lateral segment may be necessary if few other contributing resources are present in a nominated grouping or historic district, or it is individually significant.

5. Canals and laterals that have been altered, but retain their integrity of location, association, and overall design, are considered to retain a high degree of integrity. Canals and laterals should retain their original alignment and the physical dimensions of their prism (i.e., depth and width) from their period of significance, and a sufficient number of appurtenances to associate the resource with its historic context. Regular and ongoing maintenance activities are necessary to keep an irrigation system functioning, and changes resulting from these activities should not be considered a loss of integrity that necessarily diminishes a resource's historical significance. Such activities would include repairing breached embankments, dredging or cleaning earthen conduits, patching leaks, restacking rocks in retaining walls, and replacing water-control or metering structures with in-kind or proportionately similar equipment.
6. Major alterations to canals and laterals, such as realignments, piping, or the application of concrete lining to water conduits that were originally earthen or rock-lined (and not otherwise associated with a historic context) are considered significant changes that would constitute a loss of integrity and prevent the affected resource from conveying historical significance. Sections of canals and laterals that retain good integrity may still contribute to the historical significance of a historic district or be individually listed in the National Register (depending on the associations), even though some sections of the same canal or lateral may have lost integrity.
7. Sublaterals and field ditches may be considered contributors to an eligible property with which they are associated, but are generally not recognized as eligible resources either individually or as contributors. In general, they are considered not to be distinctive and unlikely to add to the historical significance of an eligible property. They could, however, garner historical significance from association with an important farm, ranch, or other agricultural property where the irrigation project's impact was substantial.
8. Pipes and pipelines may be considered contributors to an eligible property with which they are associated, but are generally not recognized as eligible resources either individually or as contributors. Exceptions would include pipes or pipelines that are associated with significant flumes, siphons, or other appurtenances. Pipelines and their appurtenances that have been installed to replace older open canals or laterals generally are not considered historically significant.
9. Chutes and flumes generally lack sufficient association to be individually eligible and should instead be considered contributors to an eligible property of which they are a part. Exceptions would include unique properties or those that are the first, last, or best examples of a particular property type. Chutes, flumes, and drains typically must retain association with other principal resources of an irrigation project, such as an intact canal or lateral, to be contributing properties. An eligible chute or flume must remain in its original location, exhibiting direct association with an associated canal, lateral, or ditch, and must remain substantially intact from its period of significance. The in-kind replacement or repair of elements of the flume, including its water conduit or trestle, should not be considered a loss of integrity that necessarily diminishes a resource's historical significance.
10. Tunnels and siphons may be recognized as individually eligible or as contributors to an eligible property of which they are a part. Under Criterion C, tunnels and siphons may be recognized as important

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engineering features or for their innovative designs or construction methods. To be individually eligible for listing under Criterion C, they must exemplify the distinctive characteristics of a certain type or method of construction; embody the work of a significant engineer or builder; be critical to the functioning of the irrigation project; or represent an influential technological advancement or innovative design solution. Tunnels and siphons typically must retain association with other principal resources of an irrigation project, such as an intact canal or lateral, in order to contribute to the historical significance of an eligible property. The visible elements of a tunnel, such as its intake and outtake, must remain intact from its original construction for the resource to be considered to have good integrity; and it need not remain functional or fully open throughout its length for it to convey historical significance. An eligible siphon must remain in its original location and must be substantially intact from its period of significance. The in-kind replacement or repair of elements of a siphon, including its pipe or footings, should not be considered a loss of integrity that necessarily diminishes the resource's historical significance.

11. The evaluation of the significance of drains is similar to that of laterals. Principal, or Class I, drains may be considered contributing resources of an eligible property, if they retain a high degree of integrity and are associated with one or more historic contexts. Class II and III drains, similar to sublaterals and ditches, may also be considered contributors to an irrigation project, but generally should not be recognized as individually eligible resources. Drains formed by unmodified natural water courses typically should not be considered eligible resources.

Property Type: Flow Control and Measuring Devices

There are several types of appurtenant features that provide for the control and measurement of water flow in an irrigation project. Most are small in scale, but are nevertheless instrumental to a system's function and the delivery of appropriate quantities of water to end users. Nearly all appurtenant features in an irrigation project are most closely associated with water conduits and conveyances, and can be divided into categories according to their general purpose. Somewhat arbitrarily defined, these categories include the regulation, measurement, and protection of an irrigation system's infrastructure and water supply.

Regulating structures are used to adjust the volume of water carried through an irrigation project at a particular location. They typically occur at the beginning of a water conveyance structure or at the intersection of one water conduit leading into another; and function to completely stop the flow of water or to release it at a prescribed volume. Headgates, located at a diversion dam's headworks or at the turnouts of a main canal into a lateral or sublateral, are the resource type that best represents this function. Checks and other diversion structures typically work in conjunction with headgates or may be used to provide flow control themselves. All are basic components of any irrigation system. Similarly, pumps, valves, and vents are other regulating structures that are common components of piped systems.

Water measurement structures are used to gauge water flow in an irrigation project and ensure its equitable distribution among water users. There are many different types of water measurement structures, and it is common to find many variants used within a single system. Some of the most common types of water measurement structures include weirs, orifices, flumes, and various kinds of flow meters. The type of water measurement structure used depends on a large number of factors, such as its adaptability to site conditions, accuracy, operation and maintenance requirements, and the type of measurements and records needed.¹⁷²

Protective structures are appurtenances that protect the irrigation project and adjacent property from damage-causing factors. These factors could include uncontrolled flooding from storm runoff, excess water flow, or the

¹⁷² U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual: A Water Resources Technical Publication* (Washington, DC: Superintendent of Documents, U.S. Government Printing Office, revised reprint 2000), 4-1, online document: http://www.usbr.gov/pmts/hydraulics_lab/pubs/wmm/, accessed November 2014.

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passage of fish, debris, or other foreign materials into and through the irrigation system. Spillways, screens, and traps are all types of protective structures that attempt to minimize or eliminate these occurrences.

Subtype: Headgate

Headgates are the regulating mechanisms most often used to divert irrigation water from a main canal into laterals, sub-laterals, and ditches for eventual delivery to water users. They control the flow of water at an irrigation project's headworks and at individual turnouts along a main canal, and subsequently from laterals and sublaterals through a point of delivery and into a farm's field ditches. The term "headgate" can refer to a wide variety of structures. They can consist of simple sliding wood slats set to inhibit the flow of water (e.g., check structures) or commercially or locally manufactured drop gates of wood, metal, or even concrete. In Reclamation's standard terminology, "headgates" are those at the start of a main canal system, while "turnouts" is the appropriate term for gates used to regulate flow into laterals off of a main canal.

Most headgates involve the installation of a vertically-placed valve between a primary and secondary water conduit, which is used to control the amount of water diverted from one conduit into the other (Figure 17). Mounted on a frame attached to a concrete headwall, the valve typically consists of a sliding panel or "slide gate" that is passed over a rectangular opening or circular orifice. This opening most often leads to a pipe, culvert, or flume, which directs the water flow into the secondary water conduit. Smaller gates can be opened and closed by hand, while the adjustment of larger gates typically relies on counterweighted, geared, or mechanically assisted systems.

In general, the regulation of water through a headgate is accomplished by the combined function of the headgate and an associated check structure (Figure 18). First, the check structure stops the flow of water in a primary conduit to create sufficient hydraulic pressure (or "head") at the headgate's location, affecting changes in the level and volume of the flowing water. The increased hydraulic pressure forces the water through any available outlet. The headgate is then opened, releasing the water, and allowing it to be diverted through the headgate and into the secondary conduit. Various factors determine the volume of water being diverted. These include the size and shape of the gate's orifice, whether the gate is fully opened, how long it is opened, and other calculations related to hydraulic pressure and the flow of water through the opening. Depending on these factors, for example, a check structure is not always required.

Headgates can be adjusted and locked, a task carried out at the direction of an irrigation project's Watermaster. During an irrigation season, ditch riders open and monitor headgates on a daily basis along laterals, sublaterals, and at individual points of delivery to ensure the flow of water through a system to its end users. Headgates at each point of delivery are opened for as much time as it takes to deliver the end user's allotted quantity of water, and then closed. This activity typically occurs over the course of several days, or even weeks, according to a set schedule established at the beginning of the irrigation season and/or in combination with specific requests for water from an individual landowner. At the end of an irrigation season, headgates are typically closed and locked, and much of the irrigation system is emptied of water. Repairs, upkeep, and maintenance of all portions of a system typically occur during the off season, when no water is flowing.

Many of Oregon's earliest irrigation projects were equipped with wooden headgates when initially constructed. Wood was readily available at low cost, and many irrigation projects did not require the sophistication of more complex systems, instead relying on check structures or other features to control and regulate the flow of water. Wooden headgates proved to have extremely short lifespans, were cumbersome to operate, and costly to maintain in the long run, because deterioration quickly made them unserviceable and they had to be replaced on a regular basis.¹⁷³ The Central Oregon Project, for example, was outfitted with wooden headgates and weirs until at least the 1920s. The high price of water rights and a lack of adequate means for importing more substantial materials prompted the construction of the system with wooden appurtenances. Wooden

¹⁷³ R. Hardesty Manufacturing Company, 125.

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construction was the most cost-effective. In 1916, for example, a Carey Act inspector for the U.S. General Land Office reported that the region's cheap lumber made the Central Oregon Project's dependence on wooden structures good economic practice, despite the need for frequent replacement. All of the project's wooden headgates have since been replaced, most with metal or concrete structures.¹⁷⁴

Most irrigation projects feature headgates and other appurtenances that were manufactured by one of several commercial manufacturers, which have serviced the irrigation industry. Products from companies such as ARMCO, Waterman Industries, and the Hardesty Manufacturing Company are some of the most common (Figure 19). These companies supplied irrigation projects with equipment in many design variations, including gates, flumes, metal pipes, and culverts. They offered products with standardized dimensions, shapes, and specifications, but equipment could also be custom ordered to meet special circumstances or needs.

In addition to commercially manufactured products, irrigation equipment was also often custom built by contractors constructing an irrigation project or fabricated by local shops. It was (and remains) common for the engineers and employees of local irrigation companies and districts to custom-build headgates and other appurtenances to meet their individual needs. In fact, the headgates and appurtenances found in many irrigation projects are often retrofitted or reconstructed from much older equipment (some of it originally manufactured by the aforementioned companies) that has been recycled and reinstalled for new and continued use. Others are completely new, locally fabricated installations. The Central Oregon Irrigation District's machine shop, for example, started building a simple rectangular slide gate with a T-shaped handle in the early 1990s (Figure 20). Small in size and well suited for turnouts on secondary sublaterals, small ditches, and points of delivery, these gates have been installed at locations throughout the irrigation project.¹⁷⁵

In general, it should be assumed that most headgates in Oregon's irrigation projects have been replaced, or fully or partially reconstructed one or more times. As part of regular maintenance, it is common practice when retrofitting or rebuilding headgates for the local shop to cut off or otherwise remove those portions of the gate that have deteriorated or are no longer functional. The bottom portions of a headgate, which are submerged under water, are the components most frequently affected in this manner. This practice is common within the Vale Project, for example, where cuts and weld marks are clear indications of rebuild and retrofit activities. The result is that many headgates in an irrigation project are a conglomeration of new and old parts; and careful attention to these details can often reveal a full history of the gate, including its estimated date of origin and later alterations.

A typical commercially manufactured headgate has five basic components. For the purposes of this document, these are defined as the headwall, stem, paddle or slide, frame, and handle (Figure 21). In addition, a headgate is typically mounted on or associated with a pipe or culvert, which conveys water through the gate from the primary to the secondary conduits. Most headgates are installed perpendicular to the ground surface, while others may be installed at an angle, or as "sloping gates," depending on their purpose and local conditions.

Headwalls serve the practical purpose of anchoring a headgate and protecting the embankment at its inlet and outlet from erosion. They may be constructed of concrete, masonry, or metal, forming vertical walls perpendicular to the bottom grade of a water conduit. Concrete headwalls are the most common, because of their adaptability of design and construction. They are typically built of cast-in-place, board-formed concrete, and their design, construction method (i.e., the type of forms used), and aggregate content are good indicators of their age and period of construction. Headwalls outfitted with other materials are less common and some headgates do not have headwalls at all, especially in low-flow locations. Headgates without headwalls are most often anchored to an underground culvert or pipe, secured by rock or overburden from construction of the associated water conduits.

¹⁷⁴ Archibald, 248.

¹⁷⁵ Claeysens, F-3.

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The overall structure of a headgate is formed by its frame. Typically rectangular in shape, frames are most commonly constructed of iron, steel, or aluminum, and bolted directly to the face or sides of a concrete headwall. They may be of varying height and width, depending on the needs of their installation, and are constructed to support a paddle or slide, which moves up and down (i.e., “slides”) to open and close the gate. The paddle is attached to a stem, which typically extends the frame’s entire vertical length and attaches to a valve handle or other operating mechanism at the top of the structure. Together these components form the slide gate. Older frames may be held together by rivets, while more recent frames or those that have been rebuilt are typically constructed with bolts. When no headwall exists, the frame is generally connected directly to the headgate’s pipe or culvert by a “collar.”

A headgate’s paddle or slide is the component that covers the opening into the pipe or culvert where water passes through the gate. As with the frame, paddles are typically formed from cast iron, steel, or aluminum or may be fabricated from simple sheet metal. They are generally rectangular or circular in shape, depending on the shape of the gate’s water conduit. Some paddles are flat, while others are dome-shaped, and they sometimes carry a maker’s mark that indicates the gate’s commercial manufacturer.

The stem typically consists of a long piece of metal affixed to the paddle that connects it to a lifting mechanism. Either manual or mechanical, it is this mechanism that is used to open and close the headgate. Stem types vary. However, most consist of round metal bars threaded like a screw or flat with a line of punched holes down the center, for the insertion of locking pins. Threaded stems are most often topped with a circular valve handle, which is used to turn the stem and lift the gate. Gates of this type are sometimes referred as a “screw lift” or a “hand wheel lift.” Flat-punch stems are likewise typical of manual “lift gates.” Lift gates are sometimes topped with a T-shaped handle that is lifted up or down to open and close the headgate. A locking pin, attached to the frame by a chain, is used to hold the gate in place at the desired level.¹⁷⁶

Heavier gates or those subject to greater hydraulic pressures require more complex mechanisms to operate, such as gears or electric motors. Several headgate types are defined by these mechanisms. Pedestal lifts, for example, are hand wheel lifts mounted on cast iron pedestals (Figure 22). A screw lift type gate, they were specially adapted for mounting on top of headwalls, in cases where a frame could not be installed on the side wall. These gates may be equipped with either standard threaded or geared hand wheel lifts.¹⁷⁷

Similarly, the radial or “Tainter gate” is typically used as an economical choice for water control subject to high water pressure or where wide, clear openings are necessary. Named for Wisconsin structural engineer Jeremiah Burnham Tainter, who invented the design in 1886, a Tainter gate resembles a pie wedge mounted on a horizontal pivot. Due to its design, the power required to operate a radial gate is almost entirely independent of the water pressure against its face, and consequently is most often used where slide gates are too difficult to operate. They are most frequently installed at diversion dams and spillways, where much larger gates are generally required, and are commonly equipped with geared hoists or motor-assisted lifts.¹⁷⁸ In the context of Reclamation projects, Tainter gates are not used in laterals or sublaterals; they are only used on main canals.

Subtype: Check Structure

Check structures (sometimes known as check dams, weirs, or simply as “checks”) function to divert water from a stream or river, or a canal, ditch, or lateral into a secondary conduit (Figure 5). The diversion is accomplished by temporarily blocking the flow of water in a conveyance structure, reducing the velocity of the flow, and thereby raising the water level. These actions help to force water through an associated headgate or intake structure and into a secondary lateral or ditch. Usually placed perpendicular and fully across a water conduit, check structures are differentiated from dams by their overall size (checks are smaller), and because they do

¹⁷⁶ R. Hardesty Manufacturing Company, 105.

¹⁷⁷ R. Hardesty Manufacturing Company, 106.

¹⁷⁸ R. Hardesty Manufacturing Company, 147.

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not permanently block the natural flow of a moving body of water. Their sizes vary and ultimately correspond to the width of the water conduit over which they are placed.

Check structures may be constructed of a variety of materials, including brush, loose rock, log cribbing, framed wood, mortared stone, concrete, and steel and feature a variety of designs. They may exist as either temporary or permanent structures within an irrigation system. In Oregon, the earliest types of check structures employed by irrigation projects commonly consisted of piles of loose rock placed in a stream or river to inhibit water flow. These check structures would sufficiently stem the flow of water for the purposes of diversion, while still allowing the passage of water, and were easily erected. However, they also required frequent upkeep or had to be rebuilt annually. Such temporary structures were most common on smaller water delivery systems developed in the late-nineteenth century, with continued use into the early-twentieth century. It is unlikely that examples of this type have survived to the present. Check structures of loose rock, for example, were employed by early irrigation efforts along Willow Creek in the vicinity of Vale, Oregon, prior to the U. S. Bureau of Reclamation's construction of the Vale Project. All have been replaced with more modern structures.

Wood and masonry check structures require more substantial investments, but are more likely than brush or rock to survive as identifiable elements of an irrigation project. Wood check structures were commonly framed with milled lumber or made of cribbed logs.¹⁷⁹ Wood check structures were once common in the irrigation systems of the Upper Deschutes basin, for example, with many still in use until the late 1910s and 1920s. It is expected that most original wood and masonry check structures have been removed and replaced by more permanent installations.

The most commonly encountered types of check structures are constructed of board-formed concrete and resemble small engineered dams. They typically consist of a notched dam with a downstream apron to prevent erosion. The notches, which are usually rectangular, facilitate the insertion of wood or metal boards to varying heights, to limit water flow. The boards are placed into vertical grooves at the notch's inside edge. Removal of these boards allows the water to return to its regular flow. Wing walls often extend laterally from the notched dam into the canal embankment.

Check structures are most commonly found in combination with one or more headgates, leading to secondary water conduits. Consequently, check structures may be identified as principal resources or associated with another principal dam or water conduit/conveyance structure. If a check structure exists at a location with no headgates, it is most likely that the headgate(s) that once existed in that location have been removed or abandoned and are no longer visible.

Subtype: Wasteway

Most irrigation projects possess infrastructure for the disposal of excess water from the irrigation system. Wasteways are the appurtenances that control the discharge of water for this purpose. They are often similar to headgates in design and construction, but control the flow of water out of an irrigation system into drains and natural water courses instead of into canals, laterals, and sublaterals. They may be found almost anywhere within an irrigation project, but are most commonly located at diversion structures, along main canals, and at the ends of canals and laterals.

Subtype: Weir

¹⁷⁹ JRP Historical Consulting Services, "Water Conveyance Systems in California: Historic Context Development and Evaluation Procedures" (Sacramento, CA: California Department of Transportation, Environmental Program/Cultural Studies Office, December 2000), 85.

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Weirs are one of the most ubiquitous features of Oregon's irrigation projects and the simplest form of water measuring device (Figures 23 and 24). They may be constructed of wood, metal, or concrete, and be either permanent or portable.¹⁸⁰ Their purpose is the measurement of water that passes from one water conduit to another, or is delivered to an individual end user. End users are typically allotted a finite amount of water for irrigation based on their water rights. Therefore, the measurement of water at various points throughout an irrigation project is essential to ensuring that all users receive an appropriate amount of irrigation water during a given season.

Water is measured in two ways, while it is at rest and while it is in motion. While at rest – as in reservoirs, tanks, and in the soil – water is measured in units of volume. The most common of these measurements are the gallon, cubic foot, the acre inch, and the acre foot. Water in motion, or flowing in pipes, streams, and flumes, is measured in rates of flow that are the units of volume passing a point in a unit of time. The common rates of flow are the cubic foot per second, the gallon per minute, and the miner's inch. The rates of flow are called "discharges."¹⁸¹

Weirs typically consist of four basic elements. These elements include: a wall or bulkhead structure built perpendicular to a water conduit; an upstream water pool created by the bulkhead; an opening or cut-out section of the bulkhead, generally referred to as the weir notch, crest, or flow control section; and a vertical measuring gauge affixed to the weir, or somewhere nearby in the upstream pool (Figure 25).¹⁸² Together these elements are used to measure water flow at specific points in an irrigation project, through a combination of predictable environmental conditions and preset calculations.

A weir's bulkhead may be built of concrete, metal, or wood, and must be vertically set at right angles to the water flow and extend far enough into the embankment to be secure. Similar to a check structure, the bulkhead's purpose is to reduce the water flow's velocity, as it approaches the weir, to facilitate its proper measurement. A properly built and operated weir creates a pool of water upstream from the structure, whose depth can be measured and rated with respect to its upstream head and the discharge of water over the weir's crest. These measurements utilize pre-calculated equations or tables, which take into consideration the depth and volume of the water pool created by the bulkhead and a weir's particular size and shape. In general, water flow is expected to be less than one-half foot per second (practically still water) and in a straight, even flow without eddies or swirls. Baffles are sometimes installed in the upstream pool to further reduce velocity and equalize water flow to the weir.¹⁸³

The earliest and simplest weirs consisted of a notch cut into a plain wooden bulkhead.¹⁸⁴ Oregon's irrigation projects continued to use wood for weir construction through the early to mid-twentieth century, and some wooden weirs may still be found in use in some irrigation systems. As with wooden headgates, wooden weirs were easy and cheap to build and did not require the sophistication of more complex systems. Because of their fast rate of deterioration and high maintenance costs, however, extant wooden weirs are most likely to be of recent construction, handmade and small in size, and most commonly utilized as small or portable weirs at a point of delivery or in a farmer's field ditch. Most wooden weirs have been replaced by more permanent and durable poured-concrete structures.

Weirs with poured-concrete bulkheads are the most common type of weir structures in most of Oregon's irrigation projects. They are typically built of cast-in-place, board-formed concrete, and their design, construction method (i.e., the type of forms used), and aggregate content are good indicators of their age and period of construction. Metal weirs are less common. They typically consist of a single plate of metal that forms

¹⁸⁰ Mark R. Kulp, "Farm Water Measurement," Extension Circular No. 43 (Boise, ID: University of Idaho, College of Agriculture, Extension Division, May 1932), 6; See also, Gertrudys B. Adkins, "Flow Measurement Devices" (Salt Lake City, UT: Utah Division of Water Rights, 2006), online document: http://waterrights.utah.gov/distinfo/measurement_devices.pdf, accessed December 2014.

¹⁸¹ Kulp, 3.

¹⁸² U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-1.

¹⁸³ Kulp, 4; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-1.

¹⁸⁴ Kulp, 6.

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both the weir's bulkhead and its notch in a single structure. Because of deterioration, extant examples of metal weirs are also likely to be of recent construction.

Regardless of the weir's construction, the measurement of water flow is dictated by the crest of the weir notch. A thin metal plate, known as a notch plate or blade, is the most common determinant of a weir's notch size and shape, and is mounted to the weir's bulkhead around the notch to create a sharp edge over which water passes. If the notch plate is mounted on the bulkhead, such that water discharge does not contact or cling to the downstream weir plate or bulkhead and springs clear, the weir type is referred to as a sharp-crested or thin-plate weir. A weir whose bulkhead forms a relatively long raised channel or flume with no blade is classified as a broad-crested weir.¹⁸⁵

A weir notch may have different shapes. The notches in sharp-crested weirs are typically triangular, trapezoidal, or rectangular. In broad-crested weirs, they are most often rectangular or circular. It is the shape of the notch plate that determines the type of weir and its common name. In the case of sharp-crested weirs, structures with triangular notches are known as V-notch weirs, those with trapezoidal notches as Cipolletti weirs, and those with rectangular notches as rectangular weirs. In the case of rectangular or Cipolletti weirs, the thin plate at the notch's bottom edge is the crest and the side edges (which are vertical or flare up and outward) are referred to as the sides or ends (Figure 26). When the notch plate does not extend to the weir's sides (otherwise known as "contraction") the weir is classified as a suppressed weir. For V-notch weirs, the crest is the point of the notch's inverted triangle.¹⁸⁶

A rectangular weir is typically the oldest weir type that may be found in most of Oregon's irrigation projects. As its name implies, the notch in this weir type features a horizontal crest with perpendicular sides. If the notch plate extends to the perpendicular sides, the weir would be considered as fully or partially contracted. Otherwise, it would be considered "suppressed." Rectangular weirs are commonly used in Oregon's irrigation projects and may be of old or new construction.¹⁸⁷

A suppressed weir is a rectangular weir without end contractions. It is sometimes used in the measurement of water, when the device needs to be placed in a flume or box not large enough to give complete contraction. This kind of weir typically has a bottom contraction, but the sides of the flume or box form the sides of the weir notch. Holes also commonly have to be present at the sides of the box, below the weir crest, to admit air under the sheet of falling water.¹⁸⁸

The Cipolletti weir, or the trapezoidal weir, is the most common weir type in general use in most irrigation projects (especially Reclamation projects), both historically and at present. This weir type was named for César Cipolletti, a late nineteenth-century Italian engineer who first proposed its design.¹⁸⁹ Cipolletti weirs are similar to rectangular weirs, but with a trapezoidal-shaped notch plate. The notch sides typically incline outwardly at a slope of 1 to 4, horizontal to vertical, to create the Cipolletti weir's characteristic inverse trapezoidal shape.¹⁹⁰

The triangular or V-notch weir is frequently used in locations with smaller water flows. They are characterized by notch plates that form a V-shape with no bottom crest length and two sloping sides, rising at set angles. The advantage of the triangular notch weir is its ability to measure small flows accurately.¹⁹¹

Several other types of more specialized measuring devices exist that are variations of these weir types, or are specifically designed for particular conditions. These devices include combinations of the aforementioned weir

¹⁸⁵ Adkins, 7; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-1.

¹⁸⁶ U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-2 and 7-5.

¹⁸⁷ Kulp, 10.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

¹⁹⁰ U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-15.

¹⁹¹ Kulp, 13; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-14.

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types, “compound weirs,” or more specialized types of measuring devices, such as submerged orifices, measuring flumes, adjustable weirs, and weir boxes.

Subtype: Submerged Orifice

Submerged orifices generally consist of weirs that have a regularly-shaped, sharp-edged opening in a vertical wall or bulkhead, through which water flows, instead of an open-sided notch. This weir type is best suited for measuring water where the fall at a bulkhead is not great enough to accommodate a traditional weir, or where the water levels both above and below the bulkhead are higher than the top of the weir opening. The hole or orifice usually is rectangular or square, and capable of providing full contraction from all sides of the opening. Because of its design, a submerged orifice requires two measuring gauges, one that measures the effective head of the upstream flow and one measuring the downstream flow, with both taken from the same datum or elevation.¹⁹²

Subtype: Measuring Flume

Measuring flumes are engineered, open-water channels designed to compress water flow to a predictable velocity and volume that can be measured. Water velocity is regulated by the placement of converging sidewalls (forming a horizontal hourglass shape), a ramped or gradually raised bottom surface, or a combination of both. When only the bottom is raised and there are no side contractions, the flume is classified as a broad-crested weir and sometimes referred to as a ramp flume.¹⁹³

Some consider measuring flumes as combining the advantages of both traditional weirs and submerged orifices.¹⁹⁴ Unlike traditional weirs, which must be periodically cleaned to prevent sediment deposits from affecting accuracy, a measuring flume tends to be self-cleaning. Its design creates a high-velocity water flow and presents no obstruction across the water channel. Like a submerged orifice, a measuring flume can also operate with a much smaller head than a weir, which can be important in locations where available head is limited. On the other hand, measuring flumes are generally considered less accurate than traditional weirs and costlier to construct.¹⁹⁵

Measuring flumes may be built of wood, concrete, galvanized sheet metal, or other materials. However, poured concrete is probably the most commonly used in their construction. Flumes may range in size from very small to extremely large, with widths varying from as little as 1 inch to over 50 feet. They are suited to both large and small water flows, so may be found installed in main canals, laterals, and ditches to measure water flow.¹⁹⁶

Like weirs, there are several classifications of measuring flumes, differentiated by their overall designs. The two most common classifications are known as long-throated flumes and short-throated flumes. Long-throated flumes control discharge rates by confining water flow in a throat that is long enough to cause nearly parallel flow lines in the region of flow control. They can be constructed to have nearly any channel shape, due to the flexibility of their design, and can be custom-fitted into most canal or lateral profiles.¹⁹⁷ In contrast, short-throated flumes are typically employed in locations that produce a curvilinear water flow and have fixed sizes and shapes. Although they are referred to as “short,” the overall length of these structures, including transitions, may be relatively long. The Parshall flume is the most common example of the short-throated flume type.¹⁹⁸

¹⁹² Kulp, 14; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 9-1.

¹⁹³ U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-1.

¹⁹⁴ Kulp, 3.

¹⁹⁵ Adkins, 5.

¹⁹⁶ U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-1.

¹⁹⁷ U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-8, 8-13.

¹⁹⁸ U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-3.

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The Parshall flume, also known as the improved Venturi flume, was first developed by Dr. Ralph L. Parshall, an irrigation engineer at the U.S. Department of Agriculture, Soil Conservation Service Colorado Agricultural Experiment Station in 1915 (Figure 27).¹⁹⁹ It was engineered as part of a cooperative effort between the federal agency and the Colorado Agricultural College at Fort Collins. The flume's design offered several advantages, combining the accuracy of a traditional weir with the self-cleaning properties of a submerged orifice, with points of superiority over both. With Parshall flumes, there is no need for an upstream pond, as the water flow's approach velocity has little effect on the accuracy of measurement, and only a small amount of head is required. The device can have a high degree of submergence without the necessity of taking multiple measurements or providing for special accommodations in the measurement's mathematical formulas, and does not clog readily with floating trash, sand, or silt.²⁰⁰ The Montana flume is a less common, shortened variant of the Parshall flume, which has been modified with its throat and discharge sections removed.²⁰¹

Other types of short-throated flumes include: H-flumes, cutthroat flumes, and trapezoidal flumes. H-flumes were developed by the U.S. Department of Agriculture's Natural Resources Conservation Service (formerly known as the Soil Conservation Service) in the 1930s. So-called because it was the eighth design in a series starting with "A," it combines the sensitivity of a sharp-crested weir with the self-cleaning properties of a flume.²⁰² The Cutthroat flume was devised by several engineers at Utah State University's Utah Water Research Laboratory in the 1960s, working under funding from the U.S. Department of the Interior, Office of Water Resources Research. They endeavored to create a flume that was able to overcome the limitation of the Parshall flume to be installed on a flat gradient. Cutthroat flumes were so named because they resemble Parshall flumes with the structure's throat removed or "cut out."²⁰³ Trapezoidal flumes were specifically designed for use in irrigation projects and installation in existing canals and laterals, in particular. They were designed to set flush with the bottom of a water conduit, providing advantage on low-flow flat gradients and in the clearance of sediments.²⁰⁴

The two most common types of long-throated flumes are the Palmer-Bowlus flume and the Replogle, Bos, Clemmens (RBC) flume, or Replogle flume. Palmer-Bowlus flumes were first developed in the 1930s for measuring municipal sewage in existing conduits with minimal site requirements, except for a suitable slope. They are now considered the second most-commonly used class of flume, after the Parshall flume.²⁰⁵ The Replogle flume is a newer flume type developed in 1984 by scientists at the U.S. Department of Agriculture and the International Institute for Land Reclamation & Improvement. Primarily designed for the measurement of flows through earthen channels, this flume consists of a flat, elevated ramp set in a trapezoidal channel (similar to a Palmer-Bowlus flume).²⁰⁶

Subtype: Weir Box

¹⁹⁹ Ralph L. Parshall, *The Improved Venturi Flume* (Fort Collins, CO: The Colorado Agricultural College, 1928); See also, A. I. Johnson, "Modified Parshall Flume" (Denver, CO: U.S. Geological Survey, Hydrologic Laboratory, 1963), online document: <http://pubs.usgs.gov/of/1963/0063/report.pdf>, accessed December 2014; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-29.

²⁰⁰ Kulp, 3; Openchannelflow.com, "Parshall Flumes," online document: <http://www.openchannelflow.com/products/flumes/parshall>, accessed December 2014; R. Hardesty Manufacturing Company, 95;

²⁰¹ Openchannelflow.com, "Montana Flumes," online document: <http://www.openchannelflow.com/products/flumes/montana>, accessed December 2014.

²⁰² Openchannelflow.com, "HS/H/HL Flumes," online document: <http://www.openchannelflow.com/products/flumes/h-type>, accessed December 2014; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-4.

²⁰³ Openchannelflow.com, "Cutthroat Flumes," online document: <http://www.openchannelflow.com/products/flumes/cutthroat>, accessed December 2014; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-4.

²⁰⁴ Openchannelflow.com, "Trapezoidal Flumes," online document: <http://www.openchannelflow.com/products/flumes/trapezoidal>, accessed December 2014; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-4.

²⁰⁵ Openchannelflow.com, "Palmer-Bowlus," online document: <http://www.openchannelflow.com/products/flumes/palmer-bowlus>, accessed December 2014; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-4.

²⁰⁶ Openchannelflow.com, "RBC Flumes," online document: <http://www.openchannelflow.com/products/flumes/rbc>, accessed December 2014; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 8-13.

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Weir boxes consist of pre-engineered rectangular boxes with all of the components of a traditional weir built into the structure (Figure 28). The components of a weir box generally include a stilling basin fit with baffles to calm water flowing into the structure from a headgate or turnout, an internal weir structure, and an opening for the water's discharge. The weir is generally located at the box's lower, downstream end and the baffle at its upstream end. Typically used in combination with a piped system, water measurement is achieved by piped water entering the still basin and being calmed by the baffles, before passing over the internal weir. Essentially consisting of two main compartments, weir-box interiors are most often divided by the weir's bulkhead.

The concept of the weir box was first developed in the early 1900s by the U.S. Bureau of Reclamation during construction of the agency's Yakima Project in central Washington state. Because of this association, weir boxes of this type are commonly referred to as "Yakima boxes" in some locales. Yakima boxes were equipped characteristically with Cipolletti weirs.²⁰⁷ However, other weir types may be present in other designs.

Weir boxes are considered best suited for smaller water flows and are typically utilized for water measurement at points of delivery along laterals and sublaterals. They have several advantages over traditional weirs. The structures are able to still water in a shorter distance, requiring a smaller, less obtrusive construction footprint; the stilling box does not readily fill with silt, requiring less cleaning; they are inexpensive to construct and easily installed; and as a partially closed system, they are well suited for piped or partially pressurized systems, especially those serving a central pivot.²⁰⁸

Weir boxes are most commonly constructed of concrete, but may be built of other materials, and can be installed aboveground or buried to ground level. In general, the manufacture and commercial sale of standardized weir box designs came into common use in Oregon's irrigation projects in the late twentieth century, although earlier examples may be found. Most weir boxes found in an irrigation project are of recent construction, having been installed sometime during this period. Indications of a weir box's relative age may be provided by its design, including its size, scale, and interior design, its construction method (i.e., the type of forms used), and the aggregate content of its concrete.

Subtype: Pump

Electric water pumps are commonly utilized to convey water from one location to another without having to rely on the characteristics of a gravity-based system, or to feed water to a pressurized distribution network, such as the piped laterals leading to a center pivot. In some cases, they have replaced or have been integrated into the structure of an older headgate. Water pumps are typically of recent design and installation.

Subtype: Screen

Irrigation projects commonly employ a variety of screening devices as protective structures to limit the passage of fish, debris, or other damaging materials, through an irrigation system. Trash grates, floating booms, and screens (both static and rotary) are some of the more commonly installed. Most are associated with other appurtenant features, such as a headgate or weir, where they function to block passage of materials through the associated device. Screens are often integrated elements of these structures and may exist separately or as component parts of their design. Representative examples of screens include trash grates or "grizzlies," sand traps, and static or rotary screens.

²⁰⁷ U.S. Department of the Interior, Bureau of Reclamation, *Operation and Maintenance Equipment and Procedures Release No. 2* (Denver, CO: U.S. Department of the Interior, Bureau of Reclamation, January-February 1953), 12-13; U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*, 7-18.

²⁰⁸ U.S. Department of the Interior, Bureau of Reclamation, *Operation and Maintenance Equipment and Procedures Release No. 2*, 12-13.

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Trash grates are large steel grates typically placed over the opening to a turnout or headgate, to limit the amount of large debris passing into a canal or lateral. They can vary widely in design, but frequently consist of grids of welded, vertical steel bars set at an angle over an opening. The grid design and angle placement are often purposeful and designed to ease removal and cleaning, even if the grate is submerged under a full flow of water. Regular maintenance is typically required to prevent trash grates from becoming blocked. Trash grates are often of local design and recent construction, built and installed by the maintenance crews of an irrigation district.

Sand traps and other filtration devices are used to reduce sediment loads in an irrigation system's water flow. In older systems, they often consist of two types of structures: sand trap and settling basin. A sand trap collects sand and gravel as it moves along the bottom of a canal or lateral and discharges it either continuously or intermittently into a waste channel. It usually consists of a structure with grooves, ducts, or small cross-channels at the base of a canal or lateral. These elements help direct sediments into a catch basin or waste channel, which can be easily flushed out or cleaned. Settling basins essentially consist of an enlarged basin in which the velocity of water flow is decreased to cause the deposition of the transported material. A settling basin's design may vary, but often consists of the enlargement of a canal or lateral in a specified location.

Static and rotary screens are circular or rectangular box-like structures typically placed over the opening to a headgate or turnout, especially those leading to a piped or pressurized system. They are constructed of metal or wire screen with a small enough mesh to catch smaller-sized debris. Static screens are permanent, unmoving installations, while rotary screens generally consist of a large drum rotated by a small motor to prevent the accumulation of debris, and to reduce the need for regular cleaning. Screens may vary in size and design. Some are commercially manufactured, while others are locally produced by an irrigation district.

Subtype: Valve/Vent

Valves, air vents, and other specialized appurtenances are commonly employed along pipelines and other pressurized systems. They consist of various designs and configurations from different commercial manufacturers, and may be found installed underground or in their own above-ground enclosures. These features are typically of recent construction, associated with the recent conversion of open canals and laterals to a piped system.

Subtype: Other

The aforementioned sections describe flow control and measuring devices that are most likely to be encountered in Oregon's irrigation projects. However, a wide variety of other appurtenant features may be utilized in an irrigation system for these purposes, making it difficult to classify them all within the scope of this document. Other flow control and measuring devices, for example, may include current meters, acoustic flow meters, calibrated gates and sluices, deflection meters, floats, flow meters, and other meters associated with piped/pressurized conduits.²⁰⁹ Many of these features, if encountered, are likely of recent construction or are uncommon property types that are not representative of an irrigation project's period of significance.

Significance

Flow control and measuring devices are important to the passage and regulation of water through an irrigation system. These properties may be considered historically significant because they directly contributed to the agricultural development of an area or were associated with the settlement, population growth, and economic successes or failures of a local community. In general, these features should be considered contributing resources of an eligible property and derive historical significance from their association with one or more other property types, such as canals, laterals, and drains. In some instances, flow control and measuring devices may warrant consideration as individually eligible resources because of an important or innovative design or

²⁰⁹ See, U.S. Department of the Interior, Bureau of Reclamation, *Water Measurement Manual*.

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construction technique, and/or due to their function within in an irrigation system. They would most often be perceived as contributing to the significance of a larger, historically significant resource.

Registration Requirements

1. All flow control and measuring devices must meet the aforementioned general registration requirements.
2. Flow control and measuring devices may, under certain circumstances, be historically significant individually, but are far more likely to be eligible as contributing resources in a larger property. They are most likely to be considered historically significant under Criterion A or C.
3. Flow control and measuring devices may be recognized as historically significant for their design and engineering under Criterion C. As individually significant properties, these features must retain a high degree of integrity, and those design elements that represent their significance must remain intact. Most flow control and measuring devices are unlikely to be considered individually eligible and should instead be considered contributing resources of an eligible property (under one or more suitable significance criteria for the overall nominated property) of which they are a part. Flow control and measuring devices typically must retain association with other principal resources of an irrigation project, such as an intact canal or lateral, to be contributing properties.
4. To be considered contributing properties, flow control and measuring devices must exhibit sufficient integrity to successfully express the historical role and function of their property type within the overall nominated property. The in-kind replacement or reconstruction of component parts for the purposes of repair and regular maintenance should not necessarily be considered a loss of integrity, and a resource does not need to remain in its original use. Headgates, for example, do not need to retain all five of their basic components in original condition (i.e. headwall, stem, paddle or slide, frame, and handle) to be considered contributing resources. The reconstruction of a headgate's metal frame or the in-kind replacement of paddles, slides, or stems due to deterioration is an expected maintenance activity and should not constitute a loss of integrity. In contrast, a headgate would lose integrity if its original headwall or its metal gate structure were completely removed or replaced.
5. Most check structures encountered in Oregon's irrigation projects are unlikely to warrant individual recognition in the National Register, due to their smaller size and relatively lesser role in an irrigation project. Instead, check structures should be more appropriately recognized as contributors to the irrigation project of which they are a part. To be considered historically significant, check structures must retain association with other elements of an irrigation project, including an intact water conveyance feature, such as a canal or lateral. Exceptions would include unique properties that are the first, last, or best examples of a particular property type.
6. Check structures of wood and stone from the late-nineteenth and early-twentieth centuries are increasingly rare in Oregon's irrigation projects. Consequently, intact examples of this type should be considered of greater importance when evaluated relative to other intact resources and would likely be considered contributing resources to an eligible historic property. Wood check structures of recent construction (i.e., outside a resource's period of significance) generally are not considered National Register-eligible.
7. An eligible check structure must remain in its original location, exhibiting direct association with an associated canal, lateral, or ditch, and its original notched-dam feature must remain intact. The presence of wing walls, downstream aprons, and other elements may vary depending on a check structure's design. Boards or other inserts placed into a check structure's notch to block the flow of water need not retain integrity.

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8. Valves, vents, and other appurtenant features associated with modern pipelines may be considered contributors to a historically significant irrigation system of which they are a part, but generally should not be recognized as eligible resources. Exceptions would include valves and vents associated with features constructed before or during the early-twentieth century or that were of a unique design, construction, or use.

Oregon's irrigation systems may contain a wide variety of other ancillary property types in addition to those outlined above. These property types could include: ditchrider housing and other buildings/structures/sites associated with the construction, operations, or maintenance of an irrigation system; hydroelectric power generation facilities and other related utilities; access roads and bridges; and other more mundane features such as fences, gates, cattle guards, and culverts. The historical significance of these resources should not be evaluated through this document, if individual eligibility is being considered; if contribution to a larger property (historic district) is being considered, significance should be evaluated on a case-by-case basis, separately or in parallel with the registration requirements outlined here.

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G. Geographical Data

The geographical area encompasses all of the State of Oregon, except the areas of the Boise and Klamath projects, located in Malheur County near the community of Adrian and southern Klamath County, south and east of the City of Klamath Falls, respectively.

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H. Summary of Identification and Evaluation Methods

(Discuss the methods used in developing the multiple property listing.)

This Multiple Property Documentation was prepared based on data collected during historic resources surveys conducted for two irrigation projects in the State of Oregon. Reconnaissance-level surveys were conducted of the Vale Project, owned by the Bureau of Reclamation and operated and maintained by the Vale Oregon Irrigation District, in October-November 2013, and the Central Oregon Project, privately owned and operated by the Central Oregon Irrigation District, in February-March 2014. Both surveys were conducted by consultant ICF International in cooperation with the Bureau of Reclamation, the Oregon State Historic Preservation Office, and the local irrigation districts to comply with requirements of Section 106 of the National Historic Preservation Act.

In 2013, both irrigation districts received federal funding from the Bureau of Reclamation's WaterSMART Water and Energy Efficiency Grant Program to pipe portions of their original open-lateral irrigation systems. Because of these grant funds, both piping projects were considered federal undertakings subject to Section 106 review requirements. Pursuant to these requirements, the Bureau of Reclamation consulted with the Oregon State Historic Preservation Office and determined that both the Vale Project and the Central Oregon Project were eligible for listing in the National Register of Historic Places, and that the proposed undertakings posed an adverse effect to each respective historic property. To resolve these effects, the Vale Oregon Irrigation District and the Central Oregon Irrigation District entered into separate Memoranda of Agreement with the Bureau of Reclamation and the Oregon State Historic Preservation Officer in September 2012 and March 2014, respectively. The September 2012 Memorandum of Agreement concerning the Central Oregon Irrigation District was revised in February 2014. The February 2014 agreement completely replaced the September 2012 document.

The Memoranda of Agreement stipulated that reconnaissance-level historic resources surveys be conducted of both irrigation districts and that National Register Multiple Property Documentation be completed for irrigation projects in Oregon, providing the historic contexts, property types, and registration requirements for the later nomination of sections of each irrigation district to the National Register. Each of the two historic resources surveys consisted of: 1) background research and collecting data/information about the Vale Project and the Central Oregon Project, 2) an on-the-ground reconnaissance-level survey of each irrigation system and its features, and 3) creation of geographic information system (GIS)-based maps and data. The collected information was used to evaluate the integrity of the irrigation systems' individual components, identify eligible and non-eligible contributing features, and provide the basis for preparing this Multiple Property Documentation.

The historic contexts contained in this Multiple Property Documentation were developed from both primary and secondary sources consulted while conducting these surveys. The author researched the history of both the Vale Project and Central Oregon Project, as well as the general history of irrigation in Oregon, at local and regional repositories, and conducted a review of records at the Oregon State Historic Preservation Office related to both irrigation systems. The archives and research collections of the Bureau of Reclamation, the Vale Oregon Irrigation District, and the Central Oregon Irrigation District, and previously completed cultural resources studies, historic buildings and structures inventories, local histories, historic maps, and other primary and secondary research sources were consulted. In addition, the author collected and analyzed historic and contemporary maps for each irrigation project to determine construction dates for individual resources and to identify specific areas where changes and improvements to the systems had occurred. Several historic maps were geo-referenced and the data imported into GIS for the purposes of analytical comparison with survey data, and the creation of comprehensive GIS-based survey maps of each irrigation system. The registration requirements presented in Section F of this Multiple Property Documentation were likewise based on conditions observed and survey data collected during the reconnaissance-level historic resources surveys. This information informed the identification of common property types and subtypes in both irrigation systems,

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which was then correlated to research in primary and secondary sources, analyzed, and extrapolated to other comparable irrigation projects in central and eastern Oregon.

The reconnaissance-level historic resources survey of the Vale Project and the Central Oregon Project consisted of on-the-ground inventories of the irrigation infrastructure and assets belonging to each irrigation district. For both projects, existing GIS data was obtained from the irrigation districts prior to each survey and used to create electronic field maps for use in identifying irrigation-related features. Field crews then surveyed each district's system of canals, laterals, and ditches and recorded data about individual assets. These efforts involved the inspection of more than 365 miles of canals and laterals and the recordation of over 1,800 individual assets for the Vale Oregon Irrigation District, and inspection of over 700 miles of canals and laterals and the recordation of over 4,000 assets for the Central Oregon Irrigation District. Recordation consisted of inspecting the integrity of each identified resource, establishing its estimated construction date, collecting basic information about its design and construction (including digital photographs of each), and positing preliminary evaluations on potential National Register eligibility. This information was collected manually for the survey of the Vale Project and electronically using GIS-equipped iPads for the Central Oregon Project, and the data was compiled and analyzed using tools created in Microsoft Excel and Access, and ESRI ArcMap.

For both the Vale Project and the Central Oregon Project, the findings of the historic resources surveys determined that each irrigation system has experienced frequent and ongoing change over time, including the improvement and alteration of their canals, laterals, and various associated appurtenant features. These changes have affected the integrity of many individual resources, and resulted in a loss of integrity for large portions of each system, leading to a somewhat fragmented historical character. For example, a large percentage of the Vale Project's lateral systems have been piped and no longer exist as open-water conduits. Meanwhile, nearly all of the Central Oregon Project's headgates, checks, and weirs have been replaced by more recent structures.

Estimated construction dates were determined using a combination of analytic and research methods. Research into the development histories of each irrigation project provided baseline information for when each system was constructed. This information was supplemented by the analysis of historic and contemporary maps, which provided side-by-side comparisons of changes over time to each irrigation system. The latter was the most useful in determining the relative age of canals and laterals. The build dates of individual assets, such as headgates, checks, and weirs, were estimated through a combination of five sources: 1) construction dates of associated canals and laterals, obtained through historic research and map analysis; 2) an examination of historic equipment catalogs and other sources to establish common manufacturers, designs, and property types; 3) discussions with irrigation district employees about the age, design, and materials of individual assets and alterations made over time; 4) observation of each recorded asset, and analysis of their materials and construction; and 5) comparative analysis of assets with known construction dates to those without.

The following methodological assumptions were made for both surveys:

- Resources less than 50 years old were plotted in GIS, but not recorded or analyzed.
- Piped portions of each irrigation project were assumed to be less than 50 years old, based on information from irrigation district staff, and not recorded or analyzed. These exclusions included any modern pumps, vents, or other appurtenant features associated with these pipelines.
- Common features such as fence lines, vehicle gates, and cattle guards were not recorded or analyzed. Most were assumed to be less than 50 years old.
- Inaccessible resources were not recorded. Resources were determined to be inaccessible if they were: within 20 feet of a private residence; dogs were present; passage to a resource's vicinity was block by parked vehicles or other equipment (i.e., one could not travel down the road or trail); passage was blocked by closed and locked private gates; access was through private property displaying numerous "no trespassing" signs; there was no discernible road or path to the resource.

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The survey data for both projects was compiled and entered into the Oregon State Historic Resources Database and transmitted to the Oregon State Historic Preservation Office, along with GIS maps and data for each survey.

It is the shared opinion of the Oregon State Historic Preservation Office and the U.S. Bureau of Reclamation that together, these two inventoried systems are sufficient to establish characteristic elements and historical trends of both historic contexts identified in this MPD (Central Oregon Project for Carey Desert Land Act Projects in Oregon, 1901-1950, and Vale Project for Federal Reclamation Projects in Oregon, 1902-1978). Because these two projects (Central Oregon Project and Vale Project) served as case studies to inform the development of the contexts and physical characteristics of these two types of irrigation conveyance systems, as well as providing illustrative examples of the historical patterns of development and the resulting structural representations of those contexts, they are not subject to the registration requirement that an irrigation project have a corresponding project-specific historic context, appended to this MPD.

Based on a search of the Oregon State Historic Resources Database, the following table lists those resources associated with agricultural irrigation in Oregon previously listed in the National Register.

Table 3. National Register Listed Agricultural Irrigation Properties in Oregon

<i>Property Name</i>	<i>Location</i>	<i>Period of Significance</i>	<i>Date Listed</i>
Owyhee Dam Historic District*	Adrian, Malheur County	1928-1932	9/23/2010
Pilot Butte Canal Historic District (Cooley Rd to Yeoman Rd Segment)	Bend, Deschutes County	1905-1921	2/8/2016

* The Owyhee Dam is listed both individually and as part of the historic district.

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Additional Documentation

(Figures, Maps, Appendices, and other materials. Please include a list of all included additional materials. Reduce file size to 300kb or less for each individual image.)

Figure 1. Watershed Basins in Oregon

Figure 2. Watershed Sub Basins in Oregon

Figure 3. North Canal Diversion Dam on the Deschutes River, Central Oregon Project, Deschutes County

Figure 4. Harper Dam on the Malheur River, Vale Project, Malheur County

Figure 5. Check Structure, Vale Project, Malheur County

Figure 6. Pilot Butte Canal, Central Oregon Project, Deschutes County

Figure 7. Vale Main Canal, Vale Project, Malheur County

Figure 8. Lateral with Headgate + Ditch Road, Vale Project, Malheur County

Figure 9. Example of PVC Irrigation Pipeline Installation

Figure 10. Tunnel on Vale Main Canal, Vale Project, Malheur County

Figure 11. Wood Flume, Central Oregon Project, Deschutes County

Figure 12. Wood-Stave Flume at Sublateral, Central Oregon Project, Deschutes County

Figure 13. Intact Section of Wood Stave Pipe Trestle, Central Oregon Project, Deschutes County

Figure 14. Series of Concrete Chutes (aka "Drops"), Vale Project, Malheur County

Figure 15. Chute or "Fall" of Natural Rock, Central Oregon Project, Deschutes County

Figure 16. Bully Creek Siphon, Vale Project, Malheur County

Figure 17. Headgate, Central Oregon Project, Deschutes County

Figure 18. Headgate + Lateral and Check Structure, Vale Project, Malheur County

Figure 19. Headgate Manufactured by Waterman Industries, Central Oregon Project, Deschutes County

Figure 20. Locally-Built Headgate, Central Oregon Project, Deschutes County

Figure 21. Diagram of Simple Headgate

Figure 22. Pedestal Lift Headgates, Vale Project, Malheur County

Figure 23. Contemporary Cipoletti Weir, Vale Project, Malheur County

Figure 24. Cipoletti Weir, Vale Project, Malheur County

Carey and Reclamation Acts Irrigation Projects in Oregon, 1901-
1978

Name of Multiple Property Listing

Oregon

State

Figure 25. Diagram of Simple Weir

Figure 26. Weir Notch Types: Rectangular (Top Left), Cipolletti (Top Right), V-Notch (Bottom) (Kulp 1932)

Figure 27. Improved Venturi (Parshall) Flume (Parshall 1928)

Figure 28. Weir Box, Vale Project, Malheur County

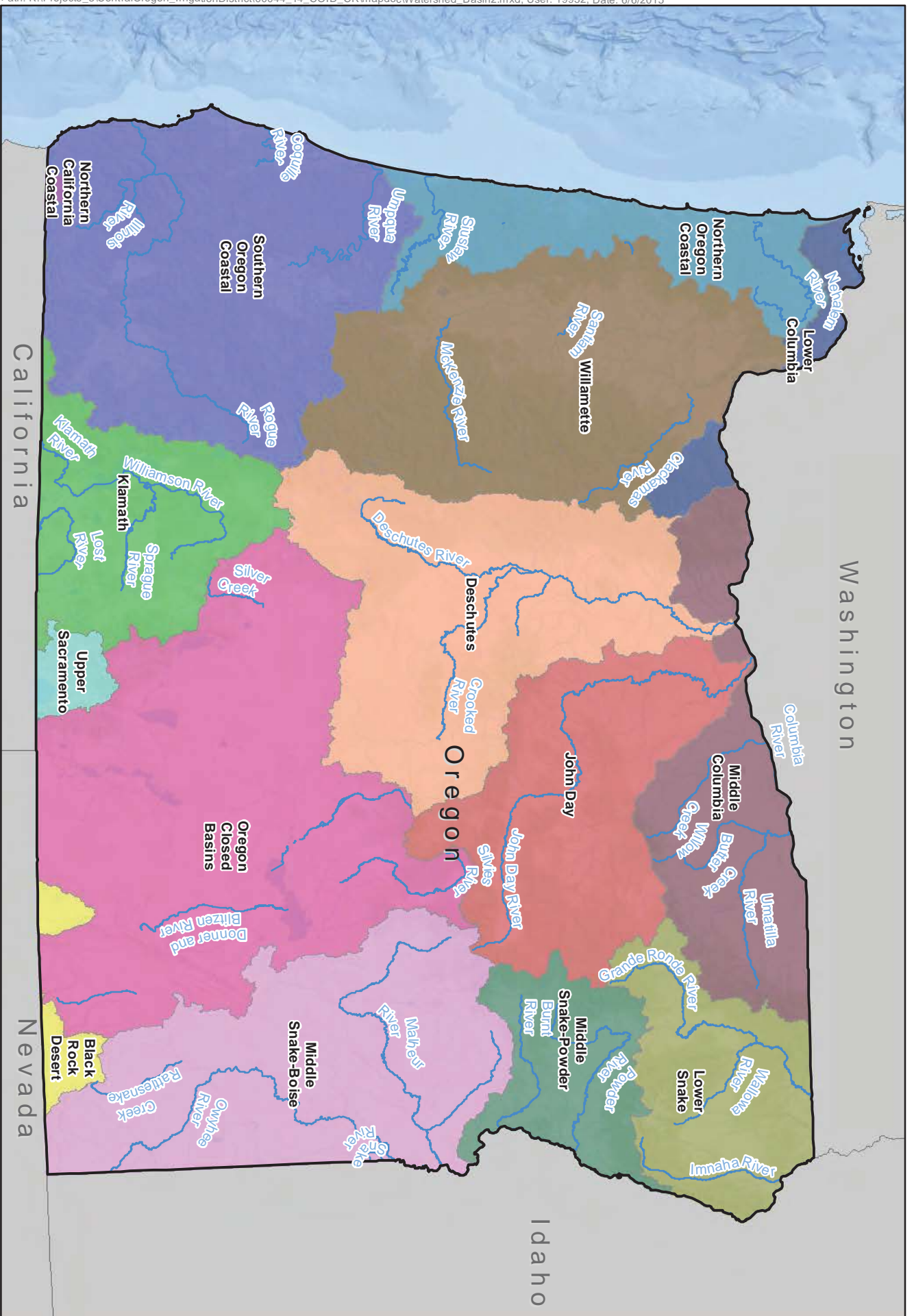
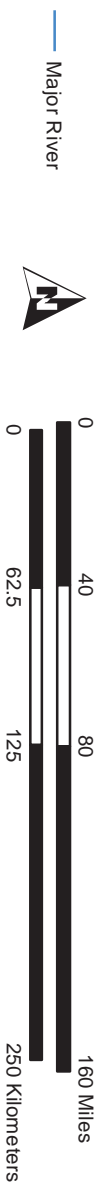


Figure 1
Watershed Basins in Oregon

Path: K:\Projects_3\CentralOregon_IrrigationDistrict\00044_14_COID_CR\mapdoc\Watershed_SubBasin.mxd; User: 19932; Date: 6/6/2015

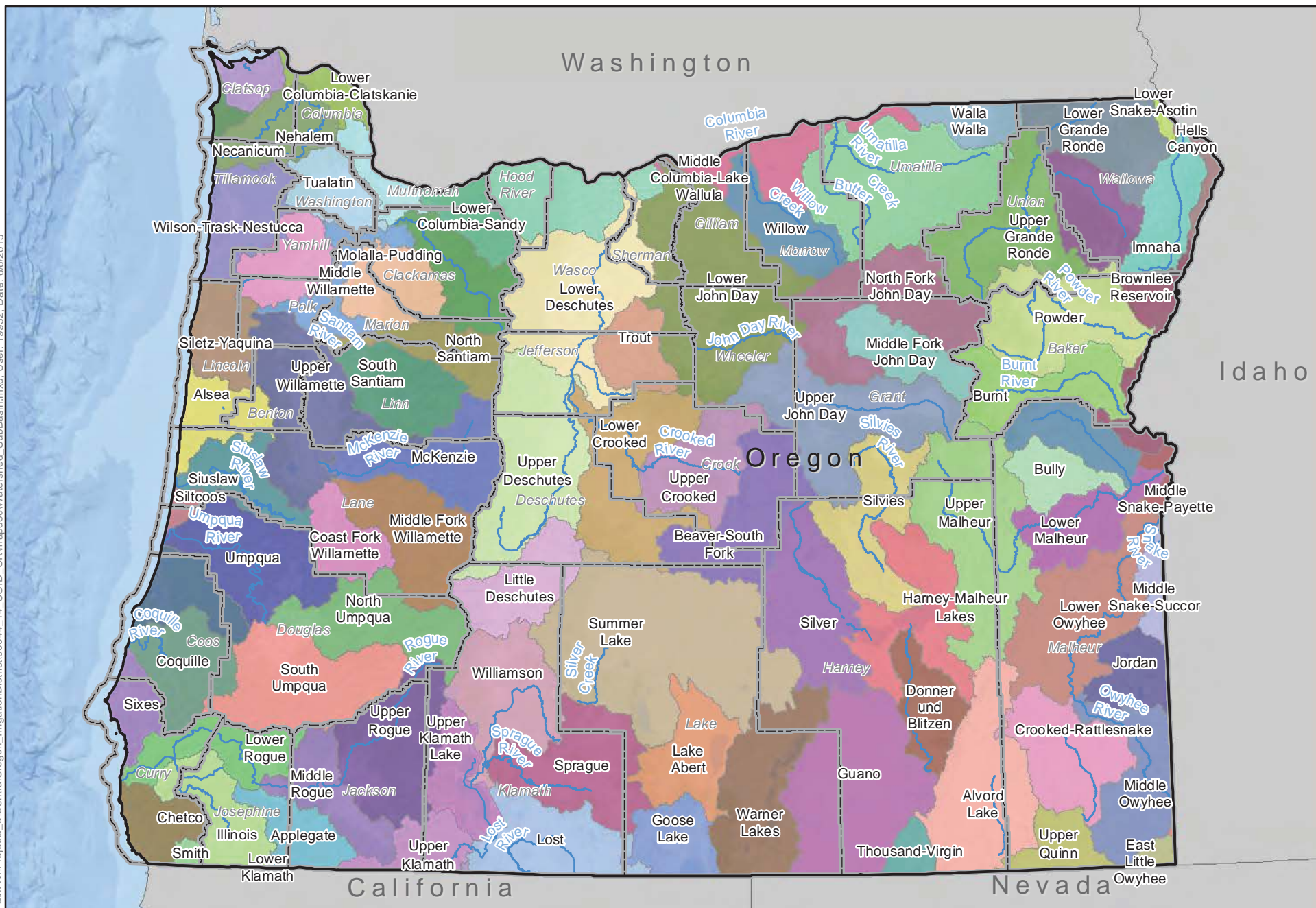


Figure 2
Watershed SubBasins in Oregon





Figure 4
Harper Dam on the Malheur River, Vale Project, Malheur County



Figure 5
Check Structure, Vale Project, Malheur County









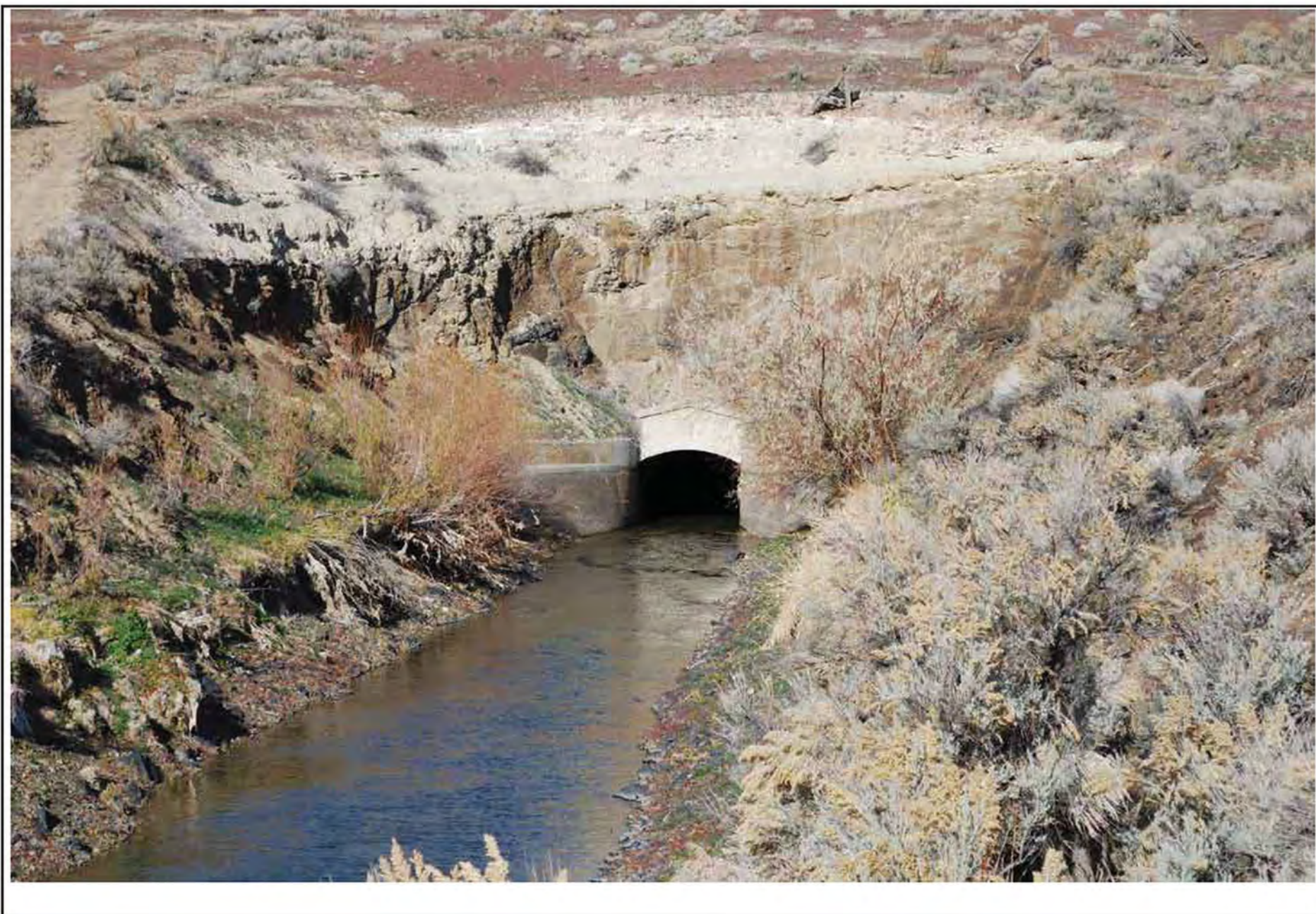


Figure 10
Tunnel on Vale Main Canal, Vale Project, Malheur County



Figure 11
Wood Flume, Central Oregon Project, Deschutes County



Figure 12

Wood-Stave Flume at Sublateral, Central Oregon Project, Deschutes County







Figure 15

Chute or "Fall" of Natural Rock, Central Oregon Project, Deschutes County









Figure 19

Headgate Manufactured by Waterman Industries, Central Oregon Project, Deschutes County



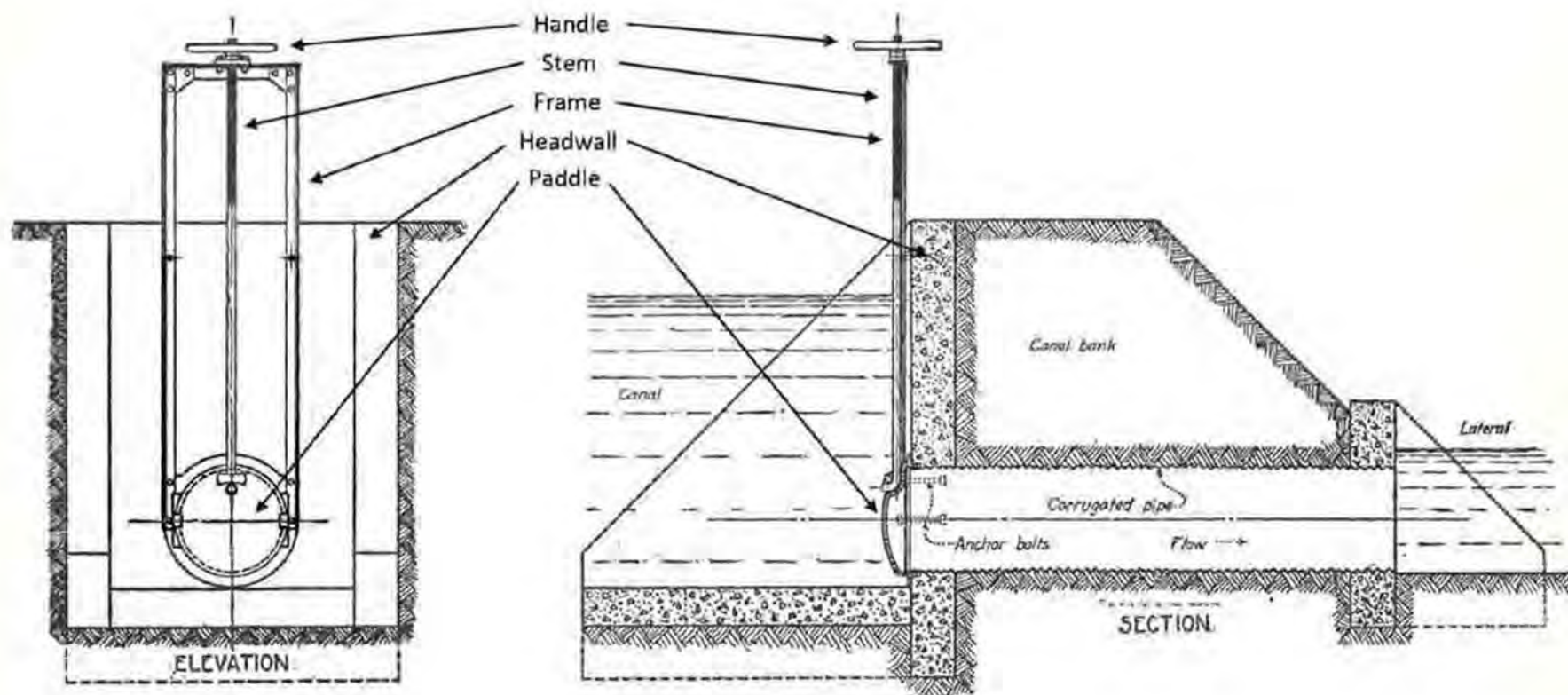


Figure 21
Diagram of Simple Headgate



Figure 22
Pedestal Lift Headgates, Vale Project, Malheur County



Figure 23
Contemporary Cipoletti Weir, Vale Project, Malheur County



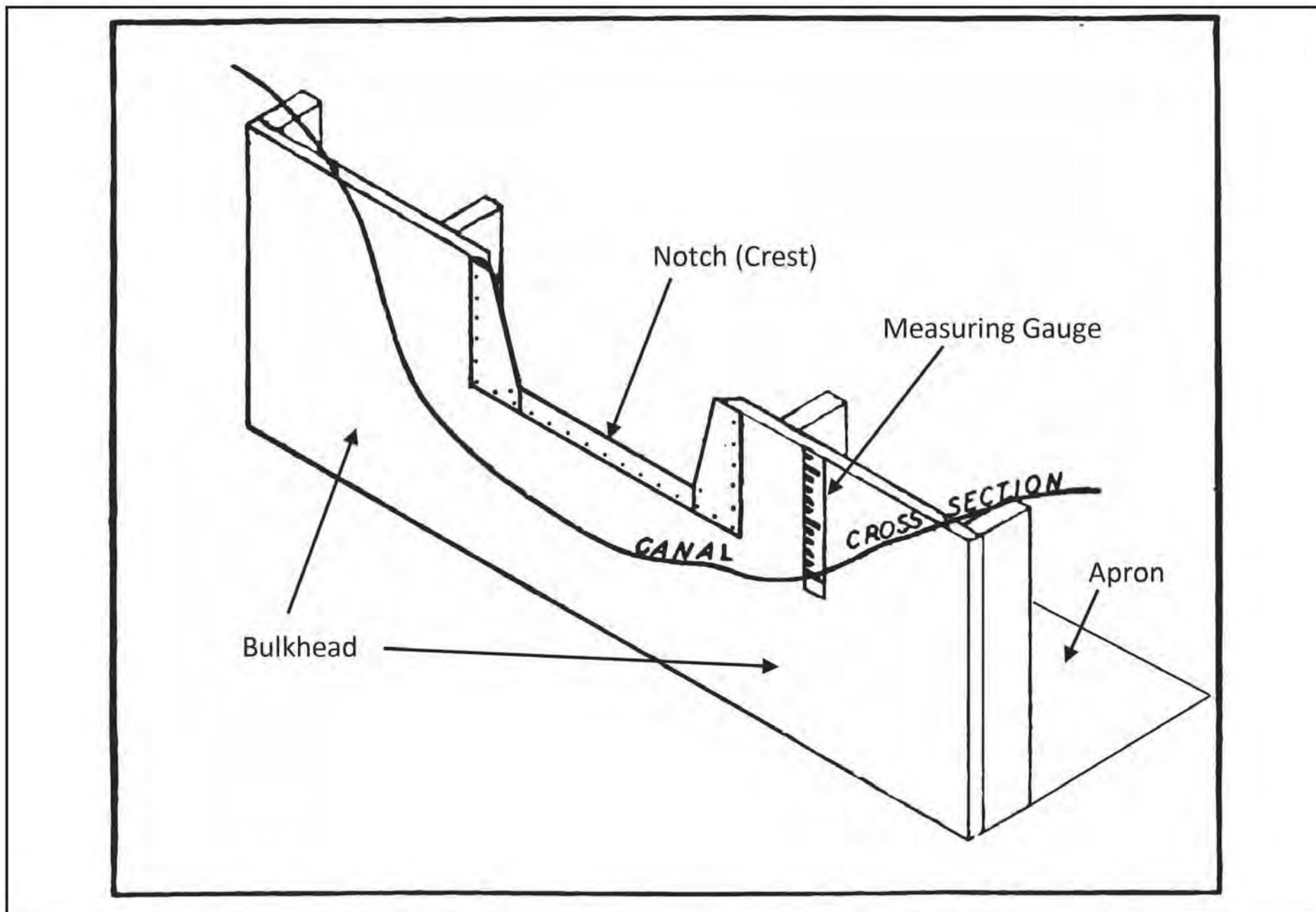


Figure 25
Diagram of Simple Weir

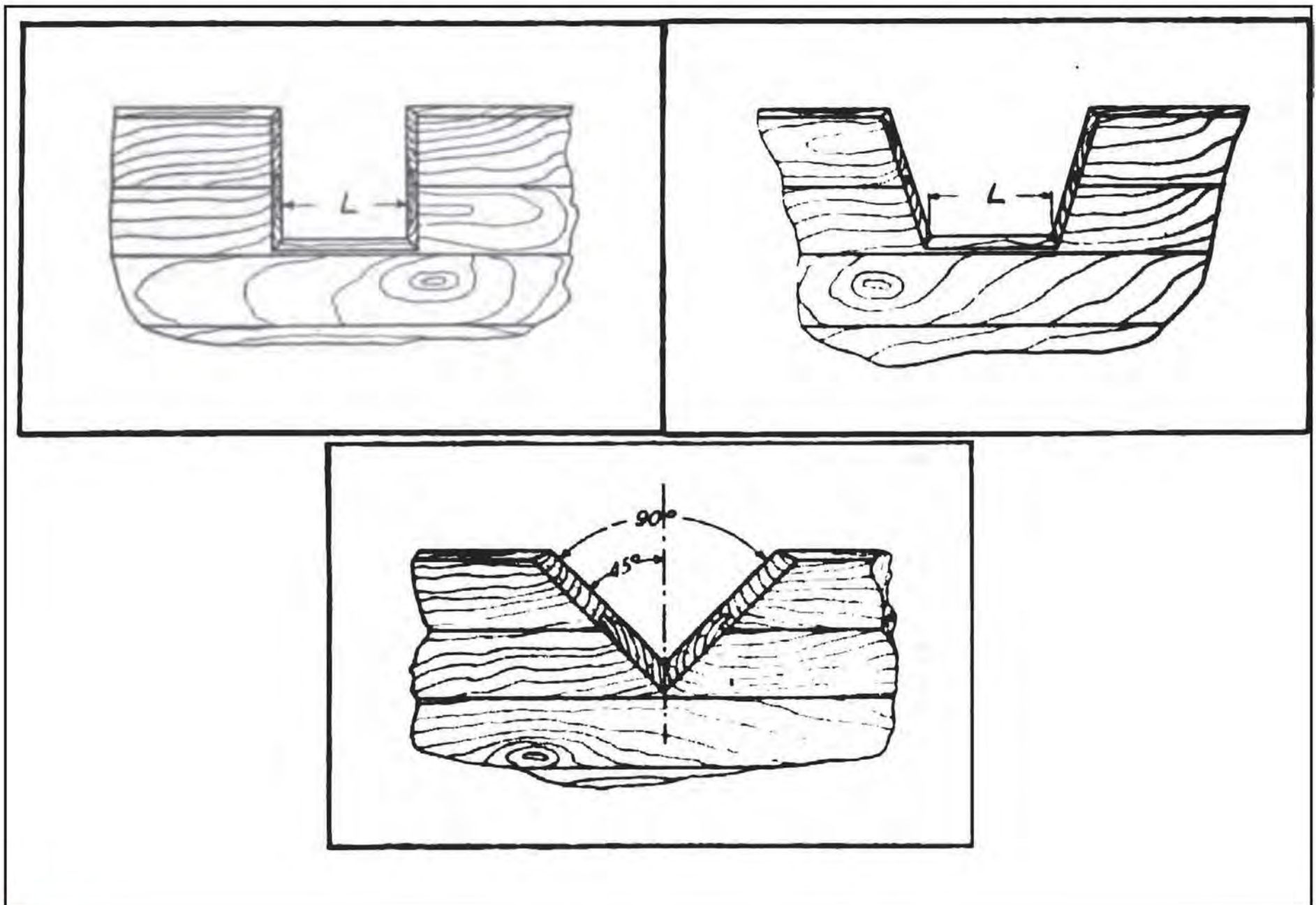


Figure 26

Weir Notch Types: Rectangular (Top Left), Cipolletti (Top Right), V-Notch (Bottom) (Kulp 1932)

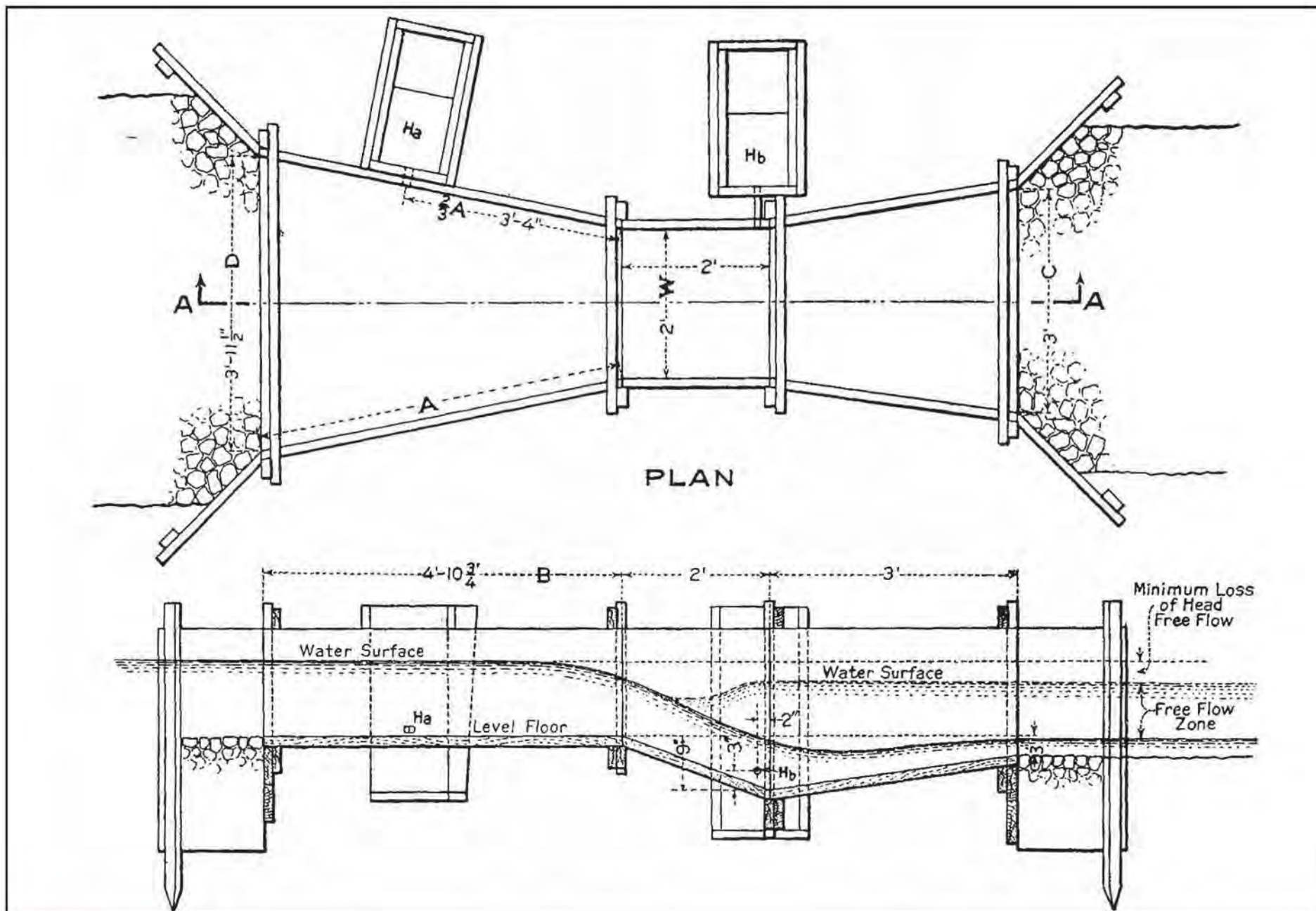


Figure 27
Improved Venturi (Parshall) Flume (Parshall 1928)



Figure 28
Weir Box, Vale Project, Malheur County











Figure 7
Vale Main Canal, Vale Project, Malheur County

















Figure 15

Chute or "Fall" of Natural Rock, Central Oregon Project, Deschutes County











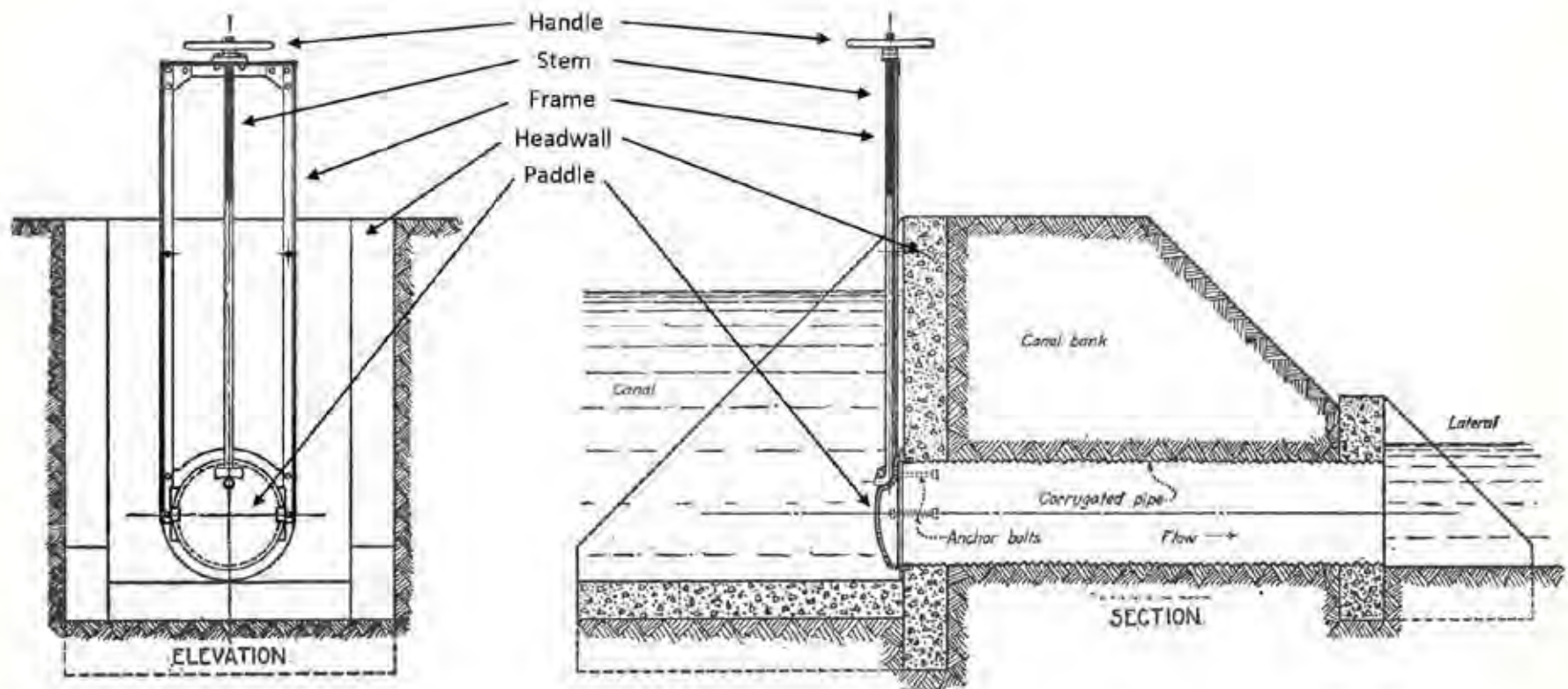


Figure 21
Diagram of Simple Headgate



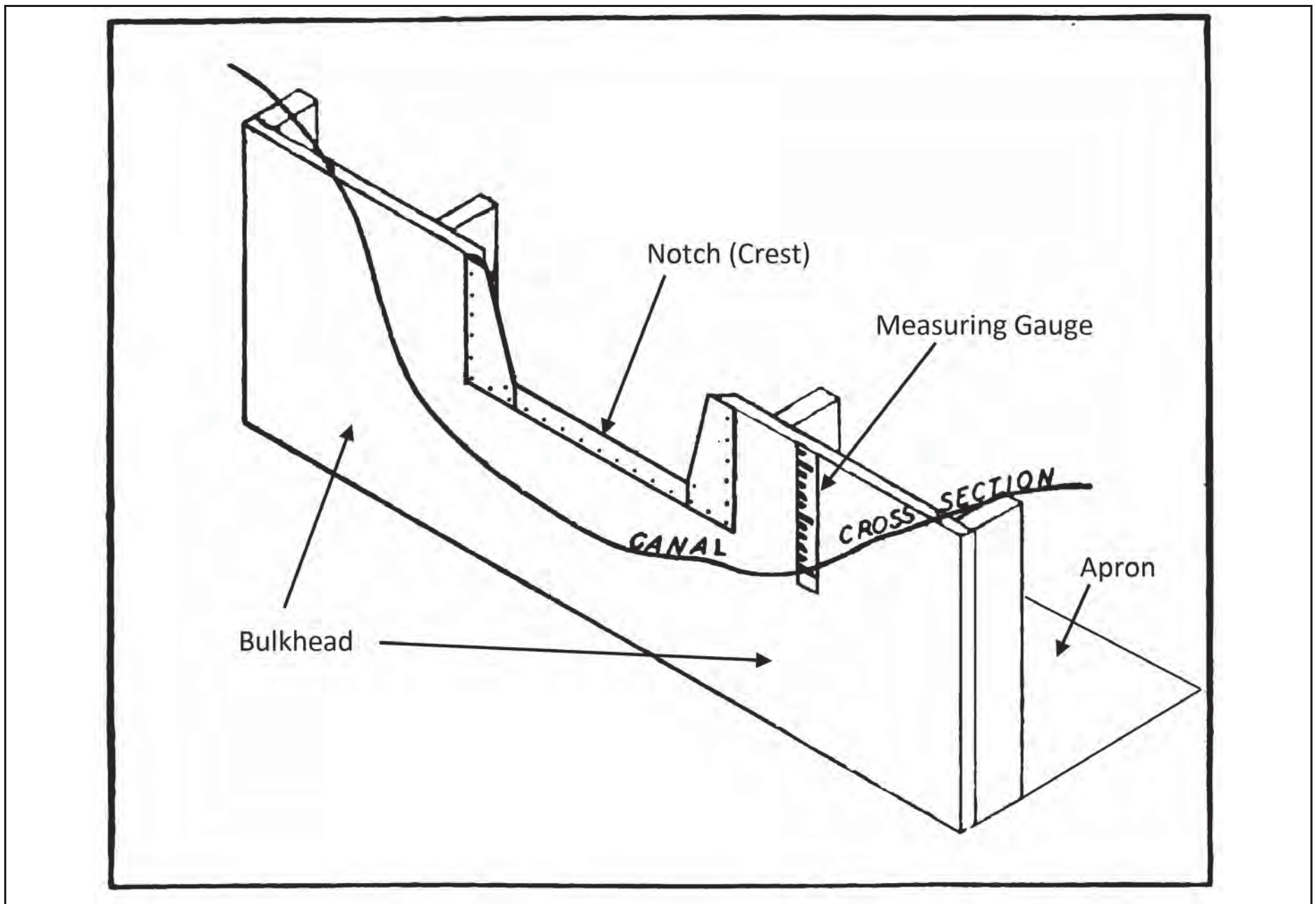
Figure 22
Pedestal Lift Headgates, Vale Project, Malheur County



Figure 23
Contemporary Cipoletti Weir, Vale Project, Malheur County



Figure 24
Cipoletti Weir, Vale Project, Malheur County



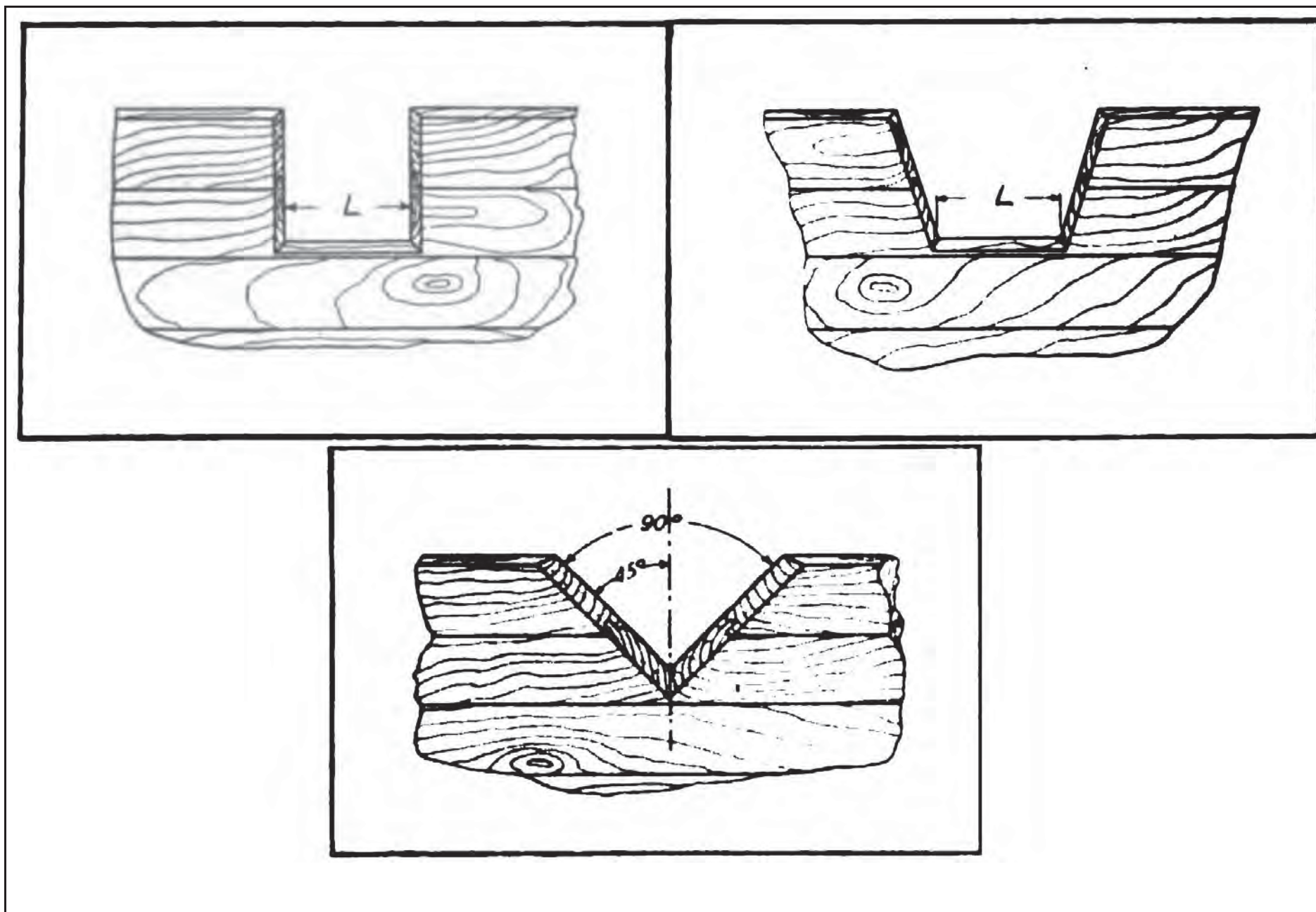


Figure 26

Weir Notch Types: Rectangular (Top Left), Cipolletti (Top Right), V-Notch (Bottom) (Kulp 1932)

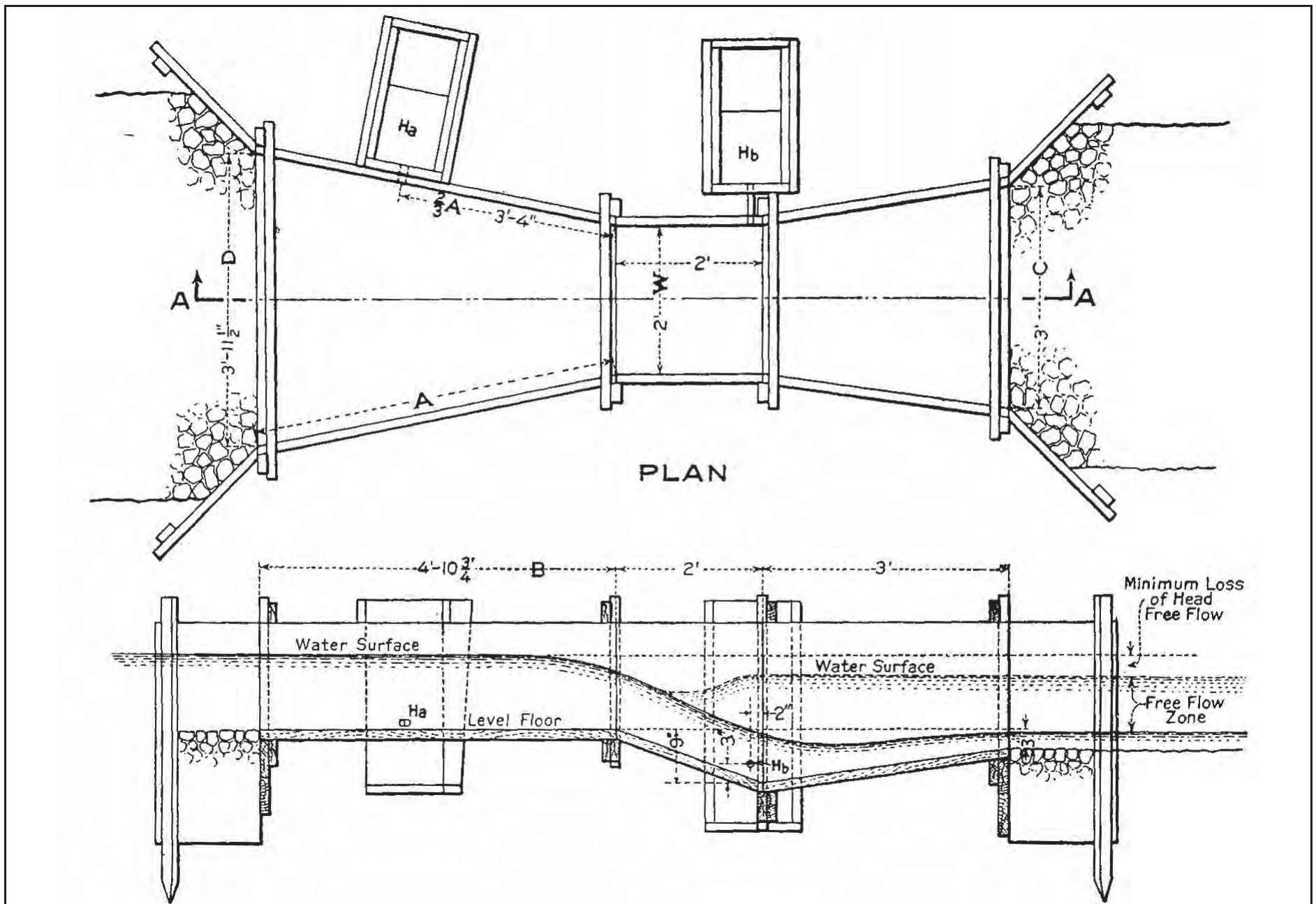


Figure 27
Improved Venturi (Parshall) Flume (Parshall 1928)

National Register of Historic Places
Memo to File

Correspondence

The Correspondence consists of communications from (and possibly to) the nominating authority, notes from the staff of the National Register of Historic Places, and/or other material the National Register of Historic Places received associated with the property.

Correspondence may also include information from other sources, drafts of the nomination, letters of support or objection, memorandums, and ephemera which document the efforts to recognize the property.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

Requested Action: COVER DOCUMENTATION

Multiple Name: Carey and Reclamation Acts Irrigation Projects in Oregon, 1901-1978 MPS

State & County: OREGON, Deschutes

Date Received: 5/26/2017 Date of 45th Day: 7/10/2017

Reference number: MC100001302

Reason For Review:

<input type="checkbox"/> Appeal	<input type="checkbox"/> PDIL	<input type="checkbox"/> Text/Data Issue
<input type="checkbox"/> SHPO Request	<input type="checkbox"/> Landscape	<input type="checkbox"/> Photo
<input type="checkbox"/> Waiver	<input type="checkbox"/> National	<input type="checkbox"/> Map/Boundary
<input type="checkbox"/> Resubmission	<input type="checkbox"/> Mobile Resource	<input type="checkbox"/> Period
<input type="checkbox"/> Other	<input type="checkbox"/> TCP	<input type="checkbox"/> Less than 50 years
	<input type="checkbox"/> CLG	

☒ Accept ☐ Return ☐ Reject 7/10/2017 Date

Abstract/Summary
Comments:

Recommendation/ Criteria Accept MPS cover.

Reviewer Patrick Andrus

Patrick Andrus

Discipline Historian

Telephone (202)354-2218

Date 7/10/2017

DOCUMENTATION: see attached comments: No see attached SLR: No

If a nomination is returned to the nomination authority, the nomination is no longer under consideration by the National Park Service.

6-14-16 Liday letter to SACHP

Steven G. Liday
steven.liday@millernash.com
503-205-2362 direct line

June 14, 2016

**BY FIRST-CLASS MAIL AND
ELECTRONIC MAIL**

tracy.zeller@oregon.gov

State Advisory Committee on Historic Preservation
c/o Oregon State Historic Preservation Office
Attention: Tracy Zeller
725 Summer Street N.E., Suite C
Salem, Oregon 97301

Subject: Comments on the Background and Effect of the NRHP Nominations by
COID

Dear Members of the State Advisory Committee on Historic Preservation ("SACHP"):

Miller Nash Graham & Dunn LLP represents Aleta Warren. This letter concerns the nominations by the Central Oregon Irrigation District ("COID") of two properties for the National Register of Historic Places (the "NRHP"), which are being evaluated by SACHP during its meeting on June 16 and 17. The primary focus of this letter is not on the details or technical eligibility of the properties, but on the context and effect of these nominations.

Although facially about preservation, the goal of these nominations is the intended destruction of most other segments of historic canals within COID's system—including the Pilot Butte Canal Historic District that was named to the NRHP earlier this year.¹ COID, the State Historic Preservation Office ("SHPO"), and the Bureau of Reclamation ("BOR") have entered into an unlawful agreement whereby COID is required to preserve one segment of each of its main canals in order to destroy the rest. As explained below, this agreement is the result of a faulty and indefensible review process under Section 106 of the National Historic Preservation Act ("NHPA") and the National Environmental Policy Act of 1969 ("NEPA").

¹ Pilot Butte Canal Historic District (Cooley Road—Yeoman Road Segment).
<http://www.oregon.gov/oprd/HCD/NATREG/Pages/Pilot-Butte-Canal-Historic-District.aspx>.

Ms. Warren and many others have worked tirelessly to persuade COID, SHPO, and BOR to fulfill their obligations under federal law—but they have flatly refused. We now ask the members of SACHP—in their role of overseeing SHPO and the NRHP nomination process in Oregon—to prevent the unnecessary destruction of historical resources.

1. Historical Background of COID's NRHP Nominations and the Related Section 106 Agreements.

In or around 2012, COID initiated plans to pipe a portion of the I-lateral canal near Alfalfa, Oregon. COID's irrigation system consists of two main canals, the Pilot Butte Canal and the Central Oregon Canal, with numerous laterals off these mains canals. This particular I-lateral is part of the Central Oregon Canal system and more than 15 miles from the Pilot Butte Canal.

Because the project was to be partially funded with federal money, it was required to be vetted under NHPA and NEPA. Generally speaking, these laws require the parties involved in a federally-funded project to determine the impact of the project on historic properties and avoid or mitigate those effects. 40 CFR § 1508.1 *et al*; 36 CFR § 800.1 *et al*. This process requires a number of formal steps and public involvement throughout. NHPA also requires that SHPO be involved in the process (commonly referred to as Section 106) because SHPO "reflects the interests of the State and its citizens in the preservation of their cultural heritage." 36 CFR § 800.2(c)(1)(i). The results of the NHPA analysis and the chosen mitigation are frequently formalized in a "memorandum of agreement" between SHPO and the agencies involved.

In 2012, pursuant to this law, COID contacted SHPO so that the two public agencies could conduct a Section 106 review of the I-lateral piping project and develop a mitigation plan for this protected historic property. During the summer and fall of 2012, COID, its archeologist contractor, and SHPO engaged in negotiations over the necessary mitigation for the piping project. There is no indication that public notice was provided, or that the public was involved in any way, during this process.

These negotiations resulted in a Memorandum of Agreement that was executed by BOR, COID, and SHPO in the fall of 2012. (Exhibit 1 – "2012 MOA".) The 2012 MOA was limited by its own terms to satisfy the Section 106 responsibilities for the I-lateral piping. (2012 MOA, ¶ II.) As mitigation for that project, COID was required to edit and complete the Multiple Property Document (the "MPD"), *Historic Agricultural*

Resources in Central Oregon (which already existed in draft form)², and enter into a "programmatic agreement." (2012 MOA, ¶ II(A)-(B).) The completed MPD and programmatic agreement were to be used to evaluate other portions of the COID irrigation system, and more efficiently fulfill the parties' Section 106 responsibilities for future piping projects. *Id.*

In January 2013, COID submitted an application for a BOR grant for a new project to pipe a portion of the Pilot Butte Canal (named the Juniper Ridge Phase II project). The Pilot Butte Canal is not connected to the I-lateral, which is part of the Central Oregon Canal system. These canals are more than 15 miles apart.

On January 2, 2013, COID contacted SHPO about the mitigation that would be required for this new piping project. One day later, SHPO stated that the parties could simply use the 2012 MOA, amended to include this new project. (Exhibit 2.) This decision was in contradiction to the 2012 MOA, which required the completion of the MPD and a programmatic agreement before evaluating subsequent projects in a systematic fashion. No public notice was provided about this decision, and the public was not involved in any way. Even the landowners whose property this segment of canal flows over were not notified of this global MOA amendment impacting the historic resource on their property.

In May 2013, COID was selected for the BOR grant for the Juniper Ridge Phase II piping project. (Exhibit 3.) In September 2013, SHPO officially informed BOR that the parties could re-write their 2012 MOA to specifically name this new project and thus "satisfy" their Section 106 obligations for the Pilot Butte Canal piping project. (Exhibit 4.)

In February 2014, COID, BOR, and SHPO re-executed the MOA for the I-lateral canal—except now it purported to apply to future piping projects within COID's system. (Exhibit 5, "2014 MOA", ¶¶ 2, 3(B).) The most significant change to the MOA was the additional mitigation requiring COID to preserve one segment from each of the canals. (2014 MOA, ¶ 3(B)(3).) Despite the MOA's new far-reaching terms, it was still titled "For Piping of a Segment of the I-Lateral, ALFALFA VICINITY, DESCHUTES COUNTY, OREGON." As before, this global MOA amendment that impacts vast swaths of historic canals in central Oregon was done with no public outreach and no notice to the impacted owners in violation of NHPA and NEPA law.

² We have not had adequate time to review the MPD and, therefore, can provide no substantive response in regard to the document. We request that the SACHP postpone its consideration of the document to allow Ms. Warren and other impacted parties an opportunity to review and provide comment.

Unfortunately, the terms of this invalid MOA state that COID is the party that selects the two segments to be preserved. The 2014 MOA also states that upon completion of the MPD and preservation of two canal segments, "all adverse effects resulting from subterranean piping of all canals, laterals, sub-laterals, and ditches will be considered to be fully mitigated, and may proceed without Section 106 or ORS 358.653 (as appropriate) consultation with Reclamation or SHPO." (Again, no public notice or public involvement was provided prior to the execution of this new MOA.)

In other words, the invalid 2014 MOA appears to state in part that approval of the MPD and the two segments of canal proposed by COID—now before the SACHP—will allow COID to destroy all other segments of its canal without any additional historical review (at least at the state and federal level). And the first segment that COID intends to destroy is the Pilot Butte Canal Historic District—which is already listed on the NRHP.

2. The Section 106 Process Related to COID Nominations Violated Both the NEPA and the NHPA.

COID and BOR have systematically excluded the public from being involved in the NEPA and Section 106 review of the I-lateral and Juniper Ridge Phase II piping projects. They have refused to provide public notice, hold public hearings, make documents available for review, or otherwise allow any public involvement. Even the owners of the land under the historic canals were not given notice or allowed to comment before the 2012 MOA and its amendments were made.

These actions are a clear violation of the both NEPA and NHPA. The NEPA and NHPA mandates to involve the public are not suggestive—they are mandatory.³ The failure to do so is grounds for a court-ordered injunction to redo the

³ 36 CFR § 800.2(d) provides:

"(1) Nature of involvement. The views of the public are essential to informed Federal decisionmaking in the section 106 process. The agency official shall seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, the likely interest of the public in the effects on historic properties, confidentiality concerns of private individuals and businesses, and the relationship of the Federal involvement to the undertaking.

"(2) Providing notice and information. The agency official must, except where appropriate to protect confidentiality concerns of affected parties, provide the public with information about an undertaking and its effects on historic properties and seek public

Section 106 process. *See Montana Wilderness Ass'n v. Fry*, 310 F Supp 2d 1127, 1151 (D Mont. 2004).

COID, SHPO, and BOR also engaged in an unauthorized process for the 2014 MOA. There is no authority that allows amending a past Section 106 MOA to include a subsequent project. Only a programmatic agreement can somewhat function in this way, and the 2012 MOA did not meet those additional requirements (or even purport to be such a document). 36 CFR § 800.14. Thus, the parties' revision of the 2012 MOA to state that it also covered the Juniper Ridge Phase II project was invalid, and does not constitute a Section 106 review for that project.

Finally, the parties failed to develop and evaluate alternatives or modifications to the piping plans to minimize the adverse effect on historic properties. 36 CFR § 800.6(a); 40 CFR § 1508.20). The focus of the review process was instead on fast-tracking the piping projects and minimizing the interference with COID's development plans. Thus, the terms of the invalid 2014 MOA allows COID to select the segments to be preserved. It is unclear why SHPO (as the representative protecting the state's historic resources) did not insist on preservation of all segments on the NRHP, or

comment and input. Members of the public may also provide views on their own initiative for the agency official to consider in decisionmaking." * * *

40 CFR § 1506.6 provides:

"Agencies *shall*:

"(a) Make diligent efforts to involve the public in preparing and implementing their NEPA procedures.

"(b) Provide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those persons and agencies who may be interested or affected.

"(1) In all cases the agency shall mail notice to those who have requested it on an individual action."

* * *

"(c) Hold or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency. * * *

"(d) Solicit appropriate information from the public.

"(e) Explain in its procedures where interested persons can get information or status reports on environmental impact statements and other elements of the NEPA process." (Emphasis added.)

* * *

at least preservation of the segments with the highest integrity. A review of e-mails produced by SHPO indicate little analysis of the value or comparative integrity of the segments selected by COID. This type of rubber-stamping approval is expressly forbidden by NEPA and NHPA case law. *See Metcalf v. Daley*, 214 F3d 1135, 1142 (9th Cir. 2000) ("the comprehensive 'hard look' mandated by Congress and required by the statute must be timely, and it must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made").

3. The Segments Selected by COID Are Not for Historical Purposes and Do Not Satisfy the 2014 MOA.

The segments proposed by COID do not even satisfy the terms of the invalid 2014 MOA, which are:

1. The segments will be high-integrity, substantial, contributing segments (minimally, one substantial segment each in the Pilot Butte Canal and the Central Oregon Canal) to the overall eligible District;
2. The segment should include a variety of features, such that it well-represents the function and appearance of the water conveyance system, as it appeared as an intact system;
3. The segment should be of sufficient length that on-site interpretation (see Stipulation 8.3(b), below) can be achieved in an attractive, well-organized fashion, without crowding or overwhelming the resource itself. (2014 MOA, ¶ 3(B)(3)(A).)

As pointed out in comments by Ms. Warren, the segments nominated by COID are not of high historic value. The segments nominated by COID were not selected for their historical value, but for their lack of interference with COID's plans to generate and sell hydroelectric power. It cannot be argued that the segment of the Pilot Butte Canal already on the NRHP does not meet the standards above, or is less worthy of preservation. The only issue with that segment is that it interferes with COID's plan to generate additional power at its nearby hydroelectric plant.

Ms. Warren and other concerned members of the public agree with the overall goals of piping some irrigation canals—if done in a responsible way that protects Oregon's historical resources and allows land owners to be involved in the decision. Conservation of water and preservation of wildlife should be top priorities. But

generation of power and revenue for COID should not take priority over the preservation of historic resources.

4. Request for the SACHP to Reject COID Nominations and Direct the Parties to Fulfill Their NEPA/NHPA Obligations.

The preservation of historic resources is of the utmost importance to the State of Oregon. *See* ORS 358.605, 358.475, 358.653, Goal 5, etc. To that end, SHPO was created and empowered by the Oregon legislature. ORS 358.612, 358.565. Unfortunately, it appears (from our review of documents obtained under public information requests) that SHPO is under political pressure to abdicate its primary responsibility and instead fast-track COID piping projects. Thus, it appears SHPO has been complicit in excluding the public from meaningful involvement in the NEPA/NHPA reviews of the canal piping projects. SHPO has repeatedly declined to provide notice of activity or decisions related to the process—including this very meeting of SACHP. Despite numerous requests for notice of relevant activity, SHPO failed to notify the owners of the Pilot Butte Canal Historic District of the COID nominations.

In stark contrast to its treatment of the public, SHPO immediately forwarded to COID all information relating to the 2014 NRHP nomination for Pilot Butte Canal Historic District. A review of SHPO's relevant emails shows that SHPO continues to provide COID with a summary or copy of almost all substantive communication it has with members of the public opposed to the piping of the Pilot Butte Canal. SHPO is recognized under both federal and state law as the agency representing Oregon's interest in protecting the state's historical resources. At a minimum, SHPO should be neutral between COID and the public opposed to the destruction of historic resources—and certainly not acting as an agent for COID.

Fortunately, the Oregon legislature foresaw these types of pressures and created an independent, non-political committee to advise and oversee SHPO. Under ORS 358.622, the SACHP has the responsibility of not only reviewing nominations for the NRHP, but also is required to "advise the State Historic Preservation Officer on matters of policy, programs and budget[.]"

We respectfully request that the SACHP perform both of these functions now. We ask that the SACHP reject the nominations by COID in order to prevent the destruction of better, already recognized, historic canals. At a minimum, SACHP should postpone a decision on these nominations and the MPD until the interested members of the public have a reasonable opportunity to review and comment.

State Advisory Committee on Historic Preservation
June 14, 2016
Page 8

We also ask that the SACHP advise SHPO to insist that BOR and COID fulfill their Section 106 obligations for all piping projects, including Juniper Ridge Phase II. This should involve SHPO notifying BOR and COID that the invalid 2014 MOA does not cover the Juniper Ridge Phase II project and insisting that the parties conduct a new Section 106 review that complies with federal law. Even if the 2014 MOA was not invalid under federal law, its own terms state that it does not apply to properties that are listed on the NRHP. (2014 MOA, ¶ 2: "This MOA does not apply to projects affecting any feature or element that is or may be individually eligible for listing in the National Register of Historic Places. Federal undertakings that affect these elements of the District will continue to be reviewed under standard Section 106 review processes (36 CFR 800).")

If BOR, COID, and SHPO refuse to comply with their obligations under NEPA and NHPA for the Juniper Ridge Phase II project, Ms. Warren may be forced to file a lawsuit to prevent the parties from moving ahead with their plans to unlawfully destroy historic properties.

Please let me know if you would like any additional information, or additional supporting documentation, for the matters discussed above.

Very truly yours,



Steven G. Liday

cc: Ms. Aleta Warren

Enclosures:
Exhibits 1-5

MEMORANDUM OF AGREEMENT
No. R12MA13723
AMONG
THE U.S. BUREAU OF RECLAMATION,
THE OREGON STATE HISTORIC PRESERVATION OFFICE
AND
CENTRAL OREGON IRRIGATION DISTRICT

For
Piping of a Segment of the I-Lateral

ALFALFA VICINITY, DESCHUTES COUNTY, OREGON

This Memorandum of Agreement, hereinafter referred to as "MOA", is made and entered into by and between the United States Of America, acting through Columbia-Cascades Area Office, Bureau of Reclamation, Department of the Interior, hereinafter referred to as "**Reclamation**", the Central Oregon Irrigation District, hereinafter referred to as "**District**", and the Oregon State Historic Preservation Office, hereinafter referred to as "**SHPO**", pursuant to the Reclamation Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplementary thereto and other applicable State laws and regulations, and Section 106 of the National Historic Preservation Act (36 CFR 800).

I. Background

WHEREAS, the Bureau of Reclamation (Reclamation), in consultation with the Oregon State Historic Preservation Office (SHPO), determined that the Central Oregon Irrigation District's I-Lateral (Lateral) is eligible for the National Register of Historic Places as a contributing feature of the Central Oregon Irrigation District, a linear irrigation water conveyance system;

WHEREAS, the District is intending to install within the prism of the Lateral approximately 4,800 ft. of a maximum diameter 63-inch diameter HDPE pipe, located in sections 25, 26 and 36 of T.17S R.14E (for water conservation aimed at improving operation efficiencies and restoring anadromous fish habitat), and has documented the extent of the Lateral within the current undertaking's Area of Potential Effects for historic and archaeological resources to standards acceptable to Reclamation and SHPO;

WHEREAS, the Bureau of Reclamation (Reclamation), in consultation with the Oregon State Historic Preservation Office (SHPO), determined that replacement of the open I-Lateral with the pipe will have an adverse effect upon the historic integrity of the Lateral;

WHEREAS, Reclamation notified the Advisory Council on Historic Preservation (Council) of the adverse effect on the I-Lateral pursuant to 36 CFR Section 800.6(a)(1), and in a letter dated September 17, 2012, the Council indicated that their participation is not needed in the consultation for resolution of adverse effects from this undertaking;

II. Implementing Actions

The Reclamation, SHPO and the District agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties, and adherence to the terms of this agreement satisfy the Section 106 responsibilities for addressing the effects of the undertaking on historic properties.

STIPULATIONS

The Central Oregon Irrigation District will ensure that the following actions will occur:

A. Historic Documentation: Following all applicable guidance provided by the National Park Service and SHPO for the preparation of Multiple Property Documents (MPD), the District will edit the MPD, *Historic Agricultural Resources in Central Oregon*, which is currently in draft form, as prepared by Clacyssens and Tomlinson (2006) under a previous Reclamation water conservation grant.

The MPD will establish standards by which eligibility and integrity can be evaluated across the entire COID irrigation water conveyance system. Section E will include a summary of the history of irrigation in Central Oregon and a complete context for the District. Section F shall include general registration requirements pertaining to all irrigation districts and their associated water systems in Central Oregon, and specific registration criteria for District resources. The selection and definition of property types and eligibility of the identified properties for listing in the National Register of Historic places shall be based primarily on field work documenting the system, and secondarily on Historic American Engineering Record (HAER) and/or Historic American Building Record (HABS) documentation, determinations of eligibility for associated features such as dams, diversion dams, and hydroelectric facilities for components of the COID system, and other secondary sources. The remaining sections of the document shall be edited as needed to reflect the changes made in Section E and F. A GIS-based map of the entire system identifying the extent and features of the COID, and any other necessary appendixes shall be included..

The draft MPD will be submitted to Reclamation and SHPO no later than three years from the date of the last signature on this document for review and comment. The final document must be revised as requested by Reclamation and SHPO and submitted to the National Park Service for listing in the National Register one calendar year from date of submission of the draft document.

B. Development of a Programmatic Agreement (PA) The District shall enter into a Programmatic Agreement (PA) with the SHPO to allow for the more efficient fulfillment of the agency's obligations under Section 106 of the National Historic Preservation Act, as amended and Oregon Revised Statute 358.653 as applicable. All parties shall use the MPD to identify contributing segments of the canal system to be managed under the PA and any subsequent documents created as part of the process. The PA will include, at a minimum:

- A list of routine maintenance and minor construction activities and actions that do not adversely affect the historic resource and that are exempt from regular review by the SHPO
- A provision to address emergency situations where catastrophic breach of the canal or other unforeseen event or eminent threat endangers human life or property. Such a provision shall allow the District to act on the immediate situation without consultation and address compliance with applicable cultural resource laws in consultation with appropriate federal and state agencies and stakeholders at a later time.
- An inadvertent discoveries clause, which will outline procedures to be followed when unknown, unanticipated cultural resources are discovered due to District activities.
- A description of annual reporting requirements and timetable for reporting activities undertaken by the District where the provisions of the PA were applied.
- A defined effective period of 10 years with provisions for the document to be reviewed at 5 years from last date of signature, amended as necessary, and the effective period continued, based on consultation.

The PA may also include a probability model for subsurface archaeological sites, cultural resource treatment plans, and preservation plans, as agreed to by the signing Parties.

The District and the SHPO as well as any other interested, consulting parties will be signatories to the PA.

III. Period of Performance

This Agreement shall become effective on the date of the last signature hereto and extend three years after the date of the last signature. The MOA will also be considered terminated once all stipulations are complete, or five years after the date of the last signature on this document. Any party may terminate this MOA by providing 30 days written notice to the other party(ies). Any party may formally request modification of the agreement by providing a written request to the other party(ies).

IV. Designated Contacts

For Reclamation:

Chris Horting-Jones
 Archeologist
 1375 SE Wilson Ave. #100
 Bend, OR 97701
 Phone (541) 389-6541
 Fax (541)-389-6394
 Email: chortingjones@usbr.gov

For the District:

Laura Wollam
Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct.
Redmond, OR 97756
Phone (541) 504-6047
Fax (541) 504-7577
Email: lauraw@coid.org

For SHPO:

Jason Allen
Historic Preservation Specialist
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1266
Phone (503) 986-0579
Fax (503) 986-0793
Email: Jason.Allen@state.or.us

V. General Provisions

A. Nothing herein shall or shall be construed to obligate any party to expend funds or involve their respective agencies in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively allocated for the purposes and projects contemplated hereunder.

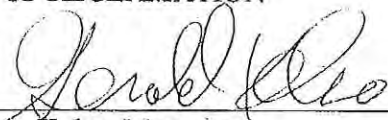
B. No Member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of this MOA or to any benefit that may arise out of it.

C. The parties agree to comply with all Federal statutes relating to nondiscrimination, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, religion, sex, or national origin; Title IX of the Education amendments of 1972, as amended, which prohibits discrimination on the basis of sex; the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990, as amended, which prohibit discrimination on the basis of disability; the Age Discrimination in Employment Act of 1967, as amended, which prohibits discrimination based on age against those who are at least 40 years of age; and the Equal Pay Act of 1963.

SIGNATORIES

BUREAU OF RECLAMATION

BY: _____

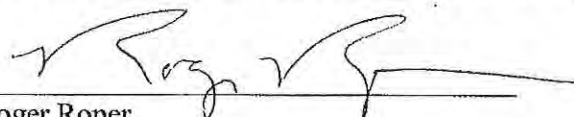

Gerry Kelso, Manager
Columbia-Cascades Area Office

DATE: _____

9/2/12

OREGON STATE HISTORIC PRESERVATION OFFICE

BY: _____

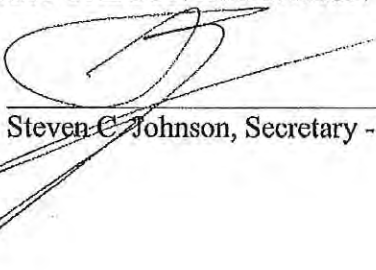

Roger Roper
Deputy State Historic Preservation Officer

DATE: _____

10.5.12

CENTRAL OREGON IRRIGATION DISTRICT

BY: _____


Steven C. Johnson, Secretary - Manager

DATE: _____

27 Sept. 2012

From: [JOHNSON Ian * OPRD](#)
To: [JOHNSON Ian * OPRD](#)
Cc: [JOHNSON Ian * OPRD](#)
Subject: FW: RE: SHPO Case 12-0948
Date: Monday, May 09, 2016 11:00:23 AM
Attachments: [PBC PIPED MAP.pdf](#)
[JR Project Site Map.pdf](#)

-----Original Message-----

From: Laura Wollam [mailto:lauraw@coid.org];
Sent: 1/7/2013 12:33:23 PM
To: JOHNSON Ian * OPRD [mailto:JohnsoI@PRD.STATE.OR.US];
CC: ALLEN Jason * OPRD [mailto:AllenJa@PRD.STATE.OR.US];
Subject: RE: SHPO Case 12-0948

<!--[if mso 9]--> <!--[endif]-->

Hi Ian,

I am attaching a map of the PBC that shows the piped and unpiped sections. The total length of the PBC is 26.2 miles with 4.4 miles currently piped and 21.8 miles currently open canal.

I am also attaching the project map from Ward Tonsfeldt's report that he created when he did the historic/cultural review of this project area.

Please let me know what our next steps are after you have had a chance to review this information.

Thanks!

Laura

Laura Wollam

*Water Use Specialist / Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct
Redmond, OR 97756
Phone: 541-504-7577
Email: lauraw@coid.org*

From: Ian Johnson [mailto:ian.johnson@state.or.us]
Sent: Thursday, January 03, 2013 1:14 PM
To: Laura Wollam
Cc: Jason Allen
Subject: RE: SHPO Case 12-0948

Laura,

Thanks for contacting us. Just to make sure we're talking about the same case I am attaching all the paperwork we have for 10-1873, a project proposed for the Pilot Butte Canal.

We can wrap the mitigation for the earlier project into the MOA for 12-0948; however, that will need to be a formal amendment process, and, as part of the deal we want to see segment(s) of Pilot Butte Canal preserved, as is, either watered or not, and interpreted. Since the MOA calls for an Multiple Property Document, preserved sections of the canal could be listed in the Register using this document.

As noted in my earlier letter, it is unclear in our records how much of the canal has already been piped and what the integrity of the remaining sections are. We'll need to know how much is left before we move forward. A good starting point might be a map that shows what is and is not piped and the area of the proposed project, which was missing from the first submission. We can discuss later what more information may be needed to complete and FOE and if/how we may amend the MOA.

Please contact me if you have any other questions.

Ian

Ian P. Johnson, Historian
Oregon SHPO
725 Summer Street NE, Suite C
Salem, Oregon 97301
Ph: (503) 986-0678
Fax: (503) 986-0793

Visit our website:
www.oregonheritage.org

Comments or suggestions:
Heritage.Programs@state.or.us

>>> "Laura Wollam" <lauraw@coid.org> 1/3/2013 7:52 AM >>>
Hi Jason,

I found a case number for this project. It is 10-1873.

Laura Wollam
Water Use Specialist / Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct
Redmond, OR 97756
Phone: 541-504-7577
Email: lauraw@coid.org

-----Original Message-----

From: Jason Allen [<mailto:jason.allen@state.or.us>]
Sent: Wednesday, January 02, 2013 10:51 AM
To: Laura Wollam
Cc: Ian Johnson
Subject: Re: SHPO Case 12-0948

Hi Laura,

I'll look into this and let you know what I find. I may have to do some

digging, since I'm not familiar with the project. I'll be in touch, likely tomorrow or Friday, if that works.

Cheers,
-Jason

Jason M. Allen, M.A.
Historic Preservation Specialist
Oregon State Historic Preservation Office
725 Summer St. NE, Ste. C
Salem, OR 97301-1266
503-986-0579
jason.allen@state.or.us

Please Note: An updated version of the SHPO Clearance Form is now available for download at:
http://cms.oregon.gov/oprd/HCD/SHPO/pages/preservation_106.aspx

>>> "Laura Wollam" <lauraw@coid.org> 1/2/2013 10:41 AM >>>
Good morning Ian & Jason,

I have a couple of questions for you regarding our most recent MOA and plans for a PA.

We are going to be submitting an application for WaterSMART funding for a new project, and are working on the NEPA requirements. This project is the 2nd phase of previous piping project in the Bend area, but not on the COC which feeds the I-Lat for our current MOA. The project is being completed on our other main canal that flows through Redmond and Terrebonne.

Since our current MOA for Case #12-0948 includes completing the draft report that Paul Claeysens did, what is going to be required of us to have SHPO sign off for this project? I believe we had already submitted a historical & cultural report, or at least a draft report for this piping project a couple of years ago to you (2010 I believe), but we did not follow-up as the project got shelved for a couple of years until the design process was more complete. I am sorry, but I don't have a case number for our submittal to you.

Will we need to do a new MOA for this project, or will we be able to work off of the existing MOA?

Thanks,

Laura

Laura Wollam

Water Use Specialist / Grant Specialist

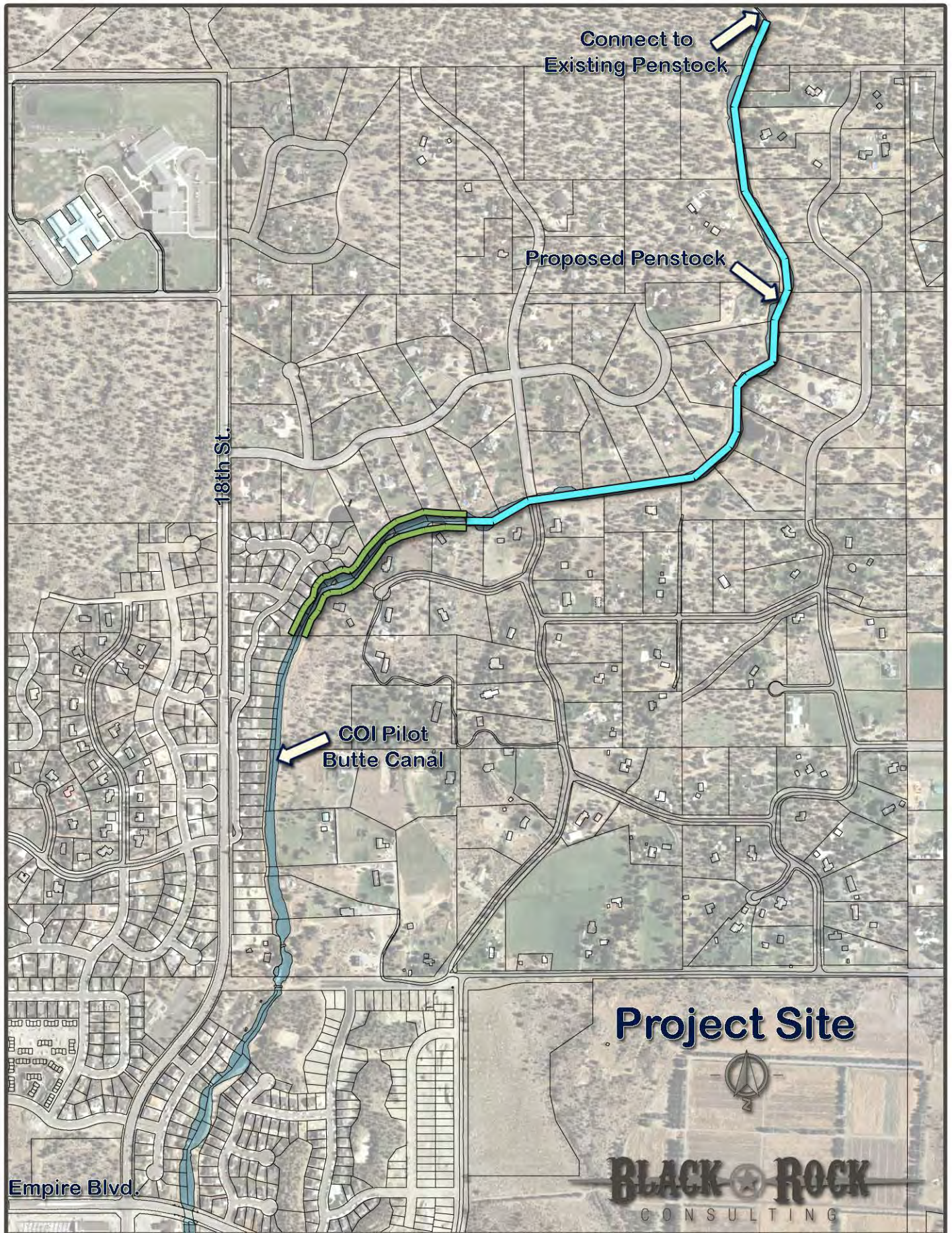
Central Oregon Irrigation District

1055 SW Lake Ct

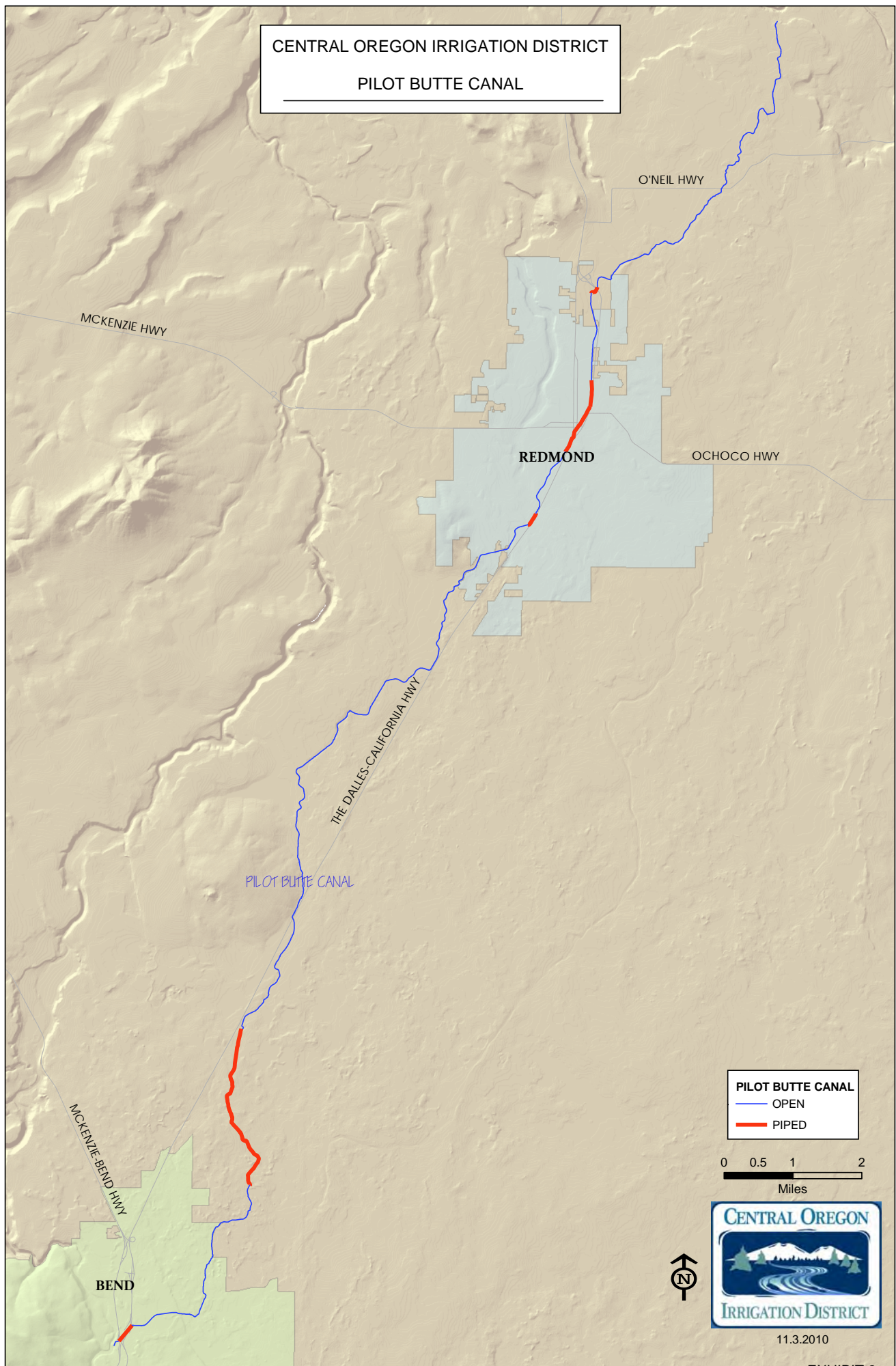
Redmond, OR 97756

Phone: 541-504-7577

Email: lauraw@coid.org



CENTRAL OREGON IRRIGATION DISTRICT
PILOT BUTTE CANAL



From: [JOHNSON Ian * OPRD](#)
To: [JOHNSON Ian * OPRD](#)
Cc: [JOHNSON Ian * OPRD](#)
Subject: FW: Pilot Butte Canal Project Timeline
Date: Monday, May 09, 2016 10:47:17 AM

-----Original Message-----

From: JOHNSON Ian * OPRD [mailto:Ian.Johnson@oregon.gov];
Sent: 4/9/2015 9:20:42 AM
To: CURRAN Chrissy * OPRD [mailto:Chrissy.Curran@oregon.gov];
Subject: Pilot Butte Canal Project Timeline

Chrissy,

Here is the project summary. Not every detail, but most of them. Please let me know if you would like more or less information – probably much much less.

Ian

Overview:

In consideration of the desire to conserve water and, where appropriate, produce hydroelectric power, the Central Oregon Irrigation District (COID) is engaged in a multi-year plan to pipe the majority of the Pilot Butte and North Unit Canals in Deschutes County. Much of this work will be paid for with federal pass-through grants. While most work completed thus far progressed without much public interest, there is considerable controversy regarding the piping and development of a hydroelectric facility on the Pilot Butte Canal in Township 17 South, Range 12 East, Section 15, W. M., Bend and unincorporated Deschutes Co. The project area is a relatively urban environment with several residences in close proximity to the Canal. In the last several years, and particularly recently, neighbors have sought to stop the project through various local, state, and federal processes due to concerns regarding property values; safety of the hydroelectric facility; and aesthetics.

The Oregon SHPO reviewed this project under two distinct and administratively separate federal programs, each with its own goals and outcomes. Section 106 of the 1966 National Historic Preservation Act, as amended (NHPA) requires agencies to seek consultation with the State Historic Preservation Office for projects funded with federal monies and under other circumstances. The goal of this program is not to prevent a project nor to prevent destruction of a resource, but rather to walk the agency through a process that considers the impact of an

action on a historic property. The SHPO provides guidance regarding the eligibility of the resource for listing in the National Register of Historic Places; the potential impact of the project on the qualities that make the property eligible for listing; and appropriate mitigation measures should the historic property be negatively impacted. Under this process, the federal agency is responsible for compliance with the law. In early 2014 our office began receiving public inquiries regarding the Juniper Ridge II project concerning our review process and the opportunity for public comment. Our office provided information and project documents, but referred all requests for public comment to Bureau of Reclamation (BOR), the project sponsor. To date, the federal agency has declined to re-examine the project or the MOA in consideration of comments received from the public.

Also established under the NHPA, the National Register of Historic Places seeks to recognize properties important in American History. As stated in federal law, any individual can propose that any property be listed. Owners may prevent the listing of their property by objecting in writing; . Owner is narrowly defined in federal regulations as only those who have fee-simple title to the property. The National Register program is honorific, requiring no federal or state oversight; however, Oregon's administrative rule for Goal 5 requires local governments to "protect" properties of "statewide significance," defined as those listed in the Register. The proponents of the Pilot Butte Canal have on several occasions stated to staff that they are pursuing listing in the National Register to gain local control over the fate of the Canal segment. As described below, efforts to list the Canal in the Register are ongoing. Attempts to list the Canal segment in the Bend and Deschutes County local landmarks registers have been unsuccessful due to the local definition of "owner" under ORS 197.772. The state law provides owners an opportunity to prevent their property from being listed in a local landmark register by objecting to the process before the property is listed. Local interpretation of the law defines COID as an owner.

Below is a more detailed synopsis of the Federal Compliance and National Register processes.

Federal Compliance Process:

In August 2010 our office received a request for concurrence for the Juniper Ridge Phase II project (SHPO Case No. 10-1873), which called for the piping of the Pilot Butte Canal and development of a hydroelectric facility, location described above. Federal law requires agencies to seek consultation with the State Historic Preservation Office under Section 106 of the NHPA for projects funded with federal monies. In this particular case, the Canal is maintained by the Central Oregon Irrigation District (COID), but the project is funded by a U.S. Bureau of Reclamation (BOR) pass-through grant. To our knowledge, no other federal agency is involved with the project. However, local authorities are involved in the local planning process.

In reviewing the documentation, the Oregon SHPO concurred with BOR that the Pilot Butte Canal was eligible for listing in the National Register, but disagreed with the assessment that the proposed project would not adversely affect the qualities that made the canal eligible for listing due to a lack of information regarding the overall condition of the resource. This response went unanswered until February 2013 when COID and BOR proposed surveying the entirety of the Canal, which SHPO agreed to. Subsequently, BOR reaffirmed its prior conclusion that the project would not adversely affect the Canal; however, our office disagreed. In a letter dated 9/9/2013 our office stated our position, but noted that the Memorandum of Agreement (MOA) mitigating adverse effects created by Phase II of the North Unit Irrigation District Water and Energy Conservation Initiative (SHPO Case No. 12-0948) addressed the piping of the entirety of the Pilot Butte and North Unit canals. The document was signed in October 2012. Because the existing MOA addressed piping the entirety of the resource, our office recommended amending the MOA to specifically include the Juniper Ridge Phase II project as a project mitigated under the document and to more specifically state that proposed piping projects were covered by the provisions of the agreement even as the MOA's stipulations were still being carried out. The amended MOA was signed in February 2014.

National Register Process:

In November 2014 our office received an application to list the Pilot Butte Canal Historic District in the National Register of Historic Places. The document was reviewed and returned to the proponents for corrections, which were made, and the document was deemed complete and scheduled for the February 2015 meeting of the State Advisory Committee on Historic Preservation (SACHP), a nine-member governor appointed board of experts in various preservation-related fields. The proposed Pilot Butte Canal Historic District encompasses the entirety of the Pilot Butte Canal, generally bound by Yeoman Road to the south and Cooley Road to the North in Bend and unincorporated Deschutes County, including an area measuring 50' from the centerline of the canal on either side creating a single corridor measuring 100' in width.

The SACHP reviewed the nomination at their regular meeting on Thursday, February 19, 2014 at 1:00pm in Eugene, approving the document on a 4 to 2 vote. A copy of the Pilot Butte Canal Historic District nomination document as reviewed by the SACHP is on our website at http://www.oregon.gov/oprd/HCD/NATREG/Pages/nrhp_sachphome.aspx. The document will be held by our office for a 90-day comment period until May 21st. During this period, the proponents will have the opportunity to revise the document in order to address issues raised during the hearing. A final review copy will be ready in early May. Before the document is sent to the National Park Service (NPS) for final consideration, Christine Curran, the Deputy State Historic Preservation Officer, will make a recommendation to the agency. NPS is the federal agency responsible for the administration of the National Register of Historic Places. NPS will review the document for 45 calendar days, to approximately July 9th. We would expect to receive notification of the agency's decision by email the following week, around

July 16th. This timeline is approximate, and subject to change.

Throughout the remainder of the review process, the petition will be judged by NPS' criteria for determining the significance of historic properties. Property owners may object to listing by submitting a certified statement that they are the property owner of real property within the district boundary and that they object to listing. Anyone not objecting to the nomination, is, according to NPS regulations, considered to be supportive of the petition. Property owners, agencies, municipalities, and the general public are invited to comment at any point during the review process, now through approximately July 9th.

To broadly inform the community of the pending petition, a letter was sent to each property owner within the district boundary, the Mayor of Bend, Deschutes County Commission, Bend and Deschutes County Landmarks Commissions, the document preparers, and COID. A press release targeting local media was issued 10 days before the meeting.



Oregon

John A. Kitzhaber, MD, Governor

Parks and Recreation Department

State Historic Preservation Office

725 Summer St NE, Ste C

Salem, OR 97301-1266

(503) 986-0690

Fax (503) 986-0793

www.oregonheritage.org



September 9, 2013

Mr. Gerald Kelso

Bureau of Reclamation

1201 NE Lloyd Blvd STE 750

Portland, OR 97232

RE: SHPO Case No. 10-1873

Pilot Butte Canal Juniper Ridge Piping Proj Phase 2

Dear Mr. Kelso:

Thank you for submitting documentation on the project referenced above. While the Oregon State Historic Preservation Office (SHPO) acknowledges that the integrity of the subject section of the Pilot Butte Canal is diminished, we believe that the majority of this segment retains sufficient integrity for listing in the National Register and that the proposed piping project will adversely affect the resource's character-defining features.

However, we believe that the Memorandum of Agreement (MOA) mitigating for the adverse effect to historic properties for Phase II of the North Unit Irrigation District Water and Energy Conservation Initiative (SHPO Case No. 12-0948) signed in September 2012 among the Bureau of Reclamation (BOR), our office, and the Central Oregon Irrigation District (COID) is sufficient to address this adverse effect. As noted in personal correspondence with Chris Horting-Jones, as written the MOA does not adequately address how COID's ongoing piping projects should be addressed. We propose amending the document to allow projects to proceed, while carrying out the previously-agreed to stipulations that will identify what portions of the system should ultimately be preserved.

Until the MOA can be amended, and if BOR is amenable, we ask that the agency concur with our Determination of Eligibility, Finding of Effect, and mitigation for this project in writing, and confirm that the agency will seek an amendment to the existing MOA to resolve the issues noted in this letter. It is our hope to have the document amended within the next several months, sooner if possible. Please contact me if there are any further questions, comments, or concerns.

Sincerely,

Ian P. Johnson, M.A.

Historian

(503) 986-0678

ian.johnson@state.or.us

MEMORANDUM OF AGREEMENT
No. R14MA13733
AMONG
THE U.S. BUREAU OF RECLAMATION,
THE OREGON STATE HISTORIC PRESERVATION OFFICE
AND
CENTRAL OREGON IRRIGATION DISTRICT

For
Piping of a Segment of the I-Lateral

ALFALFA VICINITY, DESCHUTES COUNTY, OREGON

This Memorandum of Agreement (MOA) is entered into by Bureau of Reclamation, Columbia-Cascades Area Office (Reclamation), the Oregon State Historic Preservation Office (SHPO) and the Central Oregon Irrigation District (District) to define their respective roles in mitigation efforts related to the piping of the I-Lateral of the Central Oregon Irrigation District System (System). This MOA outlines separate, but related mitigation for the current undertaking (subterranean piping of a Segment of I-Lateral) and the proposed future piping of the remainder of the canals, laterals, sub-lateral and ditches within the District. This MOA replaces MOA No. R12MA13723 thereby canceling it in its entirety.

1. Background

The District is located in Deschutes County. The District provides irrigation water within the Central Oregon Tri-county area with 43,000 acres delivered to water users in the vicinity of Bend, Alfalfa, Powell Butte, Redmond, and Terrebonne, within the upper Deschutes River basin.

A. I-Lateral Piping

Under the current undertaking, the District intends to protect and improve water quality and improve water delivery by converting approximately 4,800 feet of open ditch laterals within the I-Lateral of the System to pipe, in T17S R14E Sections 25, 26 and 36.

The District has been awarded a grant through Reclamation's WaterSMART Program to perform the work. Because Reclamation-administered Federal funds will be involved in this project, the Section 106 process of the National Historic Preservation Act was applied to identify affected historic properties.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), the District has documented the extent of the Lateral within the current undertaking's Area of Potential Effects for historic and archaeological resources to standards acceptable to Reclamation and SHPO.

Reclamation, in consultation with SHPO, determined that replacement of the open I-Lateral with the pipe will have an adverse effect upon the historic integrity of the Lateral. Reclamation notified the Advisory Council on Historic Preservation (Council) of the adverse effect on the I-Lateral pursuant to the Code of Federal Regulations (CFR) 36 CFR Section 800.6(a)(1), and in a letter dated September 17, 2012, the Council indicated that their participation is not needed in the consultation for resolution of adverse effects from this undertaking.

Specific mitigation strategies designed to address the adverse effect of this undertaking are identified below, in section 3.A.

B. Future Piping of Canals, Laterals, sub-Laterals, and Ditches

Through discussions between Reclamation, SHPO, and the District related to future project planning and the stated intentions of the District, a proposal to programmatically mitigate for future adverse effects related to the future piping of canals, laterals, sub-laterals, and ditches throughout the District has been developed. This MOA is intended to provide mitigation for such future piping efforts.

Specific mitigation strategies designed to address the adverse effects of these future undertakings are identified below, in section 3.B.

C. Interim Management

Until the Programmatic Agreement is signed and in place, all consultation regarding non-Federal undertakings will be reviewed by SHPO under standard State review practices, as defined in Oregon State Regulations (ORS) 358.653.

This MOA is entered into under the authority of the National Historic Preservation Act of 1966 as amended, as specified in the regulations in 36 CFR 800, and specifically in Section 6(c) – Resolution of Adverse Effects without the Council.

2. Purpose and Applicability

This MOA will serve to define the necessary actions for documentation of the System in its current state, define in more detail the historical significance, contextual setting, character-defining characteristics and the contributing properties within the System, and set the parameters by which future actions to pipe the System can be accomplished. This MOA will reduce the need to consult with the SHPO on a case-by-case basis when qualifying future activities (defined as subterranean piping of canals, laterals, sub-laterals, and ditches) take place on the System, and provides for a schedule that allows the SHPO to be updated on implemented actions.

This MOA does not apply to projects affecting any feature or element that is or may be individually eligible for listing in the National Register of Historic Places. Federal undertakings that affect these elements of the District will continue to be reviewed under standard Section 106 review processes (36 CFR 800). Non-Federal projects will continue to be reviewed under ORS 358.653.

3. Implementing Actions

A. Piping of I-Lateral

The SHPO, Reclamation, and the District agree that the current undertaking, consisting of the subterranean piping of approximately 4,800 feet of the I-Lateral, currently an open-ditch structure, represents an adverse effect to the National Register-eligible District water conveyance system. In order to mitigate that adverse effect, the following shall be implemented:

1. Reclamation will:

- (a) Consult with the proper interested parties, such as the Council, SHPO, and the Confederated Tribes of the Warm Springs Reservation.
- (b) Ensure that mitigation efforts defined in this MOA as part of the current undertaking (identified below, Section 3.A.2) are completed to the standards set forth below.

2. The District will:

- (a) Perform or cause to be performed the Historic Documentation of the System:

- Following all applicable guidance provided by the National Park Service and SHPO, the District will conduct a historic properties inventory of the entirety of the District facilities and infrastructure related to water conveyance (i.e., not to include district offices and equipment/vehicle maintenance or storage facilities). This inventory will document all water-conveyance system buildings and structures, provide locational information (in GIS format, using lines to represent canals, etc., and points or polygons, as appropriate, to represent features) for all water conveyance-related buildings and structures, as well as associated features. The inventory will meet the requirements set forth for Reconnaissance Level Surveys, as defined in the document, "Guidelines for Historic Resource Surveys in Oregon." Prior to initiation of the survey, a written, detailed survey design will be submitted to SHPO for review and concurrence.
- This inventory will be completed and submitted to Reclamation and SHPO for draft review within three (3) years of the date of the final signature on the document. Comments and revision requests from Reclamation and/or SHPO will be addressed, and a final version of the inventory will be submitted within one (1) year of the receipt of such comments.

B. Future Piping of Canals, Laterals, sub-Laterals, and Ditches Elsewhere Within the District

SHPO, Reclamation, and the District understand that it is the intention of the District to convert significant portions of the system of open canals, laterals, sub-laterals and ditches within the District to a subterranean, piped system. In order to mitigate for future adverse effects that would arise from these efforts, Reclamation, SHPO and the District have agreed to mitigate programmatically through the following measures in order to reduce time, effort, and resources required to conduct standard Section 106 and/or ORS 358.653 consultation:

1. Develop a Programmatic Agreement (PA)

- (a) Reclamation, SHPO, and the District shall enter into a PA to allow for the more efficient fulfillment of the entity's obligations under Section 106 of the National Historic Preservation Act, as amended, and Oregon Revised Statute 358.653, as applicable.
- (b) All parties shall use the Multiple Property Document (see Section 3.B.2., below) to identify contributing segments of the canal system to be managed under the PA and any subsequent documents created as part of the process. The PA will include, at minimum:
 - A list of routine maintenance and minor construction activities and actions that do not adversely affect the historic resource and that are exempt from regular review by SHPO;
 - A provision to address emergency situations where catastrophic breach of the canal or other unforeseen event or eminent threat endangers human life or property. Such a provision shall allow the District to act on the immediate situation without consultation and address compliance with applicable cultural resource laws in consultation with appropriate federal agencies and stakeholders within 30 days of the incident.
 - An inadvertent discovery clause, which will outline procedures to be followed when unknown, unanticipated cultural resources are discovered due to District activities;
 - A description of annual reporting requirements and timetable for reporting activities undertaken by the District where the provisions of the PA were applied;

- A defined effective period of ten (10) years with provisions for the document to be reviewed at five years from last date of signature, amended as necessary, and the effective period continued, based on consultation. If appropriate, the effective period can be extended for an additional ten (10) years (with an additional five-year review), subject to the agreement of Reclamation, SHPO, and the District.
- (c) The PA may also include a probability model for subsurface archaeological sites, cultural resource treatment plans, and preservation plans, as agreed to by the signing Parties.
 - (d) Reclamation, SHPO, and the District, as well as any other interested, consulting parties, will be signatories to the PA.
 - (e) Until the PA is signed and in place, all consultation regarding future federal undertakings (those not covered under Stipulation A) affecting the District water conveyance system will be reviewed by Reclamation and SHPO under standard Section 106 review practices, as defined in 36 CFR 800.

2. Develop Multiple Property Document (MPD)

- (a) Following all applicable guidance provided by the National Park Service and SHPO for the preparation of MPDs, the District will edit the MPD, *Historic Agricultural Resources in Central Oregon*, which is currently in draft form, as prepared by Claeysens and Tomlinson (2006) under a previous Reclamation water conservation grant. The MPD will be prepared sufficiently such that subsequent Irrigation Districts are able to add their district-specific contexts and registration requirements. The MPD elements will be based on the results of the Reconnaissance Level Survey inventory created as a result of Stipulation A.2. (above). The MPD elements to be developed include:
 1. General framework for the functioning of the MPD, once registered, including Sections A through D (complete), Sections E-I such that deal specifically with the District, but that includes general introductions, contexts, and registration requirements that will be applicable across all irrigation districts included in the final MPD;
 2. Establishment of the various historic contexts pertaining to the history and significance of the District. The historic context(s) will be based on historical research, and supported by historical documents and images;
 3. Development of associated property types and general and type-specific registration requirements through which identified elements of the system can be evaluated for eligibility (including consideration of significance and integrity) for inclusion in the NRHP through the framework of the MPD; and
 4. A GIS-based map of the entire system identifying the location, extent, and features of the District, and any other necessary appendices, shall be included. The map should identify elements and sections of the System as either contributing or non-contributing to the District as a comprehensive historic resource.
- (b) The draft MPD (including all GIS information) will be submitted to Reclamation and SHPO for review and comment within three (3) years of the date of the final signature of this MOA. Draft MPD and nomination materials will be submitted to Reclamation and SHPO for review by SHPO and the Oregon State Advisory Committee on Historic

Preservation (SACHP). The District will address any SHPO and SACHP comments prior to forwarding the document to the National Park Service for final consideration.

3. Preservation and Interpretation

- (a) Following completion of the draft MPD elements described above (Stipulation B.2.a-b), the District, in consultation with Reclamation and the SHPO, shall select appropriate, contributing segments to be listed in the National Register of Historic Places through the MPD. These segments will be selected based on the following criteria:
 - 1. The segments will be high-integrity, substantial, contributing segments (minimally, one substantial segment each in the Pilot Butte Canal and the Central Oregon Canal) to the overall eligible District;
 - 2. The segment should include a variety of features, such that it well-represents the function and appearance of the water conveyance system, as it appeared as an intact system;
 - 3. The segment should be of sufficient length that on-site interpretation (see Stipulation B.3 (b), below) can be achieved in an attractive, well-organized fashion, without crowding or overwhelming the resource itself.
- (b) Once selected, the identified segment will be cleaned, repaired, and returned to working condition in a way that meets the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the immediate vicinity prepared such that it creates a welcoming, attractive environment for the public visitation and interpretation of the resource.
- (c) The interpretation of the resource will be achieved through the use of static or active displays that relate the history, function, and significance of the Central Oregon Irrigation District water conveyance system. Such displays will be presented in a format that is weather- and vandal-resistant, attractive, and engaging. Draft content and layout of the interpretive display(s) will be submitted to Reclamation and SHPO for review and comment, and if any revisions are requested, revised versions will be submitted for a second review prior to fabrication. Upon acceptance of the draft content by Reclamation and SHPO, the District will cause the interpretive display to be constructed.
- (d) Once constructed, the interpretive site and displays must be maintained by the District in an attractive and functioning condition.

4. Completion of this MOA

The terms of this MOA will be considered to be completed when the above implementing actions (A-B) have been completed to the satisfaction of Reclamation and SHPO. Upon completion of the implementing actions, all adverse effects resulting from subterranean piping of *all canals, laterals, sub-laterals, and ditches will be considered to be fully mitigated*, and may proceed without Section 106 or ORS 358.653 (as appropriate) consultation with Reclamation or SHPO.

5. Period of Performance

This MOA shall become effective on the date of the last signature hereto and extend three years after the date of the last signature. The MOA will also be considered terminated once all stipulations are complete, or five years after the date of the last signature on this MOA. Any party may terminate this MOA by providing 30

days written notice to the other party(ies). Any party may formally request modification of the MOA by providing a written request to the other party(ies).

If this MOA is terminated prior to completion of the above stipulations, then all projects undertaken from the date of the final signature not covered by the PA (should it be in effect) on this MOA must be reviewed under standard review practices under Section 106 of the National Historic Preservation Act, or under ORS 358.653, as appropriate.

6. Modifications

Reclamation, SHPO or the District may formally request modification of this MOA. Modifications shall be made by mutual consent of Reclamation, SHPO and the District by the issuance of a written modification to this MOA, signed and dated by all parties prior to any changes being performed.

7. Principal Contacts

The principal contacts for this MOA are:

For Reclamation:

Chris Horting-Jones
Archeologist
1375 SE Wilson Ave. #100
Bend, OR 97701
Phone (541) 389-6541
Fax (541)-389-6394
Email: chortingjones@usbr.gov

For the District:

Laura Wollam
Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct.
Redmond, OR 97756
Phone (541) 504-7577
Fax (541) 548-0243
Email: lauraw@coid.org

For SHPO:

Jason Allen
Historic Preservation Specialist
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1266
Phone (503) 986-0579
Fax (503) 986-0793
Email: Jason.Allen@state.or.us

8. General Provisions

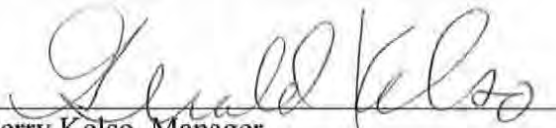
- a. Reclamation's responsibility for ensuring completion of consultation with SHPO for future undertakings identified in Section 3.B. is limited only to those that qualify as Federal undertakings. Projects identified in Section 3.B. that do not qualify as Federal undertakings are subject to review by the SHPO under ORS 358.653, and the responsibility for consultation and completion will rest with the District.
- b. Completion of the mitigation stipulations will be considered to satisfy the requirements for mitigation of adverse effects for a previous undertaking (Pilot Butte Canal Juniper Ridge Piping Project Phase 2 [SHPO Case# 10-1873]) that has not yet been mitigated as of the date of the final signature on this MOA.
- c. This MOA is neither a fiscal nor a funds-obligating document for Reclamation. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties of this MOA will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOA does not provide such authority.
- d. Nothing herein shall be construed to obligate Reclamation to expend or involve the United States of America in any contract or other obligation for the future payment of money in excess of the appropriations authorized by law and administratively allocated for the purposes and projects contemplated hereunder.
- e. No member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of the MOA or to any benefit that may arise out of it.
- f. Any information furnished to Reclamation, under this MOA, is subject to the Freedom of Information Act (5 U.S.C. 552).
- g. All parties to this MOA agree to comply with all Federal statutes relating to nondiscrimination, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, religion, sex, or national origin; Title IX of the Education amendments of 1972, as amended, which prohibits discrimination on the basis of sex; the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990, as amended, which prohibit discrimination on the basis of disability; the Age Discrimination in Employment Act of 1967, as amended, which prohibits discrimination based on age against those who are at least 40 years of age; and the Equal Pay Act of 1963.

9. Signatures

Reclamation, SHPO and the District will abide by the terms and provisions expressed or referenced herein.

BUREAU OF RECLAMATION

by:


Gerry Kelso, Manager
Columbia-Cascades Area Office

DATE:

2/12/14

OREGON STATE HISTORIC PRESERVATION OFFICE

BY:




Roger Roper
Deputy State Historic Preservation Officer

DATE:

2.25.14

CENTRAL OREGON IRRIGATION DISTRICT

BY:



Steven Johnson
Secretary-Manager

DATE:

14 Feb. 2014

~~ End of Document ~~

20170214_SHPO_MPD_Federal_Irrigation_Projects



United States Department of the Interior

BUREAU OF RECLAMATION
Pacific Northwest Regional Office
1150 North Curtis Road, Suite 100
Boise, ID 83706-1234

IN REPLY REFER TO:

FEB 14 2017

PN-1000
ENV-3.00

VIA ELECTRONIC MAIL AND U.S. MAIL

Ms. Chrissy Curran
Deputy State Historic Preservation Officer
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1266

Subject: DRAFT *National Register of Historic Properties Multiple Property Documentation Form for Federal Irrigation Projects in Oregon, 1901-1978*

Dear Ms. Curran:

Thank you for an opportunity to comment on the draft *Multiple Property Documentation (MPD) Form for Federal Irrigation Projects in Oregon, 1901-1978*. Due to the wide-ranging, long-term effects of the document and ongoing concerns with the current version of the state-wide MPD, the Bureau of Reclamation cannot yet support its adoption. Reclamation is eager to work with the State Historic Preservation Office (SHPO), irrigation districts, and other involved parties to address our concerns, some of which were communicated in 2015 when Reclamation reviewed a previous draft. Additional concerns have emerged after review of the December 2016 draft and are enclosed with this letter.

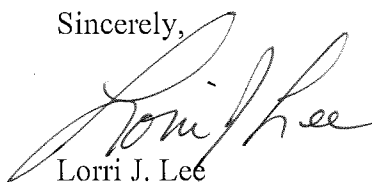
The MPD document was initially developed pursuant to the Memorandum of Agreement (MOA) between Reclamation, the SHPO, and the Central Oregon Irrigation District for piping of a segment of the I-Lateral (COID MOA; #R14MA13733). Reclamation, in a subsequent MOA for the piping of the Willow Creek Division of the Vale Oregon Irrigation District (VOID MOA; #R13MA11725), agreed the same MPD could be used, following Reclamation's review, to help resolve the adverse effects of that undertaking. As discussed in these MOAs, the scope of the MPD was to be limited to the involved districts.

After Reclamation signed the COID and VOID MOAs, the scope of the MPD was expanded to cover all Federally-owned and Carey Act irrigation facilities in Oregon. While Reclamation is not opposed, in principle, to the development of a state-wide MPD covering Reclamation irrigation facilities, additional review and comment by Reclamation's Pacific Northwest and Mid-Pacific regions (both of which manage facilities in Oregon) and Reclamation's Federal Preservation Officer must take place before such an MPD would be approved.

Reclamation requests that SHPO postpone approval of the MPD for state-wide use at Reclamation facilities until the SHPO has facilitated discussions with Reclamation, irrigation districts that operate and maintain affected properties, and other interested stakeholders. An alternative that would be in keeping with the spirit of the MOAs would be for the MPD to be redrafted to focus on the COID and VOID facilities and address Reclamation's comments. Creation of a separate state-wide document would come at a later time after the involvement of appropriate parties was more fully accommodated. Reclamation is open to a discussion of options that respect the terms of the MOAs.

Should you have any questions about this letter, please contact Dr. Sean Hess, Regional Archaeologist, at 208-378-5316 or shess@usbr.gov.

Sincerely,



Lorri J. Lee
Regional Director

Enclosure

cc:

Craig Horrell, District Manager
Central Oregon Irrigation District
1055 SW Lake Ct.
Redmond, OR 97756

Ian Johnson, Asst. Deputy State
Historic
Preservation Officer
Oregon State Historic Preservation
Office
725 Summer St. NE, Suite C
Salem, OR 97301

Tracy Zeller, National Register
& Grants Assistant
Oregon State Historic Preservation
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Salem, OR 97301

Bev Bridgewater District Manager
West Extension Irrigation District
P.O. Box 100
Irrigon, OR 97844

Dan Fulwyler, District Manager
Vale Oregon Irrigation District
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Vale, OR 97918

Lisa Deline, Reviewer
National Park Service
National Register of Historic Places
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Washington, DC 20240

Laureen Perry, Regional Archaeologist
Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way
Sacramento, CA 95825
(w/encl to each)

Reclamation Comments on the MPD

Page	Location	Comment
-	Global	In 2015, Reclamation staff commented on an earlier draft of this document, but the reviewing staff never received the revised version to see if the author ever made the requested changes. Unfortunately, review of this December 2016 version shows that the author did not address Reclamation's concerns. Given that this MPD has the potential to set precedent for a large number of Reclamation facilities, it needs to respond to Reclamation's needs as one of the property owners.
1	Section A	The title provides a misleading timeframe for this MPD. The title include the time range "1902-1978," but the Tualatin Project is the only Reclamation Project that stretches to this late date and it is only mentioned in a table. Aside from this minor mention of the Tualatin Project, the narrative only covers up to the 1960s. Please revise the title to be more in keeping with the actual content of the MPD.
1	Section A	As indicated by the current title, the MPD is for the WHOLE state of Oregon, but except for the Rogue River Basin Project (and perhaps the Tualatin Project), it does not cover any of the private or Reclamation projects in the western half of Oregon. Virtually all of the examples provided in the MPD (for example, Figures 3-8, 10-20, 22-24, and 28) are from the Vale and Central Oregon projects. The narrative, as well, tends to emphasize central and eastern Oregon. Therefore the title should not be <i>Federal Irrigation Projects in Oregon</i> , as it does not cover the whole state adequately. Please revise the title to be more in keeping with the actual content of the MPD. With some minor changes in content, like removal of the Rogue River Basin Project, Tualatin Project, the Umatilla Project, and the Klamath Project, it would be appropriate to retitle this MPD to be <i>Federal Irrigation Projects in Central and Eastern Oregon</i> . Narrowing the scope of the MPD would also eliminate the administrative problems with an MPD that includes different Reclamation region offices. Furthermore, it would also narrow the range of irrigation districts that would need to be notified of the development of this MPD.
1	Section D	There should be a signature line reserved for the Federal Agency Official, which in this case would be Reclamation's Federal Preservation Officer, since most of the Federal irrigation features being considered in the MPD are Reclamation's. This is consistent with guidance from the Keeper that MPDs should be treated in the same way as individual nominations, as they establish precedent for future nominations.
E-3	-	Reclamation is uncomfortable with the definition of "Federal Irrigation Projects" used for this MPD. Reclamation realizes that the Central Oregon Project (COP) is included because of its relationship with the Carey Act; however, the COP is not a Federal project in the conventional sense because it is not owned or operated by a Federal agency. The inclusion of COP here also seems driven by the fact that the COID receives Federal funding for some of its actions. While this does mean that Section 106

Page	Location	Comment
		applies to some of COIDs actions (see Section H of the MPD), that mere fact does not make the COP a "Federal" irrigation project. Many reviewers have struggled with the broad scope of this MPD, and splitting the MPD into two related MPDs (one focused on Carey Act Projects that are owned by irrigation districts and another focused on irrigation projects owned by Federal agencies) would help to address this concern.
E-3	-	Re: spatial and temporal scope of the MPD – Reclamation does not agree that Carey Act developments are "Federal" projects. The title should be revised to be something more along the lines of "20th Century Irrigation Developments in Eastern Oregon Resulting from the Carey and the Reclamation Acts." The MPD also needs to be consistent and clear about the actual geographic area covered by the MPD, and that the latest a period of significance can extend is to 50 years back from the current date (i.e., to 1967). If the 1978 end date was based on completion of the Tualatin Project, then that is invalid if Western Oregon is not included in the MPD boundary area.
E-4	1 st ¶	The author states that many Reclamation projects "have had a tremendous effect on Oregon..." That is only true of a few. Reclamation made this comment on an earlier version of this MPD and the author did not fully address Reclamation's concerns. Some of the projects like Umatilla did have a tremendous impact, while others were just extensions of an existing irrigation project. In the area under the jurisdiction of the Columbia-Cascades Area Office, 6 of the 15 Reclamation projects are of this more minor type. Please revise this statement to more accurately reflect the impact of Reclamation's projects.
E-24	4 th ¶	The Klamath Basin crosses the California-Oregon border, and Klamath Project facilities cross the border into the jurisdiction of the California SHPO. Reclamation would prefer to have this Project, which crosses the state boundary, handled as a unit in a separate document. In general, it is also recommended that this document address only those irrigation projects that lie entirely within the State of Oregon. This would eliminate the Boise Project, which has the majority of its facilities in the State of Idaho.
E-24	4 th ¶	Re: "The Klamath project is one of the oldest reclamation projects in the nation." It is a stretch to make this claim, as the Klamath Project was the 15th Reclamation project approved. There were 10 other projects approved in 1903 and 1904 that really deserve that title. Therefore, it is incorrect to identify it as one of the oldest projects. This is another comment that Reclamation made about earlier versions of this document that the author did not fully address. Please revise this section to more accurately reflect the place of the Klamath Project in the history of the Bureau of Reclamation.

Page	Location	Comment
E-28	4 th ¶	"The Prineville Dam (later named the Arthur R. Bowman Dam), in particular, represented the Bureau of Reclamation's postwar emphasis on creating water-based recreational facilities and along with the Prineville Reservoir, would become one of central Oregon's major recreational sites." This is incorrect. It's a conjecture of the author, as the cited source materials do not make this same claim. Reclamation worked to foster recreation at other projects, and there was no specific emphasis on recreation by Reclamation at Prineville. Bowman Dam was built for flood control and water storage – not recreation. The author's incorrect portrayal of Reclamation's reasons for constructing this facility falsely amplifies the importance of recreation, lending the facility a historical significance that it does not really have. Please revise this section to more accurately portray the reasons why Reclamation was authorized to construct Bowman Dam.
E-30	Table 2	The Boise Project is listed with no history or clarification as to why it is in Oregon. Please provide an explanation of the inclusion of the Boise Project in this document. If its inclusion is minor and contains no structures, please remove it.
F-31	Outline	Re: minimal units of structure eligible for nomination under this MPD - In terms of an irrigation work, the minimal property or structure that is appropriate to nominate for listing would be a main canal and associated sub-systems. Preferably, it would extend to include the diversion and other associated features (as parts of an historic district). To nominate an arbitrarily selected section of a canal or lateral is like nominating the front porch of a house separate from the rest of the building. Nominations of a property must utilize boundaries that are founded in the property's historical development or its design and function. This MPD clearly envisions arbitrarily defined boundaries that are not supported by the property's history or design. The draft Vale Project lateral nomination of a short segment of a lateral illustrates how the SHPO envisions this MPD being applied, and it is indefensible in terms of National Register requirements and intent. Please revise the MPD to make it clear that only main canals and associated subsystems can be considered for listing, and that individual elements need to be considered as part of larger wholes.
F-31	Outline	Picking up the previous point regarding minimal units of structure, this nomination confuses section 106 processes and National Register nomination purposes. The author's flawed approach to what is a property (that it can be a small bit of the total designed structure) is clearly built upon applying the concept of the Area of Potential Effects for an undertaking being considered under Section 106. The APE is not a basis for nomination of a bit of property unless that bit has historical or design importance that can stand alone or be presented as importantly "representative" of what makes the larger property

Page	Location	Comment
		significant. Again, please revise the MPD to make it clear that isolated elements of larger wholes cannot be nominated for listing.
F-31	Outline	<p>The MPD's flawed concept of what is a property is reflected in the definitions of the property types in this MPD. The MPD does not define logical property types, and they have failed to include some important types. For an irrigation system, the logical property types are as follows:</p> <ul style="list-style-type: none"> • storage dam and diversion dam; • conveyance facility (with sub-types like main canal, secondary delivery, drains and waste water, appurtenant operations things like turnouts, check dams, etc.); • power plants; • properties used in system operation (offices/HQs; dam tender/gate keeper/ditch rider properties; maintenance yards; etc.); and • archaeological sites associated with the construction effort (construction camps; dumps; borrow areas, etc.).
F-31	Outline	<p>Structural components of a dam or canal should not be considered "properties." They are structural or operational components of what is a property. For example, a check dam in a canal is a component part, not a "property". This breaking down component parts as if they can be evaluated in isolation from the property they are a bit of is the equivalent of saying that the windows in a house, or its front porch, are eligible and can be nominated. We should not support this approach both because it is historically and structurally illogical, and insupportable within the requirements of the National Register. There may be the occasional exceptions, like the rare case where a sub-component is unique or a first test case of some design or concept that will prove to be of lasting engineering importance. However, these will be rare, not the rule. Please revise the MPD in keeping with these property types and sub-types.</p>
F-33	"Historic Districts"	<p>The MPD utilizes a flawed understanding of historic districts. For example, the MPD provides an example of a district being a canal (or piece of a canal) that has an array of the operational sub-types like turnouts. A district is not a collection of sub-types (as they define them) of a property. A better understanding of a district would be the diversion dam, the distinct main canal(s) and the distinct main laterals fed by that diversion, dam tender's or ditch rider housing complexes along the canals, etc.</p>
F-34	"Registration Criteria"	<p>Please include a provision in the registration requirements for conveyance systems stating that when a main canal has been determined ineligible for listing in the National Register, typically secondary systems under that canal are also not eligible for nomination under this MPD.</p>

Page	Location	Comment
F-38	"Dam Functions"	The author lists several types of dams which Reclamation does not use, including "Detention Dams," and "Saddle Dams." If this MPD is for Federal Reclamation projects, it is important that the MPD use appropriate Federal terminology for the types of structures. Please replace "Saddle Dams" with "Saddle Dikes." Please insure that the other dam function names follow Reclamation conventions.
F-40	"Dam Designs"	The author lists several types of dams which Reclamation does not use such as "Steel Dams." Cofferdams are only temporary dams for the construction phase of a project and then removed. "Cofferdams" should be removed from this list, as cofferdams are temporary structures used to facilitate construction; they are not permanent structures.
F-42	"Registration Requirements"; Pt. 2	Re: "They are most likely to be considered historically significant under Criterion A or C." The author does not make a strong case as to why an irrigation project would be eligible under Criterion A beyond COID or the Vale Project. They mention the history and some of the funding involved, but not <u>specific details</u> that would assist someone in determining if an irrigation project was eligible under Criterion A. If a property is going to be determined eligible under Criterion A, there should be something more than simple statements of "a significant impact" without more information as to what that impact was. Irrigation projects would be eligible under Criterion A if they changed the economy and settlement and development of the area. A good example is in the Yakima Valley of Washington where Reclamation's projects turned the valley into the fruit bowl of the nation, brought in large populations of people, and promised a future of independence in agriculture. Please provide a better description of what specific changes might lead an evaluator to conclude that a Reclamation project made "a significant contribution to the broad patterns of our history."
F-43	"Registration Requirements"; Pt. 8	Except in very specific cases, as when a reservoir is highly engineered, Reclamation does not agree that reservoirs should be National Register eligible, either individually or as contributing elements. A typical reservoir is a fluctuating body of water that does not have consistent boundaries or characteristics. How can you justify eligibility for a large body of water that changes with the ebb and flow of the irrigation season? Reclamation made this comment about an earlier version of this document, but it was ignored. Please revise this section to indicate that reservoirs will be considered individually eligible or a contributing element only in exceptional circumstances.
F-50	Pt. 6	Re: "Sections of canals and laterals that retain good integrity may still contribute to the historical significance of a historic district or be individually listed in the National Register (depending on the associations), even though some sections of the same canal or lateral may have lost integrity." Reclamation is uncomfortable with this statement, as it creates the possibility that a segment of canal could be considered to retain integrity even if the majority of the entire canal had been destroyed, thus

Page	Location	Comment
		eliminating the integrity of the canal as a whole. It is analogous to saying that a house retains integrity if one of the windows retains its original form, even if the rest of the house has changed. It is crucial to look at the whole canal to make that kind of determination. Please revise this registration requirement to insure that eligibility determinations consider the whole canal structure and not just segments of the larger whole.
F-50	Pt. 6	Reclamation struggles with general statements such as piping canals and laterals “are considered significant changes that would constitute a loss of integrity” (pg. F-50, #6). The document indicates that even if one small portion of an eligible canal or lateral is being altered, it is an adverse effect to the integrity of the entire property. It is important to also consider the scale of the impact on integrity, which is common practice when evaluating effects to linear historic properties. For example, Reclamation recently reached a Finding of No Adverse Effects for the removal of a 400 ft.-long historic levee because there are over 26 miles of levees in the subject county. The MPD should include a discussion of the degree of impact and proportionality to the assessment of overall integrity.
F-50	Pt. 7	The MPD should put more attention on the position or importance of a particular feature within the system when considering eligibility. A “tiered approach” to eligibility (e.g., a “1 st -tier resource” refers to a main canal, as opposed to a “3 rd -tier resource” such as a sublateral or field ditch or invisible drain) has been applied successfully in other contexts. An eligibility matrix would be useful in this document to display this concept. Please see the attached example from Reclamation’s evaluation of eligibility of structures in the Columbia Basin Project.
F-52	“Subtype: Headgate”	The proper term in a Reclamation context is “turnouts.” Reclamation made this comment about earlier drafts and the revision was not made. “Turnouts” are a Reclamation term used for those laterals off the main canal, while “headgates” are at the start of a main canal system. Please revise this term to be consistent with Reclamation practice.
F-55	“Subtype: Check Structure”	Please make sure that steel is included as one of the types of material used in the construction of check structures.
F-55	2 nd ¶	Re: “Similarly, the radial or ‘Taintor Gate’...” Taintor gates are not used in laterals, sublaterals, etc. They are only used on Main Canals. This should not be in this section and it needs to be separated. Reclamation made this comment about earlier drafts and our comments were not addressed. Please revise this section to put the discussion of Taintor Gates in its proper section.
F-56	“Subtype: Spillway”	This is an incorrect use of the term “spillway.” It needs to be “wasteway,” as spillways are for dams. Wasteways are for canals.

Page	Location	Comment
F-57	5 th ¶	Re: "A rectangular weir is typically the oldest weir...found in most Oregon irrigation projects." Since this document is covering Federal irrigation projects, this statement is not true as more than 95% of Reclamation projects in Oregon use Cipolletti weirs. Please revise this section to more accurately reflect the kinds of weirs actually used.
F-60	3 rd ¶	Re: "The concept of the weir box was first developed in the late 1940s...in the construction of the agency's Yakima Project in central Washington State." That date of late 1940s is not correct, as Yakima boxes are clearly visible in photos from the early 1930s and before. In fact, the Sunnyside and Tieton divisions of the Yakima Project utilized these boxes and they were built between 1906 and 1916. Please revise this statement to more accurately reflect the historical record.
H-65	2 nd ¶	"Memorandum of Agreements" should instead be "Memorandums of Agreement" or "Memoranda of Agreement" (2 instances)

Evaluation Matrix for Columbia Basin Project Irrigation Features																
(Evaluation may be on a case-by-case basis - not all features within the system are equal)																
Resource Type		National Register Significance				Integrity							Contributing/Noncontributing			
		Criterion A	Criterion B	Criterion C	Criterion D	Location	Setting	Design	Materials	Work-Use	Feeling	Assoc.	1st Tier	2nd Tier	3rd Tier	4th Tier
A	Storage & Diversion Structures				NA											
	Dams	Y	P	P		x	x	x	x	x	x	x	C			
	Dikes	Y				x	x	j	j	j	j	j	C1	C1		
B	Canals				NA											
	Main Canals	Y	P	P		x	x	x	x	x	x	x	C			
	Sub-canals	P	P	P		x	x	x	x	x	x	x	C	C1		
	Laterals					x	x	j	j	j	j	j		C1	N1	N
	Sub-Laterals					x	x	j	j	j	j	j		C1	N1	N
C	Conveyance Components				NA											
	Siphons	Y	P	P		x	x	x	x	x	x	x	C			
	Tunnels	Y	P	P		x	x	x	x	x	x	x	C			
	Flumes					x	x	j	j	j	j	j		C1		

	Drop Structures					x	x	j	j	j	j	j		C1		
	Chutes					x	x	j	j	j	j	j	C1	C1		
D	Protective & Cleaning Features				NA											
	Culverts					x	x	j	j	j	j	j		C1		
	Overchutes					x	x	j	j	j	j	j		C1		
	Wasteways	P	P	P		x	x	j	j	j	j	j		C1		
	Drains					x	x	j	j	j	j	j		C1		
	Sand Traps					x	x	j	j	j	j	j		C1		
	Wastegates					x	x	j	j	j	j	j		C1		
	Debris gates					x	x	j	j	j	j	j		C1		
E	Control & Measurement Structures				NA											
	Headworks/ headgates	P				x	x	j	j	j	j	j	C	C1		
	Checks					x	x	j	j	j	j	j		C1		
	Check-drops					x	x	j	j	j	j	j		C1		
	Turnouts					x	x	j	j	j	j	j		C2		
F	Infrastructure				NA											
	Bridges					x	x	j	j	j	j	j		C1		
G	Pumping Plants				NA											
	Open	Y				x	x	j	j	j	j	j		C1		

	Large, Housed	Y	P	P		x	x	j	j	j	j	j	C	C1		
	Small, new housed					x	x	j	j	j	j	j				N
H	Power Facilities				NA											
	Substations					x	x	j	j	j	j	j		C1		
	Transmission Lines					x	x	j	j	j	j	j		C2		
I	Auxiliary Works				NA											
	Service Roads					x	x	j	j	j	j	j		C1		
	Elect. & Comm. Lines					x	x	j	j	j	j	j				N

Legend

Y = Primary feature of the irrigation system, individually eligible.

P = Possibly; research required.

NA = Not applicable.

x = Most likely to have retained this aspect of integrity.

j = Judgment based on research and observation.

C = Contributing Feature.

N = Noncontributing.

1 = Dependent upon research; the feature may have been altered, modified, replaced, or piped, if so, it may move up or down a Tier.

2 = a very repetitive feature common in all areas of the system.

Beckham Revision Comments

To: State Advisory Committee on Historic Preservation

From: Stephen Dow Beckham

Date: 16 June 2016

Subject: Comments and Suggested Revisions,
Irrigation Projects in Oregon, 1850-1978, MPD

The MPD is an heroic effort to create the historical context for fifteen federal reclamation projects in Oregon, 1905-present, providing irrigation to over 500 million acres. The ambition of the researcher is documented in 177 citations, a useful bibliography, and a clear identification of Property Types and Sub-Types (F0-38).

The following are offered as suggestions to strengthen the MPD.

E-2, Agricultural Irrigation in Central and Eastern Oregon, 1850-1925.

This section is the foundation to the development of irrigation projects in arid and semi-arid parts of Oregon but is incomplete in that it shows no awareness of the Swamp Land Act (1850), its extension by Congress to Oregon (1860), and the impact of that law on withholding both land and water from would-be settlers. The Swamp Land Act enabled a few individuals, namely investors in cattle companies in the 1870s and 1880s, to gain a monopoly over water and tens of thousands of acres in Harney, Lake, Malheur, and Klamath counties. Useful in broadening the foundation to irrigation and the early issues that surrounded it in Oregon is Richard Mark Pintarich's M.A. thesis, "The Swamp Land Act in Oregon, 1870-1895," PSU, 1980. The thesis is posted on-line.

E-4, Discussion of "prior appropriation."

The narrative is focused almost exclusively on water diversion for agricultural purposes and thus cites to Mormon water use in the Great Basin, 1849-1865. Water management systems, however, were developed in the nineteenth

century in Oregon and elsewhere in the American West for industrial and domestic uses in addition to agricultural irrigation. The presentation misses entirely the importance of the gold rush in the development of the doctrine of "prior appropriation." Dan Tarlock wrote in "The Future of Prior Appropriation in the New West," *NATURAL RESOURCE JOURNAL*, 41(2001):768-93:

"Because prior appropriation is grounded in both abstract principles of justice and hard experience, it has constantly had to adapt to changed conditions. The doctrine is conventionally traced to the gold mining camps of California and Colorado and the early Colorado irrigation settlements. It originally functioned as a simple, judicially enforced, system to divide small streams for a region sustained by mining, livestock grazing, and eventually irrigation. It did so by creating private rights in a historic public resource, running water, and by imposing minimal sharing rules through the beneficial use doctrine, providing at least the illusion of a clear allocation rule in times of shortage."

The MPD could be strengthened by inclusion of water appropriation for industrial purposes, especially mining, and the relationship of that enterprise in a dozen states in the American West where the "prior appropriation" doctrine rather than "riparian rights" dictate water law. One of Oregon's National Register properties is the "China Ditch," a linear feature of nearly 35 miles in Douglas County, Oregon, that included ditches, flumes, and tunnels to move water solely for hydraulic mining. It was a nineteenth century investment.

Flumes also played important roles in movement of logs and lumber, such as the Broughton Flume (Skamania County, Washington). Illustrative of this use of water diversion in California are comments by Dan Baumgart in "Nevada County Gold" (2009):

"Water is the life-blood of the mines. When its current is diminished, or even delayed, every thing languishes. With its return, all things revive." - *Hutchings California Magazine*, May 1859.

Flumes were the artificial water ditches that moved the precious liquid to more useful places; places where water powered nozzles blasted away cliffs of gravel, where water washed through sluice boxes to expose nuggets, or drove the machinery of underground mines and sawmills. The V Flume Company, located 13 miles northeast of Nevada City, built a flume in 1874 to carry lumber to a yard at Town Talk. The flume cost \$38,000 to build and could carry 100,000 feet of lumber or 100 cords of wood down its artificial stream each day. To work efficiently,

accelerating the water to a useful speed, a flume needed a fall of between five and 20 feet per mile. Made of inch-and-a-half thick boards a flume usually was 40 inches wide by 20 inches deep. The average flume life was six years and each of those years an eighth of the original cost was spent repairing the wooden structures. Flumes were built where no common ditch could be dug. There were places where there was not an inch of earth from which to scrape a dirt ditch. Men hung on ropes down the sides of steep ravines, hammering together the flumes. "To hear of the construction of a hundred miles of mining ditch conveys but a feeble conception of the magnitude of the enterprise or the difficulties to be overcome," *Hutchings California Magazine* told its readers.

E-6. Oregon Donation Land Act

The Oregon Donation Land Act granted individual settlers 320 acres (if they had arrived in the territory by 1850) or 160 acres (if they arrived between 1850 and the end of 1855). The acreage figures are stated incorrectly.

E-7. Initial Irrigation, Rogue River Valley, Willamette Valley, Umatilla

The date of Jacob Wagner's first water right claim is incorrect. Wagner did not settle on his Donation Claim at Talent until March 18, 1852, according to his claim application. Jackson County was not created until January 12, 1852. There is no problem with Wagner being a pioneer irrigator.

The statement that "similar irrigation developments were built in the Willamette Valley" is questionable. No example is cited and no source is given for this claim. The last paragraph on E-7, in fact, states that the "first record of commercial irrigation in the Willamette Valley was in 1890." It is true that early projects were created at The Dalles in Wasco County. The projects at Umatilla Meadows in 1857-58 seem impossible. Euro-American settlement had not occurred near Hermiston at that date and the county was not created until 1862. The only non-Indian structure was the Umatilla Indian Agency at Echo erected in 1851 and burned in 1853. Euro-American settlement commenced after 1860.

E-10 Initial Irrigation in Southeastern Oregon: Northern Paiute Indians

It is noteworthy that construction of the first irrigation project in Malheur County was carried out by Native American men. Samuel B. Parrish, second agent on the Malheur Reservation coped with insufficient funds, more than 500 resident Indians, no school no hospital, and no barn, but, in the spring of 1874, he launched a farming agenda in Agency Valley. He wrote: "The Indians took hold of the matter [digging the irrigation system] with great zeal, and persevered until they had finished same; its dimensions being, surface-width, 10 feet; width at bottom, 6 feet; average depth, 3 feet, and length one and one-quarter miles. It now furnishes a full supply of water for irrigating all the grounds on the west side of the river, and by running the same the distance of 20 rods farther will command a fine site for shops and a mill, with a fall of about 24 feet. The Indians did all the work on this ditch except for plowing of it, without any compensation other than their subsistence and annuity goods." In the spring of 1875 Parrish had the men plow 20 acres and put 75 young men to work to plant corn, potatoes, squash, onions, and turnips (Minor and Beckham 2004:11-13).

Source:

Minor, Rich and Stephen Dow Beckham. Archaeological Investigations in 2004 at Malheur Agency/Agency Ranch Site)(35 ML1157), Malheur County, Oregon. Eugene, OR. Heritage Research Associates Report No. 289 submitted to USDI Bureau of Reclamation, Snake River Office, Boise, ID.

The data on the Malheur Agency system was gleaned from manuscripts in the National Archives, Seattle, WA., and from the Annual Report of the Commissioner of Indian Affairs, 1875. This was the first irrigation project in Malheur County.

E-12 Promotions by Owners of Military Wagon Road Grants

Also important in promotion of settlement and encouraging settlers to consider irrigation were the promotions of the Eastern Oregon Land Company of California. In 1876 liquor dealer Edward Martin, a resident of San Francisco, paid \$125,000 to gain control of over 500,000 acres granted by the federal government to the Dalles Military Road Company. The properties included extensive holdings along the John Day River as well as lands in Grant, Baker, Harney and Malheur counties. The firm endured for decades and continued selling lands into the 1920s and 1930s. The El Dorado Ditch, the largest system of 135miles length constructed in nineteenth century Oregon, crossed through

its holdings.

Mary Oman wrote “The Chinese in Baker County” and addressed the significance of the El Dorado Ditch: “Chinese came to Baker County with the first gold rush and are well known for their work in connection with mining developments. Investor owned ditch companies hired out Chinese labor companies to construct two major mining ditches, the Sparta Ditch and the El Dorado Ditch. Construction of the El Dorado Ditch began in 1863 in the hills west of Unity, in order to bring water to the Shasta Mining District in the Willow Creek Basin. By 1878, Chinese contract crews had built more than one hundred miles of main line and feeder ditches to carry water toward the mining area around Amelia and Malheur City. The El Dorado Ditch is undoubtedly the longest historic mining ditch ever built in Oregon. The Sparta Ditch, built in 1871, was also completed by Chinese labor companies, to bring water to the mines worked in the vicinity of Sparta. Individual Chinese continued to obtain employment by working on ditch cleanout crews in the spring and by taking up mining in the area.” [Oman’s account is on-line. The El Dorado Ditch carried water from Burnt River to Malheur City and Willow Creek in Malheur County.]

E-27 Role of the Bureau of Reclamation

The nomination states that the BOR “experienced its greatest expansion and completed its largest and most influential projects between 1923 and 1940, especially in the Pacific Northwest.” This is partly true in light of the Grand Coulee Dam and related irrigation of the Columbia Plateau. The historical assessment, however, overlooks the massive BOR projects mounted under the leadership of Floyd Dominy (1909-2010). A thumbnail biography noted his impact between 1959 and 1969 as head of the BOR:

Notable events during his term as commissioner included completion of Glen Canyon, Flaming Gorge, and Navajo dams of the Colorado River Storage Project. Dominy also played a role in authorization and initiation of construction on the San Luis Unit and completion of the Trinity River Division, both on the Central Valley Project. Congress authorized the massive Third Powerplant at Grand Coulee and Reclamation’s last very large authorization, the Colorado River Basin Project Act which included the Central Arizona Project and expanded the Central Utah Project, during his term in office. During his term as commissioner, Reclamation kept tabs on widespread, visionary, public and private planning efforts aimed at supplementing water supplies of the arid West and actually

developed the Pacific Southwest Water Plan of January 1964.

Commissioner Dominy served under Presidents Eisenhower, Kennedy, Johnson, and Nixon, and some contemporaries said he wielded more influence on Capitol Hill than any Secretary of the Interior. He was a key subject in two influential books focusing on water in the West, Marc Reisner's *Cadillac Desert* and John McPhee's *Encounters with the Archdruid*.

A useful reference (on-line) is Ian Robert Stacy, "The Last Conservationist: Floyd Dominy and Federal Reclamation Policy in the American West" (1997), University of Montana Dissertation, Paper 1036.

E-29. Civilian Conservation Corps

When Native Americans were deemed eligible, they formed special units for work on reservations. They were identified as CCC-ID (Civilian Conservation Corps, Indian Division). By 1942 a total of 85,000 Indian young men had served. The tribal hall of the Confederated Tribes of Coos, Lower Umpqua, and Siuslaw in Coos Bay, a National Register property, was erected by CCC-ID. [It is unknown to this reviewer whether any CCC-ID companies were involved in the camps at Klamath and Umatilla (Stanfield) identified on E-30.

E-32 Klamath Project and Umatilla Project

Both of these BOR projects ignored the doctrine of "Winters Rights" established by the Supreme Court in 1908. Since these irrigation measures appropriated water that could have been used by the tribes, they had significant impact on the Klamath and Umatilla Reservations. In brief:

The United States Supreme Court case of *Winters v. United States* held that the decree enjoining the companies from utilizing river waters intended for an American Indian reservation was affirmed. It was also held that when American Indian reservations were created by the United States government, they were created with the intention of allowing the American Indian settlements to become self-reliant and self-sufficient. As American Indian reservations require water to become self-sufficient in areas such as agriculture, it was found that water rights were reserved for tribes as an implication of the treaties that created the reservations.

The Umatilla Tribe starting in 1980 lobbied for the Umatilla River Fish Restoration Program to put water back in the Umatilla River to restore fish runs. It was joined by Water Watch and other advocacy groups. Congress ultimately passed the Umatilla Basin Act in 1992 and appropriated \$48 million for the BOR to put water back into the Umatilla River. Salmon returned to the Umatilla in 1994 for the first time in 70 years. In the 2010s the Klamath Tribe has been active participant in the decisions for dam removal on the Klamath River and the agreements reached in the Klamath Basin Recovery Agreement (2010) and the Klamath Power Facilities Agreement (2014).

BoRcomment_matrix



United States Department of the Interior

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IN REPLY REFER TO:

FEB 14 2017

PN-1000
ENV-3.00

VIA ELECTRONIC MAIL AND U.S. MAIL

Ms. Chrissy Curran
Deputy State Historic Preservation Officer
State Historic Preservation Office
Oregon Parks and Recreation Department
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Salem, OR 97301-1266

Subject: DRAFT *National Register of Historic Properties Multiple Property Documentation Form for Federal Irrigation Projects in Oregon, 1901-1978*

Dear Ms. Curran:

Thank you for an opportunity to comment on the draft *Multiple Property Documentation (MPD) Form for Federal Irrigation Projects in Oregon, 1901-1978*. Due to the wide-ranging, long-term effects of the document and ongoing concerns with the current version of the state-wide MPD, the Bureau of Reclamation cannot yet support its adoption. Reclamation is eager to work with the State Historic Preservation Office (SHPO), irrigation districts, and other involved parties to address our concerns, some of which were communicated in 2015 when Reclamation reviewed a previous draft. Additional concerns have emerged after review of the December 2016 draft and are enclosed with this letter.

The MPD document was initially developed pursuant to the Memorandum of Agreement (MOA) between Reclamation, the SHPO, and the Central Oregon Irrigation District for piping of a segment of the I-Lateral (COID MOA; #R14MA13733). Reclamation, in a subsequent MOA for the piping of the Willow Creek Division of the Vale Oregon Irrigation District (VOID MOA; #R13MA11725), agreed the same MPD could be used, following Reclamation's review, to help resolve the adverse effects of that undertaking. As discussed in these MOAs, the scope of the MPD was to be limited to the involved districts.

After Reclamation signed the COID and VOID MOAs, the scope of the MPD was expanded to cover all Federally-owned and Carey Act irrigation facilities in Oregon. While Reclamation is not opposed, in principle, to the development of a state-wide MPD covering Reclamation irrigation facilities, additional review and comment by Reclamation's Pacific Northwest and Mid-Pacific regions (both of which manage facilities in Oregon) and Reclamation's Federal Preservation Officer must take place before such an MPD would be approved.

Reclamation requests that SHPO postpone approval of the MPD for state-wide use at Reclamation facilities until the SHPO has facilitated discussions with Reclamation, irrigation districts that operate and maintain affected properties, and other interested stakeholders. An alternative that would be in keeping with the spirit of the MOAs would be for the MPD to be redrafted to focus on the COID and VOID facilities and address Reclamation's comments. Creation of a separate state-wide document would come at a later time after the involvement of appropriate parties was more fully accommodated. Reclamation is open to a discussion of options that respect the terms of the MOAs.

Should you have any questions about this letter, please contact Dr. Sean Hess, Regional Archaeologist, at 208-378-5316 or shess@usbr.gov.

Sincerely,



Lorri J. Lee
Regional Director

Enclosure

cc:

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Reclamation Comments on the MPD

Page	Location	Comment
-	Global	In 2015, Reclamation staff commented on an earlier draft of this document, but the reviewing staff never received the revised version to see if the author ever made the requested changes. Unfortunately, review of this December 2016 version shows that the author did not address Reclamation's concerns. Given that this MPD has the potential to set precedent for a large number of Reclamation facilities, it needs to respond to Reclamation's needs as one of the property owners.
1	Section A	The title provides a misleading timeframe for this MPD. The title include the time range "1902-1978," but the Tualatin Project is the only Reclamation Project that stretches to this late date and it is only mentioned in a table. Aside from this minor mention of the Tualatin Project, the narrative only covers up to the 1960s. Please revise the title to be more in keeping with the actual content of the MPD.
1	Section A	As indicated by the current title, the MPD is for the WHOLE state of Oregon, but except for the Rogue River Basin Project (and perhaps the Tualatin Project), it does not cover any of the private or Reclamation projects in the western half of Oregon. Virtually all of the examples provided in the MPD (for example, Figures 3-8, 10-20, 22-24, and 28) are from the Vale and Central Oregon projects. The narrative, as well, tends to emphasize central and eastern Oregon. Therefore the title should not be <i>Federal Irrigation Projects in Oregon</i> , as it does not cover the whole state adequately. Please revise the title to be more in keeping with the actual content of the MPD. With some minor changes in content, like removal of the Rogue River Basin Project, Tualatin Project, the Umatilla Project, and the Klamath Project, it would be appropriate to retitle this MPD to be <i>Federal Irrigation Projects in Central and Eastern Oregon</i> . Narrowing the scope of the MPD would also eliminate the administrative problems with an MPD that includes different Reclamation region offices. Furthermore, it would also narrow the range of irrigation districts that would need to be notified of the development of this MPD.
1	Section D	There should be a signature line reserved for the Federal Agency Official, which in this case would be Reclamation's Federal Preservation Officer, since most of the Federal irrigation features being considered in the MPD are Reclamation's. This is consistent with guidance from the Keeper that MPDs should be treated in the same way as individual nominations, as they establish precedent for future nominations.
E-3	-	Reclamation is uncomfortable with the definition of "Federal Irrigation Projects" used for this MPD. Reclamation realizes that the Central Oregon Project (COP) is included because of its relationship with the Carey Act; however, the COP is not a Federal project in the conventional sense because it is not owned or operated by a Federal agency. The inclusion of COP here also seems driven by the fact that the COID receives Federal funding for some of its actions. While this does mean that Section 106

Page	Location	Comment
		applies to some of COIDs actions (see Section H of the MPD), that mere fact does not make the COP a “Federal” irrigation project. Many reviewers have struggled with the broad scope of this MPD, and splitting the MPD into two related MPDs (one focused on Carey Act Projects that are owned by irrigation districts and another focused on irrigation projects owned by Federal agencies) would help to address this concern.
E-3	-	Re: spatial and temporal scope of the MPD – Reclamation does not agree that Carey Act developments are “Federal” projects. The title should be revised to be something more along the lines of “20th Century Irrigation Developments in Eastern Oregon Resulting from the Carey and the Reclamation Acts.” The MPD also needs to be consistent and clear about the actual geographic area covered by the MPD, and that the latest a period of significance can extend is to 50 years back from the current date (i.e., to 1967). If the 1978 end date was based on completion of the Tualatin Project, then that is invalid if Western Oregon is not included in the MPD boundary area.
E-4	1 st ¶	The author states that many Reclamation projects "have had a tremendous effect on Oregon..." That is only true of a few. Reclamation made this comment on an earlier version of this MPD and the author did not fully address Reclamation's concerns. Some of the projects like Umatilla did have a tremendous impact, while others were just extensions of an existing irrigation project. In the area under the jurisdiction of the Columbia-Cascades Area Office, 6 of the 15 Reclamation projects are of this more minor type. Please revise this statement to more accurately reflect the impact of Reclamation's projects.
E-24	4 th ¶	The Klamath Basin crosses the California-Oregon border, and Klamath Project facilities cross the border into the jurisdiction of the California SHPO. Reclamation would prefer to have this Project, which crosses the state boundary, handled as a unit in a separate document. In general, it is also recommended that this document address only those irrigation projects that lie entirely within the State of Oregon. This would eliminate the Boise Project, which has the majority of its facilities in the State of Idaho.
E-24	4 th ¶	Re: "The Klamath project is one of the oldest reclamation projects in the nation." It is a stretch to make this claim, as the Klamath Project was the 15th Reclamation project approved. There were 10 other projects approved in 1903 and 1904 that really deserve that title. Therefore, it is incorrect to identify it as one of the oldest projects. This is another comment that Reclamation made about earlier versions of this document that the author did not fully address. Please revise this section to more accurately reflect the place of the Klamath Project in the history of the Bureau of Reclamation.

Page	Location	Comment
E-28	4 th ¶	"The Prineville Dam (later named the Arthur R. Bowman Dam), in particular, represented the Bureau of Reclamation's postwar emphasis on creating water-based recreational facilities and along with the Prineville Reservoir, would become one of central Oregon's major recreational sites." This is incorrect. It's a conjecture of the author, as the cited source materials do not make this same claim. Reclamation worked to foster recreation at other projects, and there was no specific emphasis on recreation by Reclamation at Prineville. Bowman Dam was built for flood control and water storage – not recreation. The author's incorrect portrayal of Reclamation's reasons for constructing this facility falsely amplifies the importance of recreation, lending the facility a historical significance that it does not really have. Please revise this section to more accurately portray the reasons why Reclamation was authorized to construct Bowman Dam.
E-30	Table 2	The Boise Project is listed with no history or clarification as to why it is in Oregon. Please provide an explanation of the inclusion of the Boise Project in this document. If its inclusion is minor and contains no structures, please remove it.
F-31	Outline	Re: minimal units of structure eligible for nomination under this MPD - In terms of an irrigation work, the minimal property or structure that is appropriate to nominate for listing would be a main canal and associated sub-systems. Preferably, it would extend to include the diversion and other associated features (as parts of an historic district). To nominate an arbitrarily selected section of a canal or lateral is like nominating the front porch of a house separate from the rest of the building. Nominations of a property must utilize boundaries that are founded in the property's historical development or its design and function. This MPD clearly envisions arbitrarily defined boundaries that are not supported by the property's history or design. The draft Vale Project lateral nomination of a short segment of a lateral illustrates how the SHPO envisions this MPD being applied, and it is indefensible in terms of National Register requirements and intent. Please revise the MPD to make it clear that only main canals and associated subsystems can be considered for listing, and that individual elements need to be considered as part of larger wholes.
F-31	Outline	Picking up the previous point regarding minimal units of structure, this nomination confuses section 106 processes and National Register nomination purposes. The author's flawed approach to what is a property (that it can be a small bit of the total designed structure) is clearly built upon applying the concept of the Area of Potential Effects for an undertaking being considered under Section 106. The APE is not a basis for nomination of a bit of property unless that bit has historical or design importance that can stand alone or be presented as importantly "representative" of what makes the larger property

Page	Location	Comment
		significant. Again, please revise the MPD to make it clear that isolated elements of larger wholes cannot be nominated for listing.
F-31	Outline	<p>The MPD's flawed concept of what is a property is reflected in the definitions of the property types in this MPD. The MPD does not define logical property types, and they have failed to include some important types. For an irrigation system, the logical property types are as follows:</p> <ul style="list-style-type: none"> • storage dam and diversion dam; • conveyance facility (with sub-types like main canal, secondary delivery, drains and waste water, appurtenant operations things like turnouts, check dams, etc.); • power plants; • properties used in system operation (offices/HQs; dam tender/gate keeper/ditch rider properties; maintenance yards; etc.); and • archaeological sites associated with the construction effort (construction camps; dumps; borrow areas, etc.).
F-31	Outline	<p>Structural components of a dam or canal should not be considered "properties." They are structural or operational components of what is a property. For example, a check dam in a canal is a component part, not a "property". This breaking down component parts as if they can be evaluated in isolation from the property they are a bit of is the equivalent of saying that the windows in a house, or its front porch, are eligible and can be nominated. We should not support this approach both because it is historically and structurally illogical, and insupportable within the requirements of the National Register. There may be the occasional exceptions, like the rare case where a sub-component is unique or a first test case of some design or concept that will prove to be of lasting engineering importance. However, these will be rare, not the rule. Please revise the MPD in keeping with these property types and sub-types.</p>
F-33	"Historic Districts"	<p>The MPD utilizes a flawed understanding of historic districts. For example, the MPD provides an example of a district being a canal (or piece of a canal) that has an array of the operational sub-types like turnouts. A district is not a collection of sub-types (as they define them) of a property. A better understanding of a district would be the diversion dam, the distinct main canal(s) and the distinct main laterals fed by that diversion, dam tender's or ditch rider housing complexes along the canals, etc.</p>
F-34	"Registration Criteria"	<p>Please include a provision in the registration requirements for conveyance systems stating that when a main canal has been determined ineligible for listing in the National Register, typically secondary systems under that canal are also not eligible for nomination under this MPD.</p>

Page	Location	Comment
F-38	"Dam Functions"	The author lists several types of dams which Reclamation does not use, including "Detention Dams," and "Saddle Dams." If this MPD is for Federal Reclamation projects, it is important that the MPD use appropriate Federal terminology for the types of structures. Please replace "Saddle Dams" with "Saddle Dikes." Please insure that the other dam function names follow Reclamation conventions.
F-40	"Dam Designs"	The author lists several types of dams which Reclamation does not use such as "Steel Dams." Cofferdams are only temporary dams for the construction phase of a project and then removed. "Cofferdams" should be removed from this list, as cofferdams are temporary structures used to facilitate construction; they are not permanent structures.
F-42	"Registration Requirements"; Pt. 2	Re: "They are most likely to be considered historically significant under Criterion A or C." The author does not make a strong case as to why an irrigation project would be eligible under Criterion A beyond COID or the Vale Project. They mention the history and some of the funding involved, but not <u>specific details</u> that would assist someone in determining if an irrigation project was eligible under Criterion A. If a property is going to be determined eligible under Criterion A, there should be something more than simple statements of "a significant impact" without more information as to what that impact was. Irrigation projects would be eligible under Criterion A if they changed the economy and settlement and development of the area. A good example is in the Yakima Valley of Washington where Reclamation's projects turned the valley into the fruit bowl of the nation, brought in large populations of people, and promised a future of independence in agriculture. Please provide a better description of what specific changes might lead an evaluator to conclude that a Reclamation project made "a significant contribution to the broad patterns of our history."
F-43	"Registration Requirements"; Pt. 8	Except in very specific cases, as when a reservoir is highly engineered, Reclamation does not agree that reservoirs should be National Register eligible, either individually or as contributing elements. A typical reservoir is a fluctuating body of water that does not have consistent boundaries or characteristics. How can you justify eligibility for a large body of water that changes with the ebb and flow of the irrigation season? Reclamation made this comment about an earlier version of this document, but it was ignored. Please revise this section to indicate that reservoirs will be considered individually eligible or a contributing element only in exceptional circumstances.
F-50	Pt. 6	Re: "Sections of canals and laterals that retain good integrity may still contribute to the historical significance of a historic district or be individually listed in the National Register (depending on the associations), even though some sections of the same canal or lateral may have lost integrity." Reclamation is uncomfortable with this statement, as it creates the possibility that a segment of canal could be considered to retain integrity even if the majority of the entire canal had been destroyed, thus

Page	Location	Comment
		eliminating the integrity of the canal as a whole. It is analogous to saying that a house retains integrity if one of the windows retains its original form, even if the rest of the house has changed. It is crucial to look at the whole canal to make that kind of determination. Please revise this registration requirement to insure that eligibility determinations consider the whole canal structure and not just segments of the larger whole.
F-50	Pt. 6	Reclamation struggles with general statements such as piping canals and laterals “are considered significant changes that would constitute a loss of integrity” (pg. F-50, #6). The document indicates that even if one small portion of an eligible canal or lateral is being altered, it is an adverse effect to the integrity of the entire property. It is important to also consider the scale of the impact on integrity, which is common practice when evaluating effects to linear historic properties. For example, Reclamation recently reached a Finding of No Adverse Effects for the removal of a 400 ft.-long historic levee because there are over 26 miles of levees in the subject county. The MPD should include a discussion of the degree of impact and proportionality to the assessment of overall integrity.
F-50	Pt. 7	The MPD should put more attention on the position or importance of a particular feature within the system when considering eligibility. A “tiered approach” to eligibility (e.g., a “1 st -tier resource” refers to a main canal, as opposed to a “3 rd -tier resource” such as a sublateral or field ditch or invisible drain) has been applied successfully in other contexts. An eligibility matrix would be useful in this document to display this concept. Please see the attached example from Reclamation’s evaluation of eligibility of structures in the Columbia Basin Project.
F-52	“Subtype: Headgate”	The proper term in a Reclamation context is “turnouts.” Reclamation made this comment about earlier drafts and the revision was not made. “Turnouts” are a Reclamation term used for those laterals off the main canal, while “headgates” are at the start of a main canal system. Please revise this term to be consistent with Reclamation practice.
F-55	“Subtype: Check Structure”	Please make sure that steel is included as one of the types of material used in the construction of check structures.
F-55	2 nd ¶	Re: “Similarly, the radial or ‘Taintor Gate’...” Taintor gates are not used in laterals, sublaterals, etc. They are only used on Main Canals. This should not be in this section and it needs to be separated. Reclamation made this comment about earlier drafts and our comments were not addressed. Please revise this section to put the discussion of Taintor Gates in its proper section.
F-56	“Subtype: Spillway”	This is an incorrect use of the term “spillway.” It needs to be “wasteway,” as spillways are for dams. Wasteways are for canals.

Page	Location	Comment
F-57	5 th ¶	Re: "A rectangular weir is typically the oldest weir...found in most Oregon irrigation projects." Since this document is covering Federal irrigation projects, this statement is not true as more than 95% of Reclamation projects in Oregon use Cipolletti weirs. Please revise this section to more accurately reflect the kinds of weirs actually used.
F-60	3 rd ¶	Re: "The concept of the weir box was first developed in the late 1940s...in the construction of the agency's Yakima Project in central Washington State." That date of late 1940s is not correct, as Yakima boxes are clearly visible in photos from the early 1930s and before. In fact, the Sunnyside and Tieton divisions of the Yakima Project utilized these boxes and they were built between 1906 and 1916. Please revise this statement to more accurately reflect the historical record.
H-65	2 nd ¶	"Memorandum of Agreements" should instead be "Memorandums of Agreement" or "Memoranda of Agreement" (2 instances)

Evaluation Matrix for Columbia Basin Project Irrigation Features																
(Evaluation may be on a case-by-case basis - not all features within the system are equal)																
Resource Type		National Register Significance				Integrity							Contributing/ Noncontributing			
		Criterion A	Criterion B	Criterion C	Criterion D	Location	Setting	Design	Materials	Work- manship	Feeling	Assoc.	1st Tier	2nd Tier	3rd Tier	4th Tier
A	Storage & Diversion Structures				NA											
	Dams	Y	P	P		x	x	x	x	x	x	x	C			
	Dikes	Y				x	x	j	j	j	j	j	C1	C1		
B	Canals				NA											
	Main Canals	Y	P	P		x	x	x	x	x	x	x	C			
	Sub-canals	P	P	P		x	x	x	x	x	x	x	C	C1		
	Laterals					x	x	j	j	j	j	j		C1	N1	N
	Sub-Laterals					x	x	j	j	j	j	j		C1	N1	N
C	Conveyance Components				NA											
	Siphons	Y	P	P		x	x	x	x	x	x	x	C			
	Tunnels	Y	P	P		x	x	x	x	x	x	x	C			
	Flumes					x	x	j	j	j	j	j		C1		

	Drop Structures					x	x	j	j	j	j	j		C1		
	Chutes					x	x	j	j	j	j	j	C1	C1		
D	Protective & Cleaning Features				NA											
	Culverts					x	x	j	j	j	j	j		C1		
	Overchutes					x	x	j	j	j	j	j		C1		
	Wasteways	P	P	P		x	x	j	j	j	j	j		C1		
	Drains					x	x	j	j	j	j	j		C1		
	Sand Traps					x	x	j	j	j	j	j		C1		
	Wastegates					x	x	j	j	j	j	j		C1		
	Debris gates					x	x	j	j	j	j	j		C1		
E	Control & Measurement Structures				NA											
	Headworks/ headgates	P				x	x	j	j	j	j	j	C	C1		
	Checks					x	x	j	j	j	j	j		C1		
	Check-drops					x	x	j	j	j	j	j		C1		
	Turnouts					x	x	j	j	j	j	j		C2		
F	Infrastructure				NA											
	Bridges					x	x	j	j	j	j	j		C1		
G	Pumping Plants				NA											
	Open	Y				x	x	j	j	j	j	j		C1		

	Large, Housed	Y	P	P		x	x	j	j	j	j	j	C	C1		
	Small, new housed					x	x	j	j	j	j	j				N
H	Power Facilities				NA											
	Substations					x	x	j	j	j	j	j		C1		
	Transmission Lines					x	x	j	j	j	j	j		C2		
I	Auxiliary Works				NA											
	Service Roads					x	x	j	j	j	j	j		C1		
	Elect. & Comm. Lines					x	x	j	j	j	j	j				N

Legend

Y = Primary feature of the irrigation system, individually eligible.

P = Possibly; research required.

NA = Not applicable.

x = Most likely to have retained this aspect of integrity.

j = Judgment based on research and observation.

C = Contributing Feature.

N = Noncontributing.

1 = Dependent upon research; the feature may have been altered, modified, replaced, or piped, if so, it may move up or down a Tier.

2 = a very repetitive feature common in all areas of the system.

Eval sheets - COID Pilot Butte Canal

NATIONAL REGISTER NOMINATION EVALUATION SHEET

SACHP Meeting Date: 6/16/2016

PROPERTY
ADDRESS:

IRRIGATION PROJECTS IN OREGON, 1850-1978

MULTIPLE CITIES, MULTIPLE CO COUNTY

EVALUATOR:

DATE:

X

OK

see below

Concerns

INTEGRITY: Major alterations or additions? New materials? Altered setting? Moved? etc.

INTEGRITY: Major alterations or additions? New materials? Altered setting? Moved? etc.

X

and non-contrib. features
OK
and

Concerns

DESCRIPTION: Is the property adequately described? Too general? Too specific? Have contrib. been clearly identified?

DESCRIPTION: Is the property adequately described? Too general? Too specific? Have contrib.

X

OK

Concerns

SIGNIFICANCE Has the appropriate Criterion been used? Has it been justified? Is the context

SIGNIFICANCE Has the appropriate Criterion been used? Has it been justified? Is the context sufficient in breadth and depth to support the claims of significance? Is the

and CONTEXT: narrative history complete and of the appropriate detail?

X

OK

Concerns

FACTS AND Are the appropriate and best sources used? Are key dates and facts accurate and supported with references?

X

OK

Concerns

TECHNICAL: Typos, grammar, organization and flow of the narrative, etc.

TECHNICAL: Typos, grammar, organization and flow of the narrative, etc.

X

OK

Concerns

SUPPORTING

MATERIALS: Adequate photos, maps, drawings, etc.?

OTHER ISSUES AND COMMENTS: The Redmond Historic Landmarks Commission reviewed the proposal and is supportive of the proposal as long as the piping is completely underground and support leaving the remaining channel unchanged (i.e. no grading or removal of historic structures). The HLC also expressed concern for protection of any found artifacts as a result of the piping and questioned whether bridge crossings would be allowed, the actual width of the designation, and the phasing plan for piping of COID canals.

NATIONAL REGISTER NOMINATION EVALUATION SHEET

SACHP Meeting Date: 6/16/2016

PROPERTY
ADDRESS:

CENTRAL OREGON CANAL: BRASADA RANCH SEGMENT
ALFALFA RD
POWELL BUTTE, CROOK COUNTY

EVALUATOR:

DATE:

OK Concerns

INTEGRITY: Major alterations or additions? New materials? Altered setting? Moved? etc.
INTEGRITY: Major alterations or additions? New materials? Altered setting? Moved? etc.

OK Concerns
and non-contrib. features
and

DESCRIPTION: Is the property adequately described? Too general? Too specific? Have contrib.
been clearly identified?

DESCRIPTION: Is the property adequately described? Too general? Too specific? Have contrib.

OK Concerns

SIGNIFICANCE Has the appropriate Criterion been used? Has it been justified? Is the context
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OK Concerns

FACTS AND Are the appropriate and best sources used? Are key dates and facts
accurate and supported with references?

OK Concerns

TECHNICAL: Typos, grammar, organization and flow of the narrative, etc.
TECHNICAL: Typos, grammar, organization and flow of the narrative, etc.

OK Concerns

SUPPORTING
MATERIALS: Adequate photos, maps, drawings, etc.?

OTHER ISSUES AND COMMENTS:

Gadow_BRS



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E-Mail: brian@brs-legal.com

Brian R. Sheets
Licensed in Oregon

January 17, 2017

VIA EMAIL ONLY

Land Conservation and Development Commission
c/o Amie Abbott
635 Capitol St., Ste. 150
Salem, Oregon 97301
Email: amie.abbott@state.or.us

RE: LCDC Agenda Item 12 Rulemaking – Goal 5 Historic Resources

Dear Chair MacPherson and Land Conservation and Development Commissioners:

This office represents Matt and Suzanne Gadow, residents of unincorporated Deschutes County, Oregon, and fee simple landowners within the Pilot Butte Canal Historic District (Cooley Road-Yeoman Road Segment) (“PCBHD”). For the past four years, Matt, Suzanne, and I have been involved in various actions to maintain the integrity of their home and property in Deschutes County. We have heavily participated in the rulemaking process by submitting written testimony to the DLCD RAC and LCDC hearings, as well as testifying in person.

In this second hearing for the Goal 5 Historic Resources, we incorporate our prior testimony, both written from November 8, 2016 and the November 18, 2016 oral testimony in this comment. As a result of DLCD disclosures to the origins of this Goal 5 Historic Resources Rulemaking, this office submitted Public Records Requests to DLCD and the Governor’s Office. The documents produced disclosed the origins of this rulemaking as a direct result from the lobbying of the Central Oregon Irrigation District (“COID”) and the push from the Governor’s Natural Resources Office to accommodate COID. The present rulemaking effort is tainted with the Pilot Butte Canal controversy in Deschutes County Oregon.

The Commission should be aware of the motives behind the present rulemaking, and balance the interests of a single lobbying interest with the far-reaching statewide implications of rewriting the Goal 5 historic protection program. Moreover, entities lobbying for standing to oppose historic designation should be scrutinized for their motives; Oregon and its historic resources should not suffer collateral damage from a single irrigation district’s desire to destroy a historic canal for an additional 1.7 MW of electricity from its hydropower generator.



1. Background



COID Hydropower Generator on the Pilot Butte Canal
Source: Google Maps

Central Oregon Irrigation District (“COID”) desires to extend its hydropower facility into my client’s property by piping the canal through the length of the PCBHD, destroying the canal for their hydropower venture.¹ The present generator has a capacity of 5.0 MW, however it is operating at 3.3 MW due to less than optimal pressures in the canal piping leading to the generator.

Through lobbying the Governor’s office, COID received support from several state agencies under the auspices of water conservation. To preserve the historic nature of the BCHD, property owners along the still-remaining canal applied to the National Park Service to list the canal and adjoining properties into the PBCHD. Despite fierce opposition from COID and coordinated actions through the Governor’s office, in February 2016, the National Park Service (“NPS”) listed the PBCHD on the National Register of Historic Places (“NRHP”). Following that nomination, the Governor’s office initiated this rulemaking with LCDC to right the perceived wrongs with the historic preservation program. This is using a sledgehammer to do a scalpel’s work, and supplants historic preservation for the entire state in order for one irrigation district to receive more power revenue. We oppose this rulemaking insofar as its directed approach to strip historic protection from

¹ See Attachment 1 at 2.

the PBCHD, and we oppose the incremental erosion of historic protection for similarly affected Oregon listed properties. The Commission should know the impetus behind the rulemaking, and we will explain the policy formulation as follows.

2. This Rulemaking is the Direct Response to the Pilot Butte Canal Historic District Being Nominated and Listed in the National Register.

a. Governor's Office

The main pressure behind this rulemaking lies in the Governor's Natural Resources Office. Gabriela Goldfarb, the Natural Resources Policy Advisor to Governor Kate Brown is the main proponent for advancing the support of COID's hydropower project. In January of 2015, Ms. Goldfarb discussed with Deschutes River Land Conservancy allies about the COID piping project and noted that the hydropower aspect of the COID piping plans could be a problem for COID.² Later in April 2015, Ms. Goldfarb specifically points out the hydropower aspect of the piping project in reference to the historic designation nomination, noting:

"However -- and this is info from a call I made to Tod Heisler at the Deschutes River Land Conservancy about this a few weeks back -- there is a twist in the regulatory framework because this canal connects to the COID's 5MW hydroelectric project. The irrigation district needs landowner permission to put the pipe underground; they have secured the legal right to run the pipe aboveground. However, if it's aboveground, the irrigation district will need to engage in an expensive FERC regulatory and construction process to construct a much bigger hydro facility forebay. The FERC process also provides another Historic Preservation nexus."³

In response to the message above, Chrissy Curran, interim deputy SHPO, put together a summary memo of the process of listing a historic district with the end analysis including a statement of "[w]hether COID may proceed with demolition of a National-Register-listed resource depends on what the local ordinance says."⁴ Clearly, the focus at the Governor's office is to find how to enable COID an opportunity to destroy the PBCHD for its hydropower venture.

In response to Mr. Curran's memo, Ms. Goldfarb noticed the objection grounds for "owners" of nominated resources, and asked who owned the canal.⁵ This is the first mention of the canal ownership issue from the Ms. Goldfarb on April 17, 2015. Ms. Curran responded:

"Ah, the million dollar question. I'm afraid I can't clarify it at this point. The property owners hold the fee simple title to their land; the Central Oregon Irrigation District holds an easement on the land and they own the water rights

² See Attachment 2

³ See Attachment 3

⁴ See Attachment 4 at page 2

⁵ See Attachment 5

to move water through the canal. Who owns the canal itself is currently the topic of a heated legal debate at the local level.”⁶

Ms. Curran answered Ms. Goldfarb’s question uncertainty on the ownership issue. Ms. Curran later explained to Ms. Goldfarb about standing to object as an owner at the local level, and stating that they have been “walking [COID] through this process since the very beginning” of the nomination process.⁷

On April 20, 2015, Ms. Goldfarb held a teleconference with Richard Golb, from PacificCom LLC and the lobbyist for COID, where she noted the position of COID for historic designation, as well as noting the Stoel Rives law firm in Portland as involved in the controversy.⁸ Mr. Golb then sent a lengthy email to Ms. Goldfarb specifically linking OAR 660-023-0200 as the mechanism that would significantly hinder COID’s ability to destroy the Pilot Butte Canal.⁹ Mr. Golb then forwarded an email originally from Craig Horrell, Manager of COID, to Dave Phillippi (Stoel Rives Attorney for COID), Matt Singer (Holland and Knight Attorney for COID) and himself noting the “the Advisory Committee process is not meant to provide real ‘review’ or assessment. It would really be helpful to discuss this matter.”¹⁰ Ms. Goldfarb responded to Mr. Golb Stating that she would contact him about his concerns, with Mr. Golb responding that he would like the assistance of the Brown Administration in opposing the PBCHD for listing on the National Register of Historic Places.¹¹

Seeking to assist COID in its opposition of listing the PBCHD, on June 29, 2015, Ms. Goldfarb drafted letter to the Secretary of the Interior.¹² Ms. Curran noted that Ms. Goldfarb’s position was “highly unusual,” and specifically noting:

“With your letter, the State is trying to stop a listing in order to help a local agency avoid the regulation that state law requires. That is an awkward circumstance, particularly since the State Advisory Committee on Historic Preservation and the State Historic Preservation Officer recommended the property to the NPS for listing. . . . I see the potential here for the State to inadvertently create the perception of mixed messages around cultural resources, and set an unhealthy precedent for future controversial nominations.”¹³ (emphasis added).

⁶ Attachment 6

⁷ See Attachment 7

⁸ See Attachment 8

⁹ See Attachment 9 at 1-2

¹⁰ See Attachment 10

¹¹ See Attachment 11

¹² See Attachment 12

¹³ See Attachment 13

Ms. Goldfarb was unpersuaded by Ms. Curran and sent her letter to the National Park Service stating that COID was the “owner” of the Pilot Butte Canal,¹⁴ despite knowing that Ms. Curran had alerted her that the issue was contested. Ms. Goldfarb remarked about the letter noting “hopefully this is the rare case where we have this degree of conflict between historic preservation and a major natural resource conservation priority.”¹⁵ Shortly later, on July 16, 2015, Ms. Goldfarb reacted to the return of the PBCHD listing with more instructions to the SHPO to resolve “ownership” issues with the canal.¹⁶

On July 21, 2015, Rich Golb requested a meeting with Gabriella Goldfarb, himself, Craig Horrell, and David Phillippi to discuss:

“We would like to discuss the following questions/issues:

- 1) How does the state intend to address/resolve COID’s limited fee ownership of the Pilot Butte Canal as granted under the 1891 Right of Way Act?
- 2) How does the state intend to address the NEPA issues surrounding the nomination?
- 3) Why won’t SHPO defer to the ongoing MOA/MPD process, which includes SHPO, USBR, and COID?
- 4) What is process that SHPO envisions going forward?
- 5) How will SHPO/state help to facilitate piping of irrigation canals to promote water conservation, higher instream flows for fish and wildlife, etc?”¹⁷

Ms. Goldfarb obediently arranged for more SHPO participants to attend Mr. Golb’s request for a meeting.¹⁸ Later, on July 23, 2015, Ms. Goldfarb addressed Mr. Golb’s issue with the State Advisory Committee on Historic Preservation’s decision without environmental consideration:

“Any such ‘balancing’ would have to come about via other mechanisms – but such changes would involve wholesale revisions to state law, and that it is unclear at this point whether the circumstances in this case are likely to recur to the degree that it such a big lift makes sense.

Raising the questions about ownership – which is something the National Register process DOES take into account – appears to be the best tool. And appears to have been effective in getting NPS to kick back the application.”¹⁹ (emphasis added).

Ms. Goldfarb’s calculation to oppose the listing of the PBCHD is couched in terms of “ownership,” as again mentioned with importance as a way of frustrating historic preservation efforts. After receiving a memo from me and my former law firm, Ms. Goldfarb forwarded the

¹⁴ See Attachment 14 at Page 2

¹⁵ See Attachment 15

¹⁶ See Attachment 16

¹⁷ Attachment 17

¹⁸ See Attachment 18

¹⁹ Attachment 19



letter to several department heads,²⁰ and ensured that attorneys for the State attended the in-person meeting between several heads of agencies and COID and their lobbyists and attorneys.²¹

Following the meeting, Ms. Goldfarb sought to eliminate roadblocks to COID's piping project by reaching out to several department heads, including Director Rue, on August 20, 2015, stating that:

"how important is it to the state's water and natural resource conservation needs to eliminate this as one barrier to piping projects? Is it significant enough to justify the lift that would be required to develop a mechanism that allows the state to make choices when natural resource protection and historic preservation values conflict."²²

Following this call to action, Ms. Goldfarb began coordinating with Director Rue to initiate the present rulemaking.²³ Amanda Punton, the DLCD Natural Resources Specialists quickly responded to Ms. Goldfarb with an analysis of the Historic preservation programs, and measures to reduce the ability of individual resource owners to list their properties without local politicians' buy-off.²⁴ Ms. Goldfarb replied that Mr. Golb had again requested her to remove barriers to COID's piping projects and coordinated a meeting with Rob Hallyburton and Steve Shipsey.²⁵

Later in October, 2015 Ms. Goldfarb admitted to Richard Whitman that "GNRO sent a letter on behalf of the Governor to the National Park Service (NPS) *raising questions about the ownership as a basis for casting a shadow on the application . . .*" and initiated the present rule change with DLCD in order to "give well-vetted, broadly supported infrastructure projects that appropriately protect the environment and other values a clearer pathway to approval."²⁶ (emphasis added). Of course, historic properties, once destroyed, are lost forever in favor of this one Policy Advisor's preferences and at the behest of COID's lobbyist. Ian Johnson, Interim Associate Deputy SHPO, in working with Amanda Punton, then directly links the Goal 5 amendments to the nomination of the PBCHD.²⁷

After the PBCHD nomination was accepted by the SACHP following NPS requested revisions to the document, Mr. Golb contacted Ms. Goldfarb by email stating "Gabriela - Are you available for a call on Monday? This process is really unfair."²⁸ In response, Ms. Goldfarb contacted other staff to let them know Mr. Golb may be complaining to them about COID's

²⁰ See Attachment 20

²¹ See Attachment 21

²² Attachment 22

²³ See Attachment 23

²⁴ See Attachment 24

²⁵ See Attachment 25

²⁶ Attachment 26

²⁷ Attachment 27

²⁸ Attachment 28

problems.²⁹ Mr. Golb then forwarded an email to Ms. Goldfarb from Dave Phillippi complaining about NPS's use of their federal definition in determining who has standing to object to historic designation.³⁰ Again this links COID's lobbying to Ms. Goldfarb in furtherance of this rulemaking with rehashed arguments rejected by NPS.³¹

Following the listing of the PBCHD in the National Register of Historic Places, Ms. Goldfarb, through Governor Brown's Press Secretary, issued a statement for a Bend Bulletin Newspaper editorial.³² And shortly after, Mr. Golb asked Ms. Goldfarb "Is there any progress regarding a solution for COID?"³³ Ms. Goldfarb emailed several department heads stating "It is time to reconvene this group to discuss a path forward to promote appropriate consideration and balance between historic preservation and natural resource conservation under Goal 5."³⁴

b. DLCD and SHPO implemented the directives from the Governor's Natural Resources Policy Advisor.

After the NPS listed the PBCHD in the National Register of Historic Places in February 2016, DLCD and SHPO began in earnest with the rulemaking processes and drafting of the initial rule revision proposals. The internal communications between the departments and the Governor's office are in stark contrast to the public disclosures regarding the origin of the rulemaking.

The initial issue DLCD was tasked with implementing is defining "owner" so that parties like COID could object to historic designation. DLCD staff and Ms. Goldfarb requested a definition of "owner" from DOJ attorneys, despite the understanding that NPS had answered the question in its previous email stating that fee simple absolute owners were the only parties able to object.³⁵ DOJ responded with a definition that would include "irrigation canals" as property types able to give a party standing to object to historic designation.³⁶ This was a revision to a prior similar definition drafted under the assumption that DLCD had the authority to make the definition.³⁷ A survey of local jurisdictions in late 2015 answered that those jurisdictions did not have a definition of "owner," "but was generally understood as the entity listed in the County records as 'owner,' most often those with a fee-simple interest in the property."³⁸

²⁹ See Attachment 29

³⁰ See attachment 30

³¹ See Attachment 31

³² See Attachments 32-33

³³ Attachment 34

³⁴ Attachment 35

³⁵ See Attachment 36

³⁶ See Attachment 37 at Page 2

³⁷ See Attachment 38 at Page 1

³⁸ Attachment 39 at Page 2-3.



In May 2016, DLCD and SHPO staff discussed the upcoming strategy in presenting the draft rule amendments to the public at large, with specific intent to hide the main event in initiating the rulemaking. Knowing that openly advancing COID's hydropower project would be poor optics and call for questioning why this rulemaking was initiated, Ian Johnson discussed with Amanda Punton Ms. Goldfarb's reluctance to involve any discussions of COID:

"One thing that is not covered specifically in these documents is that this discussion was prompted by the listing of the Pilot Butte Canal. I am curious about what everyone's comfort level is with discussing this with our constituents. I anticipate that many will want to know why DLCD and SHPO are doing this and what problem we're trying to solve."³⁹

Mr. Johnson continued:

"I chatted with Gabriella yesterday and she'd like to distance the Pilot Butte Canal issue from this process; however, she did say that we could describe it as a 'focusing event' if asked the larger question of why this rule and why now. She did ask that we couch it within other examples, and we have many."⁴⁰

Ms. Goldfarb gave the SHPO and DLCD staff the authorization to move forward with the plan to revise the Goal 5 OARs.⁴¹

DLCD and SHPO staff drafted language in the revisions of OAR 660-023-0200, including the definition of "owner." In the initial draft, staff defined an option of "owner" to include:

"(e) [OPTION 3] "Owner" or "owners" means those individuals, partnerships, corporations or public agencies holding fee simple title to property or a property interest that entitles the possessor of the property interest to exclusive and continuous use and possession of all or part of the property. Examples of property interests constituting ownership are limited fee interests in rights-of-way, such as those for railroads, irrigation canals, public highways and major high-voltage powerlines, but not for common utility easements such as those for local water, gas, electricity, or communications services."⁴²

A comment in the draft questioned the origin of the definition, to which Mr. Johnson explained:

"Where did this come from? Do we know that it's correct?"

This was language recommended by Shipsey to address the Governor's concerns about certain interests. – Ian"⁴³

³⁹ Attachment 40 at Page 4

⁴⁰ Attachment 40 at Page 2

⁴¹ Attachment 41 at Page 1

⁴² Attachment 42 at Page 2

⁴³ Id.

These disclosures specifically explain the origin, intent, and purpose for trying to include COID as a party able to object to historic designation. This office's involvement quizzically triggered Director Rue to inform Ms. Goldfarb of our request to be listed as interested parties in this any action involving the PBCHD,⁴⁴ which can now be traced to the deliberate concealment of the PBCHD's listing as the impetus for this rulemaking. The intent to shape statewide policy in favor of a single hydropower project should be carefully scrutinized to ensure that all State resources are not jeopardized as collateral damage for Natural Resources Policy Advisor Gabriela Goldfarb's preferences and her close COID lobbying ally Richard Golb.

3. Giving an easement holder standing to object to historic designation degrades the ability to protect historic properties.

There will be entities that will ask the Commission to allow "less than fee simple interests" to have standing to object to historic designation. These requests to expand objection standing should be rejected. The prior proposed rules suggested that a definition of "owner" be added to the historic protection rules to allow based on the following rationale in the Department's previous staff report:

"The rule also does not have a definition of 'owner.' The result is that properties owned by public entities, and properties in which a public or private entity has an interest not recognized by NPS, can have restrictions placed on them without consideration of the consequences it will have for the owner. Jurisdictions that automatically apply local protections to federally-listed properties compromise their own ability to weigh the pros and cons of imposing standards that complicate efforts to maintain and upgrade structures, utilities or districts serving the public."

With the now disclosed origin of the definition proposed solely to benefit COID, it should be thoroughly rejected based on the recommendation by the RAC, as well as logical arguments against expanding lesser interest holders to object to historic designation.

While we generally agree with the present staff report on the proposed definition of "owner," the new rule should not grant objection standing for public entities. Allowing public entities the ability to object to historic designation grants a veto to agencies that have little interest in historic preservation. Public entities are not granted standing at the federal level, and the proposed rule should mirror the federal rule for consistency in application.

Moreover, the Commission should not consider any alternate definition that grants easement holders that standing to object to historic designation. An easement is the ability to use another's property for a specific purpose that benefits the easement holder. They do not have a financial interest in the value of the servient property owned by another private individual. Many

⁴⁴ Attachment 43



private properties have utility easements held by various municipal and public entities. Expanding the status to additional parties listing objection standing empowers power utilities, gas utilities, telcom utilities, irrigation districts, and local government the ability to object based upon a severely fractionated interest in the use of another's property. The footing to object to historic nomination is at a much reduced level for easement holders than the person that owns the property in fee simple, that pays taxes on the property, controls the property, and uses the incentives of historic preservation to maintain the property in historic status for the benefit of the community. Should an entity with an easement desire standing for historic designation objection, that entity should purchase or condemn the property at issue to assume all of the benefits and liabilities of fee simple absolute ownership.

We rely on our previous arguments in our November 8, 2016 comment to the Commission for reasons to not adopt a definition of owner that includes less than fee simple absolute interests for standing to object to historic designation.

4. Possible Potential or Actual Conflicts of Interest

Commissioner MacPherson should not participate in the decision making process on the proposed rules. We join Aleta Warren in her attorney's letter from November 15, 2016 detailing Commissioner MacPherson's ties to COID through his law firm. Commissioner MacPherson is employed as an attorney at Stoel Rives, LLP in Portland.⁴⁵ The Portland office of Stoel Rives LLP either currently or recently represented COID, and represents the Deschutes Basin Board of Control, a consortium of irrigation districts including COID in the Deschutes River Valley. Stoel Rives LLP has represented these current or former clients and has actively participated in the opposition of listing the PBCHD to the NRHP.⁴⁶ With this business relationship between COID and Stoel Rives LLP, it is possible that there is either an actual conflict of interest, ORS 244.020(1), or potential conflict of interest, ORS 244.020(13), that triggers the Commissioner's actions specified in ORS 244.120(2) including stating the conflict, or possible recusal. The Commission should explore the actual or potential conflict of interest of Commissioner MacPherson and act according to statute.

Additionally, the Commission should explore Commissioner Morrow's connection to COID, as "Catherine Morrow chose not to serve [on the RAC] because she knows the players in the canal situation."⁴⁷ While we are uncertain to the degree of familiarity of Commissioner Morrow to COID, she was observed at the November 18, 2016 LCDC hearing with COID Manager Craig Horrell immediately following the conclusion of the hearing, and her objectivity on the proposed rulemaking should be explored by the Commission.

⁴⁵ See Attachment 44

⁴⁶ See Attachment 30

⁴⁷ See Attachment 44



CONCLUSION

The proposed rulemaking is now explicitly traced to the PBCHD controversy in Deschutes County, and the impetus behind the rules should be carefully examined for biases in favor of a single utility seeking to increase its hydropower revenues at the expense of statewide historic preservation. Giving easement holders opportunity to object to historic listing undermines historic preservation when easement holders have zero incentive to protect historic properties. We hope that the Commission understands the broad-reaching effects from a single controversy in central Oregon, and declines to fix one utility provider's disappointment with far-reaching, and overbroad administrative rules.

We are dismayed that the continued attack on my clients' property continues through another state agency, this time by initiating rulemaking in favor of a disgruntled utility. We trust that additional revisions to the proposed rules will be made in a manner that increases historic protection, rather than eroding protections for our valuable historic resources. Thank you for hearing our concerns.

Sincerely,

Brian R. Sheets
BRS Legal, LLC

Cc: Clients

The Juniper Ridge Project - Phase II

COID is now developing the second phase of this nationally recognized project. In Phase II, the District will pipe the next 4,500 feet of the Pilot Butte Canal adjacent to the section piped in Phase I. This phase will enable COID to permanently return an additional 7.95 cfs of water to the Deschutes and Crooked Rivers. These increased flows will benefit fish and wildlife, and all of us who enjoy the Deschutes River. COID patrons will also benefit from a modern, efficient system of water delivery to our farming community.



The Juniper Ridge Project will result in higher flows in the Deschutes River.

The Juniper Ridge Project is one part of COLD's commitment to work toward a sustainable water supply for Central Oregon. It will also support our work to meet the needs of fish and wildlife, including species that are threatened. The District is fortunate to have the support of many other interests and organizations on this project, and on several others we are working on in the basin. Some of our partners include the following:

- Deschutes Water Alliance
- Deschutes River Conservancy
- Upper Deschutes Watershed Council
- Trout Unlimited
- Three Sisters, Tumalo, Arnold, Swalley, North Unit, and Ochoco Irrigation Districts
- Cities of Bend, Redmond, Prineville, and Sisters
- Bend La Pine School District and Redmond School District
- Bend Metro Parks and Recreation District
- Oregon Departments of DEQ, OWRD, OWEB, ODFW, and ODOE

Next Steps

This summer, the Deschutes County Board of Commissioners will hold a public hearing on whether to change one of its codes to allow COID to complete Juniper Ridge Phase II. The District has asked the County for approval to pipe our canals in the Suburban Residential 2.5 zone just as it does in the other 18 county zones with canals. Unfortunately, some homeowners oppose this plan. They feel COID's open canal benefits their home values, and want the District to leave our older, open canals as they are now. Other homeowners have asked the District to excavate the canal bed to allow the pipe to rest lower in the ground, reducing or eliminating the need for a berm, and COID has agreed. The District will continue to work with Deschutes County and others to ensure this project is approved, and will benefit all of Central Oregon for the next century and beyond.

If you would like to learn more about the Juniper Ridge Project, visit www.COID.org or contact **Jenny Hartzell-Hill** at (541) 548-6047.

What is being proposed in Phase II of the project?

The District plans to pipe a 4,500 foot section of the Pilot Butte Canal with steel pipe, which will convey irrigation water to nearly 1,500 patrons 6 months of the year, similar to Phase I. This phase is estimated to cost approximately \$6.2 million, with \$2.6 million as the District's cost share (financed with revenue from other COID hydropower projects).

What are the likely benefits of Phase II?

Phase II will improve the District's efficiencies and result in up to 7.95 cfs of water being returned to the Deschutes and Crooked Rivers. Combined with Phase I, up to 27 cfs of additional water, in the form of senior water rights, will be returned to these rivers permanently. Additionally, the renewable electricity generated right here in Central Oregon will reduce our reliance on fossil fuels, and the green house gases they create.

What are the concerns some homeowners, who live along the canal, have raised about the project?

Some homeowners are concerned their home values may be affected by piping this section of the canal. Others have asked if the District would agree to excavate the canal so the pipe sits lower in it, reducing the need for a larger berm to cover the pipe. Others have asked if the District would agree to re landscape the area with native vegetation. The District has contacted every homeowner along this canal section, and we have agreed to excavate the canal and to provide native landscaping. Our goal is to minimize impacts to nearby homeowners. We believe the project will benefit everyone in Central Oregon.

Why doesn't COID line this section of the Pilot Butte Canal with concrete instead of piping it?

Piping this section of the Pilot Butte Canal will provide far greater economic and environmental benefits than if COID lined the two sides of the canal with concrete. First, piping will recapture, and conserve, more water due to seepage and evaporation losses. More conserved water means more water in the Deschutes and Crooked Rivers for salmon, steelhead, and recreation. Second, piping enables the District to increase the amount of clean, renewable hydropower we can generate at our Juniper Ridge facility. This means more locally generated renewable energy, and less greenhouse gas emissions. Lining the canal will not result in any additional hydropower generation. Finally, piping actually costs less over the long term due to lower operation and maintenance costs, and provides greater public safety benefits for the entire community.

What is the next step in this process?

COID has applied to Deschutes County to change its land use rules, so that irrigation districts can pipe their canals in the Suburban Residential 2 ½ acre minimum zone (SR 2 ½) without adjoining landowner approval. The rules already allow piping outright in the 18 "Exclusive Farm Use" zones in Deschutes County. The Board of County Commissioners will consider the District's proposal during their July 2, 2014 hearing at the County Administrative Offices.

Can COID meet its water conservation goals with a different project?

The Juniper Ridge Project is part of an effort in Central Oregon to stretch finite water supplies to meet our region's growing needs, especially those of cities and the environment. Piping is the most efficient tool to recapture lost water for these new uses, without reducing supplies for current needs. Our Phase II project will build on the success of Phase I by increasing the productivity of our small hydropower facility, generating more renewable energy. Traditional piping projects would not allow COID to capitalize on this hydropower generation nor would they offer any revenue to offset the cost of the pipe, or the design, planning and construction costs of this project. Without the added benefit of green power generation, COID would have a difficult time finding future funding partners to cost share a traditional piping project.

Doesn't COID have a federal right of way for their canals?

COID's rights of way for irrigation facilities were originally created by reservation from federal land patents when lands of the arid West were first transferred to states or private parties. This "subject to" language was reserved under authority of the Carey Act, passed by Congress in 1894. The Act utilized the Right of Way Act of 1891 as the means by which the right of way was granted. Since patent, some rights of way have been modified by subsequent transfer, subject to COID or federal approval.

From: [GOLDFARB Gabriela * GOV](#)
To: [WHITMAN Richard M * GOV](#)
Subject: Info from Tod Heisler re Central Oregon Irrigation District
Date: Wednesday, February 25, 2015 5:03:52 PM

Central Oregon Irrigation District

Pilot Butte Canal

Juniper Ridge area

On the UGB-County line, mostly on County Line

There is one small zone that didn't get the outright use designation; unclear if administrative oversight or intentional, every other part of county comprehensive plan provides for outright use.

Problem was compounded by the way the Irrigation District attorney and manager first approached this (he has since quit). New manager is likely going to ease the attorney off.

Districts would sell to DRC conserved water resulting from piping project

Private property/scenic value argument by residential property owners.

Neighbors trying to:

- * use state historic and national historic designation to stop piping project

- * land use issue to appeal LUBA and go through public conditional use process.

- * **They may prevail because of connection to the District's 5 MW hydroelectric process – that's what connects it to the land use jurisdiction.**

Districts trying to get county commissioners to approve text amendment in zoning to allow piping as outright use in that land use zone.

Very large canal, 500cfs, will take 10 diameter pipe, in order to excavate they need landowner permission, but have perfected federal right of way (summary judgment from federal court)

If pipe is aboveground, need a much bigger hydro facility forebay.

In mediation, or discussions about doing mediation, for 6 months, has broken down.

District may back away for now.

Tod thinks all the local governments need to be brought into coalition in support of regional water plan, along with irrigators – can't be successful if this is COID's fight alone.

Cell 541-480-2388

—
Gabriela Goldfarb, Natural Resources Policy Advisor

Office of Governor Kate Brown, State of Oregon

Tel (503) 378-5232

Cel (971) 209-8277

Scheduler: Julie.Tasnady@Oregon.gov

Please change your records to reflect my updated information.

From: [GOLDFARB Gabriela * GOV](#)
To: [AUNAN Lauri * GOV](#); [LIEBE Annette * GOV](#); [BROWNSCOMBE BRETT E](#)
Cc: [MELCHER Curt](#)
Subject: RE: State Advisory Committee on Historic Preservation
Date: Tuesday, April 07, 2015 4:50:28 PM

Hello all:

I spoke w/MG Devereaux and asked OPRD to prepare a one pager outlining the historic property designation process generally and as it pertains to this location/infrastructure. Will forward when I get it.

Until then, my understanding is that the State Historic Preservation Advisory Committee approved recommending historic property designation for this canal system and sent it to the State Historic Preservation Office, which will review for technical issues and work with the applicant to make technical adjustments based on the Advisory Committee's recommendations. SHPO has 90 days to review, and in this case is expected to take the full 90 days. SHPO then forwards to the Keeper of the National Historic Registry, which makes the designation. In the past, significant local opposition has been a basis for the registry to deny designation.

MG noted that if it does make the list, the County and City have principal authority for implementation under their land use code, and that neither of those entities' codes have a restriction on demolition.

However -- and this is info from a call I made to Tod Heisler at the Deschutes River Land Conservancy about this a few weeks back -- there is a twist in the regulatory framework because this canal connects to the COID's 5MW hydroelectric project. The irrigation district needs landowner permission to put the pipe underground; they have secured the legal right to run the pipe aboveground. However, if it's aboveground, the irrigation district will need to engage in an expensive FERC regulatory and construction process to construct a much bigger hydro facility forebay. The FERC process also provides another Historic Preservation nexus. I mentioned this to OPRD and they are going to look into this angle as well.

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Scheduler:Â Julie.Tasnady@Oregon.gov
Please change your records to reflect my updated information.

-----Original Message-----

From: AUNAN Lauri * GOV
Sent: Tuesday, April 07, 2015 10:05 AM
To: LIEBE Annette * GOV; BROWNSCOMBE BRETT E; GOLDFARB Gabriela * GOV
Cc: MELCHER Curt
Subject: RE: State Advisory Committee on Historic Preservation

Looping Gabriela in re: Parks/SHPO

Lauri Aunan
Policy Advisor
Governor's Natural Resources Office
503-373-1680
503-400-5426 (cell)

From: [CURRAN Chrissy * OPRD](#)
To: [GOLDFARB Gabriela * GOV](#)
Cc: [VANLAANEN Lisa L * OPRD](#); [DEVEREUX MG * OPRD](#)
Subject: Pilot Butte Canal Issues Summary
Date: Friday, April 10, 2015 2:19:31 PM
Attachments: [PBC Issues Analysis.docx](#)

Hi Gabriela,

In response to the conversation you had on Monday with MG Devereux about the Pilot Butte Canal in Deschutes County, I have attached a one-page summary of the primary issues in play from the cultural resources perspective. I left out a lot of distracting detail, so if you have remaining questions or need more information, please let me know.

All best,

Chrissy Curran

Interim Deputy SHPO
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer Street NE, Suite C
Salem, Oregon 97301
Tel: 503-986-0684
Email: chrissy.curran@oregon.gov

Cultural Resources Issues Summary **Pilot Butte Canal/Juniper Ridge Piping Project, Deschutes County** *(April 10, 2015)*

ISSUES:

1. The Central Oregon Irrigation District (COID) is planning to pipe an urban segment of the Pilot Butte Canal (PBC), located partially in Bend and partially in Deschutes County. The project is being funded by the Bureau of Reclamation (BOR). Its purpose is to extend an existing pipeline that was installed a few years ago as part of the Juniper Ridge Hydroelectric Project (opened in 2010), and add a small, secondary hydroelectric facility.
 2. A group of property owners along the affected segment of the PBC nominated the segment to the National Register of Historic Places in 2014 in the hopes that it would stop the piping project and preserve the canal.¹
- Issue No. 1 is resolved. It has to do with compliance with federal cultural resource laws. Because the project is funded by BOR, they are responsible for consultation with the State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act.² (The Federal Energy Regulatory Commission (FERC) is evidently not involved in this "Phase II" of the Juniper Ridge extension project, likely because COID applied for and received a license exemption for the project during the first phase a few years ago, and exemptions exist in perpetuity.) BOR and the SHPO agreed that the PBC is historically significant, that the piping would constitute an adverse effect, and have agreed to mitigation, which is currently underway. Consultation between BOR and the SHPO is complete; BOR has satisfied its 106 obligations under federal law.
 - Issue No. 2 is nearly resolved. Proponents prepared a nomination to the National Register of Historic Places in 2014; it was reviewed by the State Advisory Committee on Historic Preservation in February 2015. The committee voted 4-2 to recommend it for listing. The SHPO holds the nomination for 90 days to resolve any remaining documentation issues and allow for additional public comments. In this case, that means the SHPO will forward the nomination to the National Park Service (NPS) on May 21st. The NPS will hold it for review for 45 days, then make the final decision. We should know by the middle of July if it is listed in the National Register.

ANALYSIS:

Involvement in both these issues was triggered for the State Historic Preservation Office (SHPO) under two distinct and administratively separate federal programs: Section 106 compliance, and the National Register of Historic Places. Neither program has the ability to stop the project or ensure preservation of the PBC. Because, in Oregon, National-Register listing is connected to local land use laws, if the PBC segment is listed in the National Register, it will be subject to local codes that govern protection of historic resources at both the county and city level (the PBC segment spans both jurisdictions). **Whether COID may proceed with demolition of a National-Register-listed resource depends on what the local ordinance says.** At present, the City of Bend and Deschutes County may prohibit demolition, but each considers a variety of factors in making such decisions, including economic impacts. This local process will take over once the NPS makes its final decision. It is the local process that will ultimately determine whether or not COID can pipe the canal segment and move the Juniper Ridge Phase II project forward.

¹ The National Register of Historic Places is a designation program run by the National Park Service and administered at the state level (SHPO).

² Section 106 of the National Historic Preservation Act compels federal agencies to assess their effects on historic properties when they are issuing licenses, permits, or providing funding.

From: [GOLDFARB Gabriela * GOV](#)
To: [CURRAN Chrissy * OPRD](#)
Cc: [VANLAANEN Lisa L * OPRD](#); [DEVEREUX MG * OPRD](#)
Subject: RE: Pilot Butte Canal Issues Summary
Date: Friday, April 17, 2015 10:34:30 AM

Thanks for this Chrissy.

This element of the bulletin caught my eye:

Can a property owner object to a listing?

Owners of private property within a proposed historic district may object to the listing by submitting to the

SHPO a notarized statement certifying that the party is the sole or partial owner of the property and objects

to the listing. The National Register will not list a district if the majority of property owners object.

Each owner of private property in a district has one "vote" regardless of how many properties or what part of the one property that party owns and regardless of whether the property contributes to the significance of the district. An owner is defined as an entity (individual, partnership, corporation or public agency) holding fee simple title to a property. The right to object is described more fully in the federal regulations governing the National Register program, 36 CFR 60.6.

Can you clarify who owns the canal?

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Note: Please change your records to reflect my updated title.

Scheduler: Julie.TASNADY@oregon.gov

From: CURRAN Chrissy * OPRD
Sent: Friday, April 17, 2015 9:52 AM
To: GOLDFARB Gabriela * GOV
Cc: VANLAANEN Lisa L * OPRD; DEVEREUX MG * OPRD
Subject: RE: Pilot Butte Canal Issues Summary

Gabriela,

Since the notarized objection process is typically limited to historic districts (multiple owners), we

From: [CURRAN Chrissy * OPRD](#)
To: [GOLDFARB Gabriela * GOV](#)
Cc: [VANLAANEN Lisa L * OPRD](#); [DEVEREUX MG * OPRD](#)
Subject: RE: Pilot Butte Canal Issues Summary
Date: Friday, April 17, 2015 11:26:55 AM

Ah, the million dollar question. I'm afraid I can't clarify it at this point. The property owners hold the fee simple title to their land; the Central Oregon Irrigation District holds an easement on the land and they own the water rights to move water through the canal. Who owns the canal itself is currently the topic of a heated legal debate at the local level.

The question of ownership needs to be answered, of course, but it is less of an issue for the National Register program than it is for the local jurisdictions. That is because, according to federal regulations, only private-owner objections can stop a listing, if they reach 51% of the majority. If a property is publicly owned, the public entity may object, but it can't prevent a listing. COID is considered a public entity, so even if it is determined that they own the canal, its objection cannot stop the listing.

So far as we know, COID has been the only objector of this nomination.

Chrissy Curran

Acting Deputy SHPO
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer Street NE, Suite C
Salem, Oregon 97301
Tel: 503-986-0684
Email: chrissy.curran@oregon.gov

From: GOLDFARB Gabriela * GOV
Sent: Friday, April 17, 2015 10:35 AM
To: CURRAN Chrissy * OPRD
Cc: VANLAANEN Lisa L * OPRD; DEVEREUX MG * OPRD
Subject: RE: Pilot Butte Canal Issues Summary

Thanks for this Chrissy.

This element of the bulletin caught my eye:

Can a property owner object to a listing?

Owners of private property within a proposed historic district may object to the listing by submitting to the

SHPO a notarized statement certifying that the party is the sole or partial owner of the property and objects

to the listing. The National Register will not list a district if the majority of property owners object.

Each owner of private property in a district has one "vote" regardless of how many properties or what part

From: [CURRAN Chrissy * OPRD](#)
To: [GOLDFARB Gabriela * GOV](#)
Cc: [VANLAANEN Lisa L * OPRD](#); [DEVEREUX MG * OPRD](#)
Subject: RE: Pilot Butte Canal Issues Summary
Date: Monday, April 20, 2015 4:29:29 PM

Gabriela,

The information about the objection letter process in the bulletin is pretty general. That's because the people (or agencies) who have the right to object under federal law (i.e., the fee-simple property owners with properties located within the boundaries of a proposed district) don't have to go in search of the information – we provide it to them. The SHPO is required to notify property owners and elected officials once a nomination is submitted. We also strongly encourage the local government to follow up with notification and public meetings of their own, since it is the local regulations that concern most property owners - but they are not required to do so.

By the way, just because the National Register regulations don't give public owners the right to prevent a listing doesn't mean the local jurisdiction follows those same rules. For example, in Bend and Deschutes County, I believe it is the case that an owner is an owner, public or private, and if the owner objects, the property isn't listed as a local landmark. That has probably caused some confusion for COID, but our staff has been walking them through this process since the very beginning.

I'd be happy to chat with you on the phone about all this. If there is a specific issue you are dealing with, perhaps I can help. I will be out of the office the rest of the week, but available by phone and email.

Chrissy Curran

Acting Deputy SHPO
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer Street NE, Suite C
Salem, Oregon 97301
Tel: 503-986-0684
Email: chrissy.curran@oregon.gov

From: GOLDFARB Gabriela * GOV
Sent: Monday, April 20, 2015 9:06 AM
To: CURRAN Chrissy * OPRD
Cc: VANLAANEN Lisa L * OPRD; DEVEREUX MG * OPRD
Subject: RE: Pilot Butte Canal Issues Summary

Hello Chrissy:

I appreciate the clarification, that is helpful. Would the information regarding the public entity aspect be found only by reading the federal regulations? There is no mention in the Bulletin.

Thanks --

From: [GOLDFARB Gabriela * GOV](#)
To: [GOLDFARB Gabriela * GOV](#)
Subject: TELCON: Rich Golb re COID Pilot Butte Canal
Date: Monday, April 20, 2015 4:56:36 PM

2 law firms have been involved
Stoel Rives in Portland

In non-legal terms: when state recommends hist designation, NPS is likely to designate as historic. Fed designation triggers state Goal 5 restrictions, atty's representing the district believe ability to maintain existing status quo, much less piping.

Believe can accommodate routine ops & maintenance, but if major problem, designation would make response problematic

Piping could be blocked.

State advisory committee met, brought forward 25 national and local/tribal supporters.

\$31M in funding for the project; 75% of funds are state funds.

Enhances public safety, environmental benefits in terms of conservation (8cfs in stream permanently).

Advisory cmte said – they don't look at any of those things.

9th circuit ruled that Districts have the right to do piping projects.

10 homeowners accept piping projects
10 going along
10 actively engaged

National Historic Designation triggers Goal 5 restriction

Phase 2 ready to go to construction; County going to bring the project back in 30 days.

BOR and USFWS have been big investors, millions of dollars, oppose designation.

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Scheduler: Julie.Tasnady@Oregon.gov

Please change your records to reflect my
updated information.

From: [Richard Golb](#)
To: [GOLDFARB Gabriela * GOV](#)
Cc: [BROWNSCOMBE BRETT E](#); [MELCHER Curt](#)
Subject: Juniper Ridge Water Conservation Project
Date: Friday, May 01, 2015 5:41:17 PM
Attachments: [COID Fact Sheet - May 2015.pdf](#)

Gabriela - I'm getting back to you on your request for more information surrounding COID's concerns with the recent action by the State Advisory Committee on Historic Preservation (SACHP) to recommend approval of the application by the Pilot Butte Canal Preservation Alliance (PBCPA) to nominate a 1.5-mile segment of the Pilot Butte Canal to the National Register of Historic Places (NRHP).

I think everyone is clear on the process, in that given the 4 to 2 vote by the SACHP to recommend approval, the proposed nomination is currently being held by the SHPO for further comment for a 90-day period, until May 21. At that time, the nomination will be forwarded to the National Park Service (NPS), and then the NPS will make a decision 45 days later.

While COID strongly disagrees with the SACHP's recommendation for a variety of substantive reasons, which we have discussed (outlined in the attached fact sheet), you raised the issue of whether inclusion of the 1.5-mile segment of the canal to the NRHP will in fact effectively prevent piping of the subject segment. While we do not believe inclusion to the NRHP would amount to an absolute legal bar on piping, absent changes in state or local law, we believe as a practical matter, it would make it very difficult, if not impossible, for COID to proceed with piping. Including the 1.5-mile segment in the NRHP will lead to additional local approval processes, cause more delays and unnecessary expenses, and only empower those opposed to piping.

As background, and as COID understands the context for the current nomination, the NRHP is a historic designation program run by the NPS, but administered at the state level by the SHPO. As part of the State's effort to comply with federal law, the Oregon Land Conservation and Development Commission (LCDC) adopted Oregon Administrative Rule (OAR) 660-023-0200, which defines "historic resources of statewide significance" as including buildings, structures, objects, sites or districts listed in the NRHP. The rule goes on to require that local governments "protect all historic resources of statewide significance through local historic protection regulations, regardless of whether these resources are 'designated' in the local plan." In essence, if the canal is included in the NRHP, then by state rule, it must be protected under local historic resource protective codes, even if the local government would not have otherwise designated the resource for protection on its own. Thus, even if the local government is opposed to the designation and opposed to protecting the resource under its local historic protection regulations (which is the case here, as Deschutes County has already rejected the local designation effort by PBCPA of the same canal segment), local governments are required by state law to protect any resource included in the NRHP.

Given that the 1.5-mile segment of the canal is within Deschutes County, if the NPS ultimately decides to include the canal segment in the NRHP, then it will be protected under the Deschutes County Code. Chapter 2.28 of the Code governs historic preservation in the County, and in particular sets forth requirements for preserving districts, buildings, structures and sites, including those included in the NRHP. The Code goes on to mandate that no person

may demolish or alter any historic resource without the approval of the County. The County's decision to grant such approval is evaluated pursuant to a set of criteria, which are designed to make it very difficult to demolish or alter historic resources. If the criteria were applied to an application to replace the 1.5-mile segment of canal with a pipe, approval may be very difficult, if not impossible, to receive. For example, in determining whether to approve the demolition or removal of the canal, the County (through its Landmarks Commission) would consider a list of factors, including "[t]he criteria used in the original designation of the historical structure, building or district," as well as "[t]he effects of the proposed demolition or removal upon the protection, enhancement, perpetuation and use of the structure and/or building which cause it to possess a special character, or special historical or aesthetic interest or value." In short, COID will be at a significant disadvantage when it comes to receiving approval to pipe the subject segment of canal, given the emphasis that some of the criteria place on the manner in which the canal was protected in the first instance. Thus, COID will undoubtedly encounter the same arguments from the same opponents when it seeks approval to pipe that were raised at the time of the proposed nomination--in particular, that environmental, economic, and social consequences are irrelevant in the demolition/alteration decision, just as they apparently are not considered at the nomination stage. COID will of course dispute this, but the state's actions at the nomination stage are not only setting up COID to have to go through an additional layer of local approvals, with their own set of appeals, but the manner in which the state has approved the nomination only makes it that much more difficult to demolish or alter the canal in the future, whether for piping or otherwise. In sum, having to secure local approvals to pipe in a historic district--which again will only occur if the 1.5 mile segment of canal is included in the NRHP given Deschutes County's rejection of the local Goal 5 application--would severely hinder efforts to pipe the subject segment of canal, or otherwise upgrade and modernize COID's delivery system, on any reasonable timeframe.

We understand the position of the SHPO to be that once the canal segment is included in the NRHP, then the state will step away from the alteration and demolition decision, and it will be Deschutes County's decision to either allow or prohibit demolition. This position, however, ignores the fact that the County would never be in the position to have to make this decision absent the state's recommendation to the NPS to include the canal to the NRHP. Moreover, it's the way the state has chosen to implement protections for NRHP-listed resources that unduly burdens COID. Stated bluntly, there is no requirement in federal law that the inclusion of a building, structure, object, site, or district to the NRHP must necessarily result in Goal 5-level protections. Rather, by virtue of OAR 660-023-0200, this level of protection is required by the State. So while it may be true that the local process will ultimately determine whether or not COID can pipe the subject canal segment and move the Juniper Ridge Phase II project forward, the local process is only triggered as a result of the State forwarding the recommendation to the NPS. And then once included to the NRHP, it is a State administrative rule that requires the County to protect the canal with a heightened level of protection that is more appropriate for locally-designated resources.

I hope this explanation is helpful. What would be the best time for us to discuss options for the State to help COID and our partners (including the State) advance the project?

Vancouver WA 98684
360.397.0248
360.326.1551 (fax)

From: [Richard Golb](#)
To: [GOLDFARB Gabriela](#) * GOV; [MELCHER Curt](#); [BROWNSCOMBE BRETT E](#)
Subject: Fwd: National Register Irvington Historic District, proposed boundary decrease
Date: Thursday, May 14, 2015 9:31:37 AM

All - Please see the email below. As you can see, the Advisory Committee process is not meant to provide real "review" or assessment. It would really be helpful to discuss this matter.

Richard K. Golb
PacificComm LLC
201 NE Park Plaza Drive Ste 269
Vancouver WA 98684
360.397.0248
360.326.1551 (fax)

Begin forwarded message:

From: "Craig Horrell" <chorrell@coid.org>
To: "Filippi, David" <david.filippi@stoel.com>, "Richard Golb" <rich@pacificcommllc.com>, <Matt.Singer@hklaw.com>
Subject: FW: National Register Irvington Historic District, proposed boundary decrease
Date: May 14, 2015 at 9:28:19 AM PDT

-----Original Message-----

From: JOHNSON Ian * OPRD [<mailto:Ian.Johnson@oregon.gov>]
Sent: Thursday, May 14, 2015 8:38 AM
To: 'Heidi Kennedy'; 'Michael Hall'; 'Pat Kliewer'; 'Elizabeth Dickson'; 'COID'; 'Craig Horrell'; 'Matt Martin'; 'Peter Gutowsky'; Aleta Warren; Jeff Perreault
Subject: RE: National Register Irvington Historic District, proposed boundary decrease

Hello all,

I realized that I made a mistake yesterday when calculating the end of the 90-day SHPO comment period. The correct date is May 20th. The mistake was made when I calculated the 90 calendar days from the last day of the meeting (Friday) instead of Thursday the 19th when the hearing was held. I apologize for the inconvenience.

As of yesterday, I received a final draft from the proponents. I will be formatting the document to meet Oregon SHPO standards and then I will read the document for typographical and other surface errors per our standard procedure for preparing nominations to the National Park Service. Due to other pressing deadlines I will not be able to make the final copy available

From: [Richard Golb](#)
To: [GOLDFARB Gabriela * GOV](#); [MELCHER Curt](#); [BROWNSCOMBE BRETT E](#)
Cc: [TASNADY Julie * GOV](#)
Subject: Re: National Register Irvington Historic District, proposed boundary decrease
Date: Monday, May 18, 2015 3:23:45 PM
Attachments: [Pilot Butte Canal NHRP Comment Letter FINAL\(2\).docx](#)

Gabriela - Since we last spoke, the U.S. Bureau of Reclamation (see attached) has written SHPO in opposition to the historic designation. Now, the Bureau has joined the City of Bend, Deschutes County, and Central Oregon Irrigation District in raising concerns regarding the State proposal. Please remember too that over 20 stakeholders including Trout Unlimited, the Deschutes River Conservancy, the Upper Deschutes Watershed Council, and many others all support piping this section of canal.

We're hopeful the Brown Administration is willing to help COID and all of our partners in not seeking the federal designation.

Richard K. Golb
PacificComm LLC
201 NE Park Plaza Drive Ste 269
Vancouver WA 98684
360.397.0248
360.326.1551 (fax)

On May 14, 2015, at 10:51 AM, GOLDFARB Gabriela * GOV
<Gabriela.GOLDFARB@oregon.gov> wrote:

Thanks Rich. Per our email exchange this morning, I am awaiting information from DOJ about the land use implications of a National Historic Register designation. I should receive that in the next few days, and will be in touch to arrange a time for us to talk.

Curt/Brett, let me know if one of you wish to participate in that conversation.

Best,

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Note: Please change your records to reflect my updated title.
Scheduler: Julie.TASNADY@oregon.gov

From: [GOLDFARB Gabriela * GOV](#)
To: [SUMPTION Lisa * OPRD](#)
Subject: Fwd: Letter re Juniper Ridge
Date: Monday, June 29, 2015 4:50:30 PM

Hi Lisa - I wanted to run the attached letter past you, and see if you wanted to add language that better conveys that historic preservation is a priority for the state -- assuming there is a way OPRD/SHPO would want to say it that goes beyond that dry statement I just made. (I will then add "but there are occasions when important values may come in conflict, as in this case...etc")

Also, it is frustrating to me - and a frustration I expressed to Chrissy -- that I cannot find any mention of the project or how to comment on it at the state and (equally important, and relevant now) the federal level - and I could not find it on the NPS website either.

I am going to try you by phone to discuss...sorry to dump this on you on short notice, I was just alerted that the federal deadline is the end of this week!

Gabriela

Sent from my iPad

--

Gabriela Goldfarb, Policy Advisor ~ Natural Resources
Office of Oregon Governor Kate Brown
Gabriela.Goldfarb@oregon.gov
[\(503\) 378-5232](tel:(503)378-5232) Office
[\(971\) 209-8277](tel:(971)209-8277) Cell

Please update your records to reflect changes above

Scheduler: Julie.Tasnady@oregon.gov (503) 986-6535

Begin forwarded message:

From: Curt Melcher <curt.melcher@state.or.us>
Date: June 29, 2015 at 4:32:43 PM PDT
To: MELCHER Curt <curt.melcher@state.or.us>, "GOLDFARB Gabriela * GOV" (gabriela.goldfarb@oregon.gov) <gabriela.goldfarb@oregon.gov>, "LOFTSGAARDEN Meta" <meta.loftsgaarden@state.or.us>, RANCIER Racquel R <racquel.r.rancier@state.or.us>
Cc: BYLER Thomas M <thomas.m.byler@state.or.us>
Subject: RE: Letter re Juniper Ridge

Thanks Racquel.

CM

Attachment 12

From: [Curt Melcher](#)
To: [GOLDFARB Gabriela * GOV](#)
Subject: Fwd: Letter
Date: Tuesday, June 30, 2015 2:45:51 AM

Here is Rich's response regarding the letter I sent you.

CM

Sent from my Verizon Wireless 4G LTE smartphone

----- Original message -----

From: Richard Golb <rich@pacificcommllc.com>
Date: 06/30/2015 2:14 AM (GMT-08:00)
To: Curt Melcher <curt.melcher@state.or.us>, Brett Brownscombe
<brett.e.brownscombe@state.or.us>
Subject: Letter

Curt - Thanks for the follow-up. Yes, COID is still pursuing the Juniper Ridge water conservation project. The District has asked Deschutes County for more time to "redesign" the project but still plans to pursue it. In fact, the District just sent the Bureau of Reclamation a letter requesting additional funds for a potentially larger canal piping project. A National historic listing (based upon the State Advisory Committee recommendation) does only apply to this section of the Pilot Butte canal. And that presents part of the problem. This is one of the worst sections of all of COID's canals, with conveyance losses of up to 40%. Additionally, the listing would preempt a local, state and federal review now underway of all of COID's canals, to determine which sections are the most appropriate to designate and which are not. And finally, we believe it is appropriate for the Brown Administration to write the Secretary of Interior. Of course, the letter could also be addressed to the National Park Service Director.

I'll be out of the office later this week, but please call my cell on Tuesday if you would like to follow-up.

Richard K. Golb
PacificComm LLC
201 NE Park Plaza Drive Ste 269
Vancouver WA 98684
360.397.0248
360.326.1551 (fax)

From: [CURRAN Chrissy * OPRD](#)
To: [GOLDFARB Gabriela * GOV](#)
Cc: [SUMPTION Lisa * OPRD](#); [DEVEREUX MG * OPRD](#)
Subject: Follow-up on Pilot Butte letter
Date: Tuesday, June 30, 2015 5:09:22 PM

Gabriela,

The more I think about your letter opposing the listing of Pilot Butte Canal in the National Register, the more this situation strikes me as highly unusual, for the following reasons:

- I think I have mentioned to you in previous emails that, in Oregon, National Register listing is tied to local land-use laws. Most states have not linked the National Register to regulatory local ordinances, but Oregon has. It is a state law that does this. With your letter, the State is trying to stop a listing in order to help a local agency avoid the regulation that state law requires. That is an awkward circumstance, particularly since the State Advisory Committee on Historic Preservation and the State Historic Preservation Officer recommended the property to the NPS for listing.
- The National Register will make a decision on whether to list the Pilot Butte Canal based on the adequacy of the documentation prepared by the proponents, the ability of the property to meet the program criteria, and the integrity of the administrative process. They don't have the discretion to refuse to list a property based on local politics, planning issues, or even the balancing of natural and cultural resources. The scope of the National Register review is pretty narrow.

I am speaking frankly here, but I see the potential here for the State to inadvertently create the perception of mixed messages around cultural resources, and set an unhealthy precedent for future controversial nominations. I just want to make sure this situation has been viewed from every angle. Please call me if I can help in any way.

All best,

Chrissy Curran

Acting Deputy SHPO
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer Street NE, Suite C
Salem, Oregon 97301
Tel: 503-986-0684
Email: chrissy.curran@oregon.gov

KATE BROWN
GOVERNOR



July 10, 2015

The Honorable Sally Jewell
Secretary
U.S. Department of Interior
1849 C Street
Washington DC 20005
Via Fax: 202-273-3501

J. Paul Loether, Chief
National Register of Historic Places
National Park Service
1201 Eye St. NW, 8th floor
Washington, DC 20005
Via FAX: 202-371-6447.

Dear Secretary Jewell and Chief Loether:

I understand the National Park Service is reviewing whether to include a section of Central Oregon Irrigation District's Pilot Butte Canal (Bend, Oregon) in the National Register of Historic Places.

I am writing on behalf of Governor Brown to express concern about the inclusion of this canal in the National Register. Such a designation would limit, and may even effectively preclude, the irrigation district from replacing this open section of canal with a buried pipe. The proposed piping project is the second phase of the successful Juniper Ridge water conservation project. The State of Oregon supports this project along with national, regional, and local stakeholders, including the Confederated Tribes of Warm Springs, the Upper Deschutes Watershed Council, Deschutes River Conservancy, local governments, irrigation districts, and other conservation organizations. Over \$30 million in local, state and federal funds have been committed to this project (Phases I and II) because it will conserve water and increase river flows for fish, wildlife, and recreation.

Piping canals is one of the most efficient means to conserve water, which is essential in the drought stricken West. Under Oregon law, at least 25 percent of the conserved water left instream is protected from appropriation and permanently returned to instream uses. Water conserved by this project would benefit numerous federally protected species, including bull trout, steelhead, and Oregon spotted frog. Additionally, the Central Oregon Irrigation District (COID), U.S. Bureau of Reclamation, and state agencies are reviewing all of COID's canals as part of a comprehensive process to determine their appropriate status.

Oregon does strongly support in our policies and programs both the obligation to preserve significant historic and cultural resources of our communities for the benefit of present and future generations, and the obligation to be responsible stewards of our natural resources vital to the people, fish, and wildlife they support. In the present circumstance, these two important values are in conflict. Earlier this year, the State Advisory Committee on Historic Preservation recommended listing this section of canal in the National Register of Historic Places.

It is important to note that COID, owner of the Pilot Butte Canal, objects to such a listing. Furthermore, since that recommendation, the City of Bend, Deschutes County, the U.S. Bureau of Reclamation, and others have raised legitimate concerns that the listing would be counterproductive to Oregon's interests in efficient use of water and the associated fish, wildlife, and recreation values.

I encourage you to consider closely the circumstance that, notwithstanding support from real property owners in the vicinity of the project, the owner of the proposed historic structure itself, sited on the real property by way of an easement, strongly objects to the historic property designation. The outcome of your evaluation will have a decisive bearing on whether this important water conservation project advances and allows Oregon's fish, wildlife, and recreation values to be fully realized.

Sincerely,



Gabriela Goldfarb
Natural Resources Policy Advisor
Office of Governor Kate Brown

From: [GOLDFARB Gabriela * GOV](#)
To: [MELCHER Curt](#); [MELCHER Curt](#); [LOFTSGAARDEN Meta](#)
Cc: [RANCIER Racquel R](#); [BYLER Thomas M](#)
Subject: RE: Letter re Juniper Ridge
Date: Sunday, July 12, 2015 10:00:55 PM
Attachments: [7-10-15 Secretary Jewell Chief Loether Pilot Butte Final.pdf](#)

Folks, wanted to share with you the letter submitted to DOI and NPS on Friday. Let me know if you'd like to discuss, and thanks for pulling together on the original draft. I know SHPO has concerns about this letter, FYI – hopefully this is the rare case where we have this degree of conflict between historic preservation and a major natural resource conservation priority.

Best,

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Note: Please change your records to reflect my updated title.

Scheduler: Julie.TASNADY@oregon.gov

From: Curt Melcher [<mailto:curt.melcher@state.or.us>]
Sent: Thursday, June 25, 2015 11:07 PM
To: MELCHER Curt; GOLDFARB Gabriela * GOV; LOFTSGAARDEN Meta
Cc: RANCIER Racquel R; BYLER Thomas M
Subject: RE: Letter re Juniper Ridge

Thanks Meta. Gabriela, let me know if you need anything else.

CM

From: LOFTSGAARDEN Meta
Sent: Wednesday, June 24, 2015 4:15 PM
To: MELCHER Curt; GOLDFARB Gabriela * GOV (gabriela.goldfarb@oregon.gov)
Cc: RANCIER Racquel R; BYLER Thomas M
Subject: RE: Letter re Juniper Ridge

No changes from our end. Thanks, Curt.

Meta

From: Curt Melcher [<mailto:curt.melcher@state.or.us>]
Sent: Wednesday, June 24, 2015 12:01 PM
To: GOLDFARB Gabriela * GOV (gabriela.goldfarb@oregon.gov)

From: [GOLDFARB Gabriela * GOV](#)
To: [MELCHER Curt](#); [BROWNSCOMBE BRETT E](#); [BYLER Thomas M](#); [RANCIER Racquel R](#); [LOFTSGAARDEN Meta](#); [SHIPSEY Steve](#); [WHITMAN Richard M * GOV](#)
Subject: Fwd: Pilot Butte Canal nomination
Date: Thursday, July 16, 2015 2:49:14 PM

FYI. I have asked SHPO how they intend to resolve the ownership question, or if they will ask the applicant to do so somehow.

Richard, I will flag for comms.

Gabriela

Sent from my iPad

--

Gabriela Goldfarb, Policy Advisor ~ Natural Resources
Office of Oregon Governor Kate Brown
Gabriela.Goldfarb@oregon.gov
(503) 378-5232 Office
(971) 209-8277 Cell

Please update your records to reflect changes above

Scheduler: Julie.Tasnady@oregon.gov (503) 986-6535

Begin forwarded message:

From: CURRAN Chrissy * OPRD <Chrissy.Curran@oregon.gov>
Date: July 16, 2015 at 5:31:04 PM EDT
To: GOLDFARB Gabriela * GOV <Gabriela.GOLDFARB@oregon.gov>
Cc: SUMPTION Lisa * OPRD <Lisa.Sumption@oregon.gov>, JOHNSON Ian * OPRD <Ian.Johnson@oregon.gov>
Subject: Pilot Butte Canal nomination

Gabriela,

Just a heads-up that the National Park Service is returning to the Oregon SHPO the Pilot Butte Canal nomination for major editing and **ownership questions**.

The schedule from this point is unclear and depends on two things: if and when the preparers can accomplish the necessary edits; and the answers to the ownership issues. We are returning the nomination to the preparers and will await further guidance from the NPS.

Chrissy Curran

From: [Richard Golb](#)
To: [GOLDFARB Gabriela * GOV](#)
Subject: Aug 10
Date: Tuesday, July 21, 2015 2:43:00 PM

Gabriela - How about Aug 10 in Salem with you, Oregon Parks and SHPO? Anytime that day works for Craig Horrell (COID General Manager), David Filippi (COID attorney) and myself. We would like to discuss the following questions/issues:

- 1) How does the state intend to address/resolve COID's limited fee ownership of the Pilot Butte Canal as granted under the 1891 Right of Way Act?
- 2) How does the state intend to address the NEPA issues surrounding the nomination?
- 3) Why won't SHPO defer to the ongoing MOA/MPD process, which includes SHPO, USBR, and COID?
- 4) What is process that SHPO envisions going forward?
- 5) How will SHPO/state help to facilitate piping of irrigation canals to promote water conservation, higher instream flows for fish and wildlife, etc?

Richard K. Golb
PacificComm LLC
201 NE Park Plaza Drive Ste 269
Vancouver WA 98684
360.397.0248
360.326.1551 (fax)

From: [GOLDFARB Gabriela * GOV](#)
To: [SUMPTION Lisa * OPRD](#)
Subject: Request from Central OR Irrigation District for a meeting FW: Aug 10
Date: Tuesday, July 21, 2015 5:38:44 PM

Hi Lisa – boy, this is my day for OPRD stuff (and your day for Governor's office stuff!)

I picked up a ringing phone and got Rich Golb, who wanted to meet to discuss "changing the SHPO advisory committee recommendation." I made clear that there is no avenue to change that, and that historic/cultural resource evaluations are based on those criteria, not natural resource protection criteria. He raised questions (which I have as well) about the pursuit of a "historic district" nomination versus the designation of the one section of canal that went forward.

I asked him to send me written questions, which he has done, and that I would meet with him and look into having OPRD/SHPO at the meeting as well.

Let me know if we need to discuss, or, if you are in agreement to have OPRD/SHPO participation, let me know who, and I'll have Julie follow up to schedule. In addition to August 10, I know August 11 is also an option.

Thank you!

Gabriela

—

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
T (503) 378-5232
M (971) 209-8277
Scheduler: Julie.Tasnady@Oregon.gov

From: Rich Golb [mailto:pacificcommllc@gmail.com] **On Behalf Of** Richard Golb
Sent: Tuesday, July 21, 2015 2:43 PM
To: GOLDFARB Gabriela * GOV
Subject: Aug 10

Gabriela - How about Aug 10 in Salem with you, Oregon Parks and SHPO? Anytime that day works for Craig Horrell (COID General Manager), David Filippi (COID attorney) and myself. We would like to discuss the following questions/issues:

- 1) How does the state intend to address/resolve COID's limited fee ownership of the Pilot Butte Canal as granted under the 1891 Right of Way Act?
- 2) How does the state intend to address the NEPA issues surrounding the nomination?
- 3) Why won't SHPO defer to the ongoing MOA/MPD process, which includes SHPO, USBR, and COID?
- 4) What is process that SHPO envisions going forward?

From: [GOLDFARB Gabriela * GOV](#)
To: [LIEBE Annette * GOV](#)
Subject: FW: Request from Central OR Irrigation District for a meeting FW: Aug 10
Date: Thursday, July 23, 2015 1:58:45 PM

Annette, scroll to the bottom to see their list of questions (I asked him to prepare those to structure a conversation with SHPO). Let me know if you want to join by phone or in person, and how your convo w/Craig goes today.

You should know I told Rich that there is no scope for reversing the decision of the state advisory committee on historic preservation or otherwise introducing natural resource considerations into the evaluation of historic resources related to this project. Any such "balancing" would have to come about via other mechanisms – but such changes would involve wholesale revisions to state law, and that it is unclear at this point whether the circumstances in this case are likely to recur to the degree that it such a big lift makes sense.

Raising the questions about ownership – which is something the National Register process DOES take into account – appears to be the best tool. And appears to have been effective in getting NPS to kick back the application.

Thanks!

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
T (503) 378-5232
M (971) 209-8277
Scheduler: Julie.Tasnady@Oregon.gov

From: SUMPTION Lisa * OPRD
Sent: Tuesday, July 21, 2015 8:00 PM
To: GOLDFARB Gabriela * GOV
Subject: RE: Request from Central OR Irrigation District for a meeting FW: Aug 10

Hilarious. We have not touched base this much in months!

Let me check with Chrissy in the morning and see if her and I can join the two of you.

I will have Jennifer coordinate with Julie.

I have another SHPO issue brewing with the city of Powder. I have a meeting tomorrow on it and if that does not resolve it I will give you a call and update.

Have a great rest of your evening!

Lisa

From: [GOLDFARB Gabriela * GOV](#)
To: [MELCHER Curt](#); [BYLER Thomas M](#); [LOFTSGAARDEN Meta](#); [SUMPTION Lisa * OPRD](#)
Cc: [GARRAHAN Paul](#); [SHIPSEY Steve](#); [BROWNSCOMBE BRETT E](#); [RANCIER Racquel R](#); [WHITMAN Richard M * GOV](#)
Subject: Split bill for COID/SHPO legal work
Date: Wednesday, August 05, 2015 1:53:55 PM
Attachments: [20150731133339081.pdf](#)
[7-10-15 Secretary Jewell Chief Loether Pilot Butte Final.pdf](#)

Directors, we have received a copy of the attached letter from a Bend homeowner challenging the letter sent to Secy Jewell and the NPS (also attached) raising concerns and questioning ownership issues relating to the National Register of Historic Places nomination of the Pilot Butte canal.

[REDACTED]

Please let me know if you'd like to discuss.

Best,

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Note: Please change your records to reflect my updated title.
Scheduler: Julie.TASNADY@oregon.gov

From: [Busey Jen * OPRD](#)
To: [TASNADY Julie * GOV](#)
Cc: [SHIPSEY Steve \(Steve.SHIPSEY@state.or.us\)](#)
Subject: FW: Mtg: Rich Golb, Craig Horrell, David Filippi / Gabriela Goldfarb, Lisa Sumption, Chrissy Curran
Date: Monday, August 10, 2015 5:10:31 PM

Hi Julie,

Counsel Steve Shipsey will be joining tomorrow's 4pm by cell at 503.302.3006.

Can you help make sure he gets connected?

Thank you,
Jennifer Busey

From: Shipsey Steven [<mailto:steve.shipsey@state.or.us>]
Sent: Monday, August 10, 2015 5:09 PM
To: Busey Jen * OPRD
Subject: RE: Mtg: Rich Golb, Craig Horrell, David Filippi / Gabriela Goldfarb, Lisa Sumption, Chrissy Curran

I'm going to be by phone (mobile) after all

Steven Shipsey

503.947.4584 (Monday & Wednesday)
503.302.3006 (Tuesday & Friday – mobile)
503.934.0023 (Thursday – no messages)

-----Original Appointment-----

From: Jen.Busey@oregon.gov [<mailto:Jen.Busey@oregon.gov>] **On Behalf Of** GOLDFARB Gabriela * GOV
Sent: Monday, August 10, 2015 5:07 PM
To: SHIPSEY Steve
Subject: FW: Mtg: Rich Golb, Craig Horrell, David Filippi / Gabriela Goldfarb, Lisa Sumption, Chrissy Curran
When: Tuesday, August 11, 2015 4:00 PM-5:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Captiol Bldg, Governor's conference room #254

Hi Steve – are you joining this meeting by phone or in person? I wasn't sure where you all left this?

Thank you,
Jennifer Busey

-----Original Appointment-----

From: GOLDFARB Gabriela * GOV
Sent: Monday, July 27, 2015 11:05 AM
To: GOLDFARB Gabriela * GOV; Richard Golb; SUMPTION Lisa * OPRD; CURRAN Chrissy * OPRD

Subject: Mtg: Rich Golb, Craig Horrell, David Filippi / Gabriela Goldfarb, Lisa Sumption, Chrissy Curran
When: Tuesday, August 11, 2015 4:00 PM-5:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Capitol Bldg, Governor's conference room #254

8/10/15: Changing locations of this meeting to the Governor's Conf Room # 254 in the Capitol Bldg.

Thanks,
Julie

Meeting details:

Date: 8/11/15

Time: 4-5pm

Location: Public Service Building, 255 Capitol Street, Suite 126, Salem

Participants:

Craig Horrell (COID general manager), David Filippi (COID attorney), Rich Golb

States of Oregon: Gabriela Goldfarb, Lisa Sumption, Chrissy Curran

Please let me know if you have any questions.

Julie

From: Rich Golb [<mailto:pacificcommllc@gmail.com>] **On Behalf Of** Richard Golb

Sent: Tuesday, July 21, 2015 2:43 PM

To: GOLDFARB Gabriela * GOV

Subject: Aug 10

Gabriela - How about Aug 10 in Salem with you, Oregon Parks and SHPO? Anytime that day works for Craig Horrell (COID General Manager), David Filippi (COID attorney) and myself. We would like to discuss the following questions/issues:

- 1) How does the state intend to address/resolve COID's limited fee ownership of the Pilot Butte Canal as granted under the 1891 Right of Way Act?
- 2) How does the state intend to address the NEPA issues surrounding the nomination?
- 3) Why won't SHPO defer to the ongoing MOA/MPD process, which includes SHPO, USBR, and COID?
- 4) What is process that SHPO envisions going forward?
- 5) How will SHPO/state help to facilitate piping of irrigation canals to promote water conservation, higher instream flows for fish and wildlife, etc?

Richard K. Golb

PacificComm LLC

201 NE Park Plaza Drive Ste 269

Vancouver WA 98684

From: [GOLDFARB Gabriela * GOV](#)
To: [MELCHER Curt](#); [BYLER Thomas M](#); [Meta Loftsgaarden](#); [RUE Jim](#); [SUMPTION Lisa * OPRD](#)
Cc: [LIEBE Annette * GOV](#); [HOWARD Lisa * GOV](#); [GARRAHAN Paul](#); [RANCIER Racquel R](#); [WHITMAN Richard M * GOV](#)
Subject: Follow up piping project/historic preservation conflicts in Central Oregon
Date: Thursday, August 20, 2015 4:32:00 PM

Dear Directors:

At last week's NR Cabinet we discussed the issue of water conservation piping projects becoming subjects of historic preservation designation efforts by homeowners seeking to block piping in order to preserve scenic water features on their property. I will send under separate cover background documents related to the Central Oregon Irrigation District Pilot Butte/Juniper Ridge project, in the meantime, here is this link to OPRD's [webpage](#) with information about the nomination and process.

A meeting last week among COID, the Governor's office, and OPRD, clarified that the historic registry processes as presently implemented by both the state or the federal government do not provide an opportunity to evaluate and make a choice between conflicting water conservation and historic preservation priorities.

Oregon is one of three states in the country for which National Register of Historic Places designation carries significant implications for actions that affect listed historic resources. I am requesting your assistance to clarify what is at stake if the current state of affairs continues – that is, how important is it to the state's water and natural resource conservation needs to eliminate this as one barrier to piping projects? Is it significant enough to justify the lift that would be required to develop a mechanism that allows the state to make choices when natural resource protection and historic preservation values conflict.

[REDACTED]

Please notify Racquel Rancier at OWRD whom from your agency should participate in this threshold discussion. Racquel will coordinate pulling together the group.

Let me know if you have questions.

Best,

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
T (503) 378-5232
M (971) 209-8277
Scheduler: Julie.Tasnady@Oregon.gov

From: [GOLDFARB Gabriela * GOV](#)
To: [RUE Jim](#); [MACLAREN Carrie](#)
Subject: Central Oregon Irrigation District/Historic Registry related documents
Date: Monday, August 24, 2015 11:30:44 PM
Attachments: [JUSTICE-#6529969-v1-Goal 5: Historic Resources background.docx](#)
[7-10-15 Secretary Jewell Chief Loether Pilot Butte Final.pdf](#)
[PBC Issues Analysis.docx](#)
[Pilot Butte Canal Ownership.msg](#)

Hi Jim: In follow up to our conversation today, forwarding a number of documents as background.



SHPO (Chrissy Curran) is still awaiting the letter from the National Park Service specifying terms for the NPS' kicking back the original submission due to defects; I will forward it once I receive it.

Here is a link to the SHPO page consolidating documents from the Historic Registry process:
<http://www.oregon.gov/oprd/HCD/NATREG/Pages/Pilot-Butte-Canal-Historic-District.aspx>

I have somewhere the letter from the homeowners' attorney contesting the question I raise about ownership in the Governor's office letter I submitted to Interior/Park Service – can't lay my hands on it now. Will try to find it.

Let me know once you've had a chance to visit about this and discuss next steps.

Thanks –

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277

Note: Please change your records to reflect my updated title.
Scheduler: Julie.TASNADY@oregon.gov

Ideas for re-establishing Goal 5 process elements or alternative policy balancing option into local protection of a property listed on the National register of Historic Places.

OAR 660-200, the "Goal 5 rule" for historic resources puts properties listed on the National Register of Historic Places (NRHP) on a fast track to receive protection under existing city and county historic preservation codes. This fast track severely restricts a local government's ability to weigh the benefits and consequences of limiting future actions that could conflict with preserving the listed property. These restrictions on local process may be an unintended result of relying too heavily on a federal inventory process. The Goal 5 rule could be amended to restore local and state influence over strategies to preserve historic resources.

Option 1; Add requirement for ESEE analysis

For sites determined to be significant by the application of local standards a jurisdiction has the option of conducting an analysis of the economic, social, environmental and energy consequences of a decision to allow, limit, or prohibit conflicting uses. The "ESEE analysis" provides a basis for selecting appropriate protection standards. OAR 660-23-0200 could be amended to require that local protections for sites added to the NRHP be supported by an ESEE analysis.

Prose -This would insert a process to insure that local protections for a NRHP are considerate of the larger natural resource and land use implications of those protections.

Cons - Process costs money. The added cost of an ESEE analysis would likely be passed onto the applicant. Also the ESEE process is a discretionary process susceptible to LUBA challenge.
Appeal of a local decision adds costs to all involved.

Option 2; Build in differentiation between sites of local, state and National significance

In addition to properties of "national significance", properties of "state significance" and "local significance" can be nominated to the NRHP. Once a property is listed on the federal register they are treated the same way by Division 23. Possibly the rule could be amended to require properties nominated for their statewide significance be reviewed by a state entity, and properties nominated for local significance be reviewed by the local government.

Pros – This would restore state and local discretion to how the federal listing is incorporated into state and local planning and policy decisions.

Cons – The details for state level review would have to be worked out. Local review would add process and cost, but possibly less than Option 2.

Option 3; Keep amendments focused on designations that impact state interests

Amanda Punton
DLCD
September 8, 2015

National and local historic designations that affect state property, investments or policy could be reviewed by a state entity or be subject to state review standards. The intent would be to preserve the public benefits realized by state management of resources under its control. The state would need to have the ability to weigh in on the initial nomination or on the protections afforded to a building, structure or district at the local level. (The opportunity to influence nomination to the NRHP is limited by federal law.) Possible triggers for review are: districts that include multiple properties; districts and structures that serve the function of delivering a state owned or regulated natural resource; nominations of state owned property, such as state highways.

Pros- This approach recognizes that conflicts with state policy could arise from local listings as well as national listings. The set of nominations that have potential to affect the state's interest can be defined up-front and kept narrow so that the rest of SHPO's programs and local historic preservation efforts can continue as is.

Cons- Other NRHP listings could still result in local protections being applied without appropriate balancing of local or regional priorities.

Option 4; Comprehensive re-write of OAR 660-23-0200

The rules for historic preservation on Oregon are entwined with the Federal program for historic preservation. The federal program is an incentivized, voluntary program. Oregon uses the federal program as a basis for Goal 5 protection program. References to federal guidance are included in the rule and are found in local codes. The evolution of this system over the past 20 years has tangled voluntary and regulatory approaches together into local Goal 5 historic preservation programs. Interestingly, local governments are not required by Goal 5 to have to have a local protection program; however, if they choose to have a local program, State law says they must protect federally listed properties to a degree significantly beyond protections required by the federal government.

Pros – This option could result in a rule with the best utility for state, local and private interests.

Cons – This would be a difficult undertaking.

In considering various options for rule amendments we need to remember that, since local governments are not required to have local protection programs under OAR 660-23-0200, many do not. A complete lack of local protections is different problem than the one described above, but a problem none the less.

From: [GOLDFARB Gabriela * GOV](#)
To: [PUNTON Amanda](#)
Cc: [RUE Jim](#)
Subject: RE: Pilot Butte canal
Date: Tuesday, September 08, 2015 2:22:47 PM

Thanks Amanda, I will review and get back to you!

For both of you, I just had a discussion with Richard about taking a broader look at the obstacles to water conservation projects. Our scheduler Julie will be reaching out soon to schedule that – invitees to include the two of you, Rob Hallyburton, and Steve Shipsey.

Best,

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
T (503) 378-5232
M (971) 209-8277
Scheduler: Julie.Tasnady@Oregon.gov

From: Punton, Amanda [mailto:amanda.punton@state.or.us]
Sent: Tuesday, September 08, 2015 2:09 PM
To: GOLDFARB Gabriela * GOV <gabriela.goldfarb@state.or.us>
Cc: RUE Jim <jim.rue@state.or.us>
Subject: Pilot Butte canal

Hi Gabriela,

Please see attached and let me know if there is more that I can do at this point. I think it would be a good idea to meet jointly with SHPO. They may have some additional ideas on how to improve the balance between federal and state program priorities.

Amanda Punton | Natural Resource Specialist
Planning Services Division
Oregon Dept. of Land Conservation and Development
800 NE Oregon, #18 | Portland, OR 97232
Office: (971) 673-0961
amanda.punton@state.or.us | www.oregon.gov/LCD

From: [GOLDFARB Gabriela * GOV](#)
To: [WHITMAN Richard M * GOV](#)
Subject: Blurbs on Pilot Butte Canal Piping /Central Oregon Irrigation District
Date: Wednesday, October 07, 2015 11:03:05 AM

The Pilot Butte section of the Central Oregon Irrigation District (COID) irrigation canal system, which runs through the heart of Bend, looks like a stream (though it is not; it did not exist before the District constructed the system decades ago), and courses through the yards of a number of homeowners who enjoy the canal as an attractive water feature during irrigation season each year. The neighbors are seeking National Historic Register listing of the canal as one strategy to block a water conservation project that would pipe the canal underground. The state and federal governments have put tens of millions of dollars into this and similar water conservation efforts in the area. This is an unfortunate conflict between two values of historic preservation and natural resource protection.

Statewide Planning Goal 5 of Oregon's land use program ("Natural Resources, Scenic and Historic Areas, and Open Spaces") is set up to give properties listed in the National Register of Historic Places an automatic protected status that bypasses the intended "balancing" process of Goal 5. Under Goal 5, local governments are to inventory natural, historic, and other resources, and identify priorities when one or more protection values conflict. Oregon is one of three states where a federal listing automatically triggers significant protections.

Governor's office staff are in discussions with DLCD to identify an administrative change that would restore the intended process to carefully consider and balance competing uses such as historic preservation and water conservation, and eliminate the mechanism that allows federally listed historic properties to "go to the head of the line." We believe this tool will be not only against the COID project, but other water conservation projects, and indeed other infrastructure projects generally. For this reason, we are also exploring more broadly how to give well-vetted, broadly supported infrastructure projects that appropriately protect the environment and other values a clearer pathway to approval.

Other Background:

- GNRO sent a letter on behalf of the Governor to the National Park Service (NPS) raising questions about the ownership as a basis for casting a shadow on the application. The NPS responded by sending the application back to OPRD, which houses the state historic preservation office that processes historic registry listing applications. The NPS identified a number of technical flaws with the submission. OPRD returned the submission to the property owners, who are responsible to fix the flaws.
- The County Commissioners are supportive of the piping project and voted to oppose the findings of the OPRD advisory committee that recommended that OPRD forward the historic preservation application to the federal government.
- The Bend Bulletin ran an editorial specifically commending the Governor's letter to NPS, and others supporting the water conservation projects.
- The State Historic Preservation Office, Central Oregon Irrigation District, and Bureau of Land Management have been working for more than a year on a "cultural resources programmatic agreement" to survey all of the COID system, identify those canals and other

elements that best meet historic and cultural resource preservation criteria, identify conflicts with piping projects, and either protect or mitigate historic resources from those impacts.

This is the type of comprehensive, thoughtful approach to reconciling conflicting values we want to encourage. However, there is no mechanism at either the federal or state level to prevent applications being submitted by others, such as the Bend homeowners.

--

Gabriela Goldfarb, Natural Resources Policy Advisor

Office of Governor Kate Brown, State of Oregon

Office: (503) 378-5232

Mobile: (971) 209-8277

New Scheduler: Nancy.Salber@Oregon.gov

From: [Punton, Amanda](#)
To: [GOLDFARB Gabriela * GOV](#)
Subject: FW: Goal 5 Amendments in response to nomination of Pilot Butte Canal to the National Register
Date: Wednesday, October 14, 2015 2:57:20 PM

Hi Gabriela,

In case you have not heard directly from Parks I thought you might want to see the request I got from Ian today. I will tell him that the meeting happened and that he or his manager should talk to you about their interest in the topic.

This email chain is long because Ian originally forwarded me an email exchange with Tod Bassham when I asked Ian for some information on the intersection between the SHPO process for identifying and protecting historic resources and the Goal 5 rule.

Amanda Punton | Natural Resource Specialist
Planning Services Division
Oregon Dept. of Land Conservation and Development
800 NE Oregon, #18 | Portland, OR 97232
Office: (971) 673-0961
amanda.punton@state.or.us | www.oregon.gov/LCD

-----Original Message-----

From: JOHNSON Ian * OPRD
Sent: Wednesday, October 14, 2015 2:27 PM
To: Punton, Amanda
Subject: Goal 5 Amendments in response to nomination of Pilot Butte Canal to the National Register

Hello Amanda,

I see from my notes that a meeting was tentatively scheduled today to discuss Goal 5 Amendments in response to nomination of Pilot Butte Canal to the National Register. I am curious if that meeting happened or if it is planned. Our office would very much like to be part of the conversation.

Thanks.

Ian

Ian Johnson
Interim Associate Deputy State Historic Preservation Officer
(503) 986-0678

-----Original Message-----

From: JOHNSON Ian * OPRD
Sent: Monday, September 14, 2015 12:33 PM
To: PUNTON Amanda
Subject: RE: Re: LUBA speaker

Ah, next month then.

Thanks.

Ian

Ian Johnson
Interim Associate Deputy State Historic Preservation Officer

From: [Richard Golb](#)
To: [GOLDFARB Gabriela * GOV](#)
Subject: Fwd: National Register nomination for the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment)
Date: Friday, November 13, 2015 3:06:29 PM
Attachments: [NotificationLetter_13November2015.pdf](#)
[ATT00001.htm](#)

Gabriela - Are you available for a call on Monday? **This process is really unfair.**

Richard K Golb
PacificComm LLC
Sent from my iPhone

Begin forwarded message:

From: "JOHNSON Ian * OPRD" <Ian.Johnson@oregon.gov>
To: "CraigHorrell" <chorrell@coid.org>, "Pat Kliewer" <pkliwer@hotmail.com>, "Michael Hall" <HallMichaelA@msn.com>, "Matt Martin" <Matt.Martin@deschutes.org>, "Peter Gutowsky" <Peter.Gutowsky@deschutes.org>, "Nick Lelack" <Nick.Lelack@deschutes.org>, "Heidi Kennedy" <hkennedy@bendoregon.gov>
Cc: "Rasmussen, William" <william.rasmussen@millernash.com>, "Abernethy, Liza" <Liza.Abernethy@MillerNash.com>, "Richard Coe" <rcoe@bendbulletin.com>, "Ted Shorack" <tshorack@bendbulletin.com>, "Albrich, Elaine" <elaine.albrich@stoel.com>, "David Filippi" <david.filippi@stoel.com>, "Laura A. Schroeder" (schroeder@water-law.com)" <schroeder@water-law.com>, "Jeff Perreault" <jeff.a.perreault@gmail.com>, "Carrie Richter" <crichter@gsblaw.com>, "Aleta Warren" <a.warren.bend@gmail.com>, "Daryl Cole" <daryl@water-law.com>, "Matt Gadow" <mgadow@bendbroadband.com>, "Brian Sheets" <b.sheets@water-law.com>, "ZELLER Tracy * OPRD" <Tracy.Zeller@oregon.gov>, "CURRAN Chrissy * OPRD" <Chrissy.Curran@oregon.gov>
Subject: National Register nomination for the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment)

The Oregon State Historic Preservation Office (SHPO) received the revised National Register nomination for the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment) on November 2nd, 2015. In consultation with the National Park Service (NPS), the SHPO determined that the revisions are not substantive enough to warrant further review by the State Advisory Committee on Historic Preservation, who reviewed the document in February 2015.

From: [GOLDFARB Gabriela * GOV](#)
To: [WHITMAN Richard M * GOV](#)
Subject: FW: National Register nomination for the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment)
Date: Friday, November 13, 2015 3:21:21 PM
Attachments: [NotificationLetter_13November2015.pdf](#)

FYI, in case someone pings you about this. The message that the focus of any changes does not lie with the historic preservation program (per se) simply does not stick with Rich Golb.

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277
[New Scheduler: Nancy.Salber@oregon.gov](#)

From: GOLDFARB Gabriela * GOV
Sent: Friday, November 13, 2015 3:16 PM
To: 'Richard Golb'
Subject: RE: National Register nomination for the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment)

Rich, I'll send you a calendar invitation for a call late Monday. I got your phone call today, but am voiceless (bad head cold) so literally could not talk.

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Tel (503) 378-5232
Cel (971) 209-8277
[New Scheduler: Nancy.Salber@oregon.gov](#)

From: Richard Golb [<mailto:rich@pacificcommllc.com>]
Sent: Friday, November 13, 2015 3:06 PM
To: GOLDFARB Gabriela * GOV
Subject: Fwd: National Register nomination for the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment)

Gabriela - Are you available for a call on Monday? This process is really unfair.

Richard K Golb
PacificComm LLC
Sent from my iPhone

Begin forwarded message:

From: [Richard Golb](#)
To: [GOLDFARB Gabriela * GOV](#)
Subject: Fwd: Additional information re the NPS email to SHPO re the definition of "owner" under NPS rules
Date: Tuesday, November 24, 2015 8:51:22 AM
Attachments: [NPSEmailOnOwnership.pdf.pdf](#)

Gabriela - No worries. Please see David???s email below. It may help clarify some of the misunderstanding that is out there. How about Tuesday, December 1 at 4:15 pm? Happy Thanksgiving.

Richard K. Golb
PacificComm LLC
201 NE Park Plaza Drive Ste 269
Vancouver WA 98684
360.397.0248

Begin forwarded message:

From: "Filippi, David" <david.filippi@stoel.com>
Date: November 24, 2015 at 7:53:17 AM PST
To: "Richard K. Golb (rich@pacificcommllc.com)" <rich@pacificcommllc.com>
Subject: Additional information re the NPS email to SHPO re the definition of "owner" under NPS rules

Rich,

You asked me for an email that could be passed along to Gabriela regarding SHPO???s apparent determination that COID is not the owner of the Pilot Butte Canal, and as such, is not entitled to vote against the revised nomination. As we discussed, it appears that SHPO is relying on the attached September 17 email from NPS as the basis for its determination that COID is not an owner for purposes of objecting to the revised nomination of a segment of the Pilot Butte Canal. The NPS email does not support such a determination.

First, the conclusory statement from NPS contains no analysis or reference to legal authority. The definition at 36 CFS 60.3(k) of ???owner or owners??? includes ???those individuals, partnerships, corporations or public agencies holding fee simple title to property. Owner or owners does not include individuals, partnerships, corporations or public agencies holding easement or less than fee interests (including leaseholds) of any nature.??? The NPS email inserts the term ???absolute,??? but fails to explain why that insertion is an appropriate interpretation of the rule language. We reviewed the rule history, and we located no support for the definitiveness of NPS???s position.

Second, our 7/10 and 8/6 letters go into painstaking detail as to the limited fee interest that COID holds in the right of way (ROW) upon which the canal is located, and explains why that limited fee interest in the ROW is the legal

equivalent of fee simple title for purposes of determining whether COID is an owner under the definition. The same argument applies regardless of whether NPS's definition of "owner or owners" were to be interpreted to include the term "absolute."

And third, and most important, our 8/6 letter makes clear that COID is in fact the fee simple absolute owner of the canal itself. The 11/2 transmittal letter from the nominator's attorney in support of the revised petition does not dispute this point, and we're not aware that anyone has disputed this point. (And of course, the homeowner opponents won't dispute this point, as they don't want the responsibility or liability for operating and maintaining the canal.) Thus, the issue then is not who owns the canal, but whether SHPO/NPS will improperly accept a nomination for a historic "district" (as drawn up by the nominators to include adjacent lands), or whether SHPO/NPS will instead require the nomination to be of the canal structure itself. Again, the 8/6 letter makes the case for why a district nomination is inappropriate, and there's been no response from SHPO. The transmittal letter from the nominator's attorney dismisses COID's position by arguing that the difference between a district and a structure is nothing more than a "technical debate," and that there is no reason why a district and a structure would be mutually exclusive. Of course, it is much more than a technical debate, and the two are in fact mutually exclusive here, as COID can effectively preclude the listing of the canal segment if it is acknowledged for what it is--a structure. With COID as the sole owner of the structure, SHPO should reject the revised nomination.

In short, to the extent that SHPO is interpreting the NPS email to mean that COID is not the owner of the Pilot Butte Canal, SHPO is wrong. All the email says is that NPS will only recognize fee simple absolute owners of property as owners under its rules--but NPS has not opined as to whether COID is the fee simple (or fee simple absolute) owner of the Pilot Butte Canal. Given that COID is the fee simple (and fee simple absolute) owner of the canal, the issue is whether nominating the canal segment here as a district is appropriate, or whether it should be nominated as a structure. As set forth in its 8/6 letter, COID maintains that a district nomination is inappropriate here and should be rejected.

We of course will have additional arguments that will be provided to SHPO and NPS prior to the close of the comment period for the revised nomination.

Let me know if you need anything further.

David.

David E. Filippi

Stoel Rives LLP | 900 SW Fifth Ave., Suite 2600 | Portland, OR 97204

Direct: (503) 294-9529 | Fax: (503) 220-2480 | dfilippi@stoel.com |

www.stoel.com

JOHNSON Ian * OPRD

Subject: FW: Ownership per NR Regulations

From: CURRAN Chrissy * OPRD
Sent: Thursday, September 17, 2015 9:53 AM
To: Loether, Paul; Chrissy Curran
Cc: Lisa Deline; Stephanie Toothman; JOHNSON Ian * OPRD
Subject: RE: Ownership per NR Regulations

Thanks for the clarification, Paul.

Chrissy Curran
Deputy State Historic Preservation Officer

State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer Street NE, Suite C
Salem, Oregon 97301
Tel: 503-986-0684
Email: chrissy.curran@oregon.gov

From: Loether, Paul [mailto:paul_loether@nps.gov]
Sent: Thursday, September 17, 2015 7:21 AM
To: Chrissy Curran
Cc: Lisa Deline; Stephanie Toothman
Subject: Ownership per NR Regulations

Chrissy:

In response to your inquiry, this email will serve to confirm that the National Park Service considers the term "owner or owners" as defined in 36 CFR 60.3(k) to only include individuals, partnerships, corporations, and/or public agencies that hold a fee simple absolute interest in the property.

If you have any additional questions in this regard, please let me know.

Best,

Paul

--
J. Paul Loether, Chief
National Register of Historic Places
and National Historic Landmarks
National Park Service
1201 Eye Street NW, #2280
Washington, DC 20005

From: [GOLDFARB Gabriela * GOV](#)
To: [WHITMAN Richard M * GOV](#)
Subject: FW: State Historic Preservation Office
Date: Tuesday, February 09, 2016 5:32:13 PM

Calling you to discuss

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Oregon Governor Kate Brown
Office: (503) 378-5232
Mobile: (971) 209-8277

From: NAVAS Melissa * GOV
Sent: Tuesday, February 09, 2016 3:50 PM
To: GOLDFARB Gabriela * GOV <Gabriela.GOLDFARB@oregon.gov>
Cc: GRAINGER Kristen * GOV <Kristen.GRAINGER@oregon.gov>; PAIR Chris * GOV <Chris.PAIR@oregon.gov>; WOJCICKI Amy * GOV <Amy.WOJCICKI@oregon.gov>
Subject: FW: State Historic Preservation Office

Hi Gabriela,

See the additional detail from Richard below. Please call me when you're out of meeting. His deadline is 7.

--

Melissa Navas
Press Secretary
Office of Governor Kate Brown
503-378-6496

From: [Richard Coe <rcoe@bendbulletin.com>](#)
Date: Tuesday, February 9, 2016 3:44 PM
To: melissa navas <melissa.navas@oregon.gov>
Subject: Re: State Historic Preservation Office

It is unfortunate when government makes conservation of water more difficult. I wrote an editorial to that effect. It is running tomorrow. If you get me an answer by 7 I can probably get it in.

I contacted the Congressional delegation to ask if they thought anything could be done. I contacted you again because you had stated that there were conversations regarding the federal historic registry program carried out by the State Historic Preservation Office. I would like to update readers if any progress has been made.

I got responses from Wyden and Walden. I was hoping to include a response from Brown's office as well.

Richard Coe
Editorial Page Editor
The Bulletin
541-383-0353

On Tue, Feb 9, 2016 at 3:05 PM, NAVAS Melissa * GOV <Melissa.NAVAS@oregon.gov> wrote:

Hi Richard,

I received your message and am looking into it. Are you writing something on this? If so, what's your focus? And what is your deadline?

Best,
Melissa

--

Melissa Navas
Press Secretary
Office of Governor Kate Brown
[503-378-6496](tel:503-378-6496)

From: Richard Coe <rcoe@bendbulletin.com>

Date: Tuesday, February 9, 2016 11:16 AM

To: melissa navas <melissa.navas@oregon.gov>

Subject: Re: State Historic Preservation Office

Anything new on this issue?

The National Park Service has gone ahead and listed the Pilot Butte Canal on the National Register of Historic Places. As you may recall Gov. Brown opposed this listing because it will make it much more difficult to conserve water by piping.

Richard Coe
Editorial Page Editor
The Bulletin
[541-383-0353](tel:541-383-0353)

From: [NAVAS Melissa * GOV](#)
To: [WHITMAN Richard M * GOV](#); [GOLDFARB Gabriela * GOV](#); [GRAINGER Kristen * GOV](#); [PAIR Chris * GOV](#); [WOJCICKI Amy * GOV](#)
Subject: FW: State Historic Preservation Office
Date: Tuesday, February 09, 2016 5:56:46 PM

FYI on response.

--

Melissa Navas

Press Secretary

Office of Governor Kate Brown

503-378-6496

From: melissa navas <melissa.navas@oregon.gov>
Date: Tuesday, February 9, 2016 5:56 PM
To: Richard Coe <rcoe@bendbulletin.com>
Subject: Re: State Historic Preservation Office

Hi Richard,

Following last year's drought, our need to conserve water is even more crucial as Oregon continues to experience climate change. The Governor's Office is working to make sure we strike the right balance between preserving important historic resources and ensuring we conserve water so it is available for people and ecosystems. We anticipate having specific recommendations on a path forward in the near future.

Best,
Melissa

--

Melissa Navas

Press Secretary

Office of Governor Kate Brown

503-378-6496

From: Richard Coe <rcoe@bendbulletin.com>
Date: Tuesday, February 9, 2016 3:44 PM
To: melissa navas <melissa.navas@oregon.gov>
Subject: Re: State Historic Preservation Office

It is unfortunate when government makes conservation of water more difficult. I wrote an editorial to that effect. It is running tomorrow. If you get me an answer by 7 I can probably get it in.

From: [Richard Golb](#)
To: [GOLDFARB Gabriela * GOV](#)
Cc: [Ward, Ben \(Merkley\)](#); [Adrian Deveny](#)
Subject: Editorial: Pipe around the Pilot Butte Canal;
Date: Wednesday, February 17, 2016 8:01:08 AM

Gabriela - Just catching up with you. **Is there any progress we can discuss regarding a solution for COID?**

<http://www.bendbulletin.com/opinion/editorials/4003824-151/editorial-pipe-around-the-pilot-butte-canal?referrer=fpblob>

Editorial: Pipe around the Pilot Butte Canal

Given that the National Park Service has declared historic a stretch of the Pilot Butte Canal, we want to do what we can to help preserve the ditch for generations to come.

Central Oregon Irrigation District should divert the water that has run through the canal by building a pipe on other nearby land. The ditch's historic character will be preserved. The piped water will be conserved.

COID General Manager Craig Horrell said he's considered it. It's possible. He should explore if the cost and other factors would make it feasible.

The future of the 1.5-mile section of canal has been a topic of fierce debate between homeowners near the canal and the irrigation district.

The district had plans to pipe that part of canal. And that was a very good idea. Piping prevents water loss due to seepage and evaporation. About half the water in an open canal is lost.

COID estimated that this piping project would save 7.95 cubic feet per second of water, when the canal was being used. One cubic foot of water is more than 7 gallons. The pipe would also build pressure for a COID hydropower project.

But homeowners had concerns about replacing the canal with a lump of pipe. During irrigation season, the canal is a broad stream flowing through backyards. Replacing that with a half-buried pipe is not attractive.

There were battles before the Deschutes County Commission over the piping. And then a group of homeowners nominated a stretch of the canal as a historic water feature — oops, historic district.

There's really no question it is old. Construction of the canal began in 1903 and it was completed in 1905. You can see marks left by steam drills in the basalt.

Water flowing through the canal helped open up the region to farming and settlement.

But there is a conflict between that character and the need to conserve water in the Deschutes Basin. The historic designation makes it more difficult for COID to get permission to pipe. The district would have to fight through a permitting process in the city and the county. Both could face multiple legal challenges from homeowners.

The answer could very well be to find a way to pipe around it. It preserves the canal. And it does what would be even more important: It saves water.

Richard K. Golb

PacificComm LLC

201 NE Park Plaza Drive Ste 269

Vancouver WA 98684

360.397.0248

From: [TASNADY Julie * GOV](#) on behalf of [GOLDFARB Gabriela * GOV](#)
To: [Rue, Jim](#); [Punton, Amanda](#); [SUMPTION Lisa * OPRD](#); [CURRAN Chrissy * OPRD](#); [JOHNSON Ian * OPRD](#); [GARRAHAN Paul](#); [SHIPSEY Steve](#); [MacLaren, Carrie](#); [Hallyburton, Rob](#)
Cc: [TASNADY Julie * GOV](#)
Subject: Doodle poll: Goal 5 & SHPO working group meeting
Date: Wednesday, February 10, 2016 3:47:11 PM

Greetings
all;

It is time to reconvene this group to discuss a path forward to promote appropriate consideration and balance between historic preservation and natural resource conservation under Goal 5. SHPO has now concluded its survey of local government practices related to historic properties designations, and SHPO, DLCD, and DOJ staff will have completed a joint background and options memo in advance of our meeting. On a related note, Pilot Butte Canal Historic District was listed in the National Register of Historic Places today by the National Park Service.

Please complete the doodle poll for a meeting later this month. Mandatory and optional invitees are listed below; if you think you should be listed in a different group, please let Julie.Tasnady@oregon.gov know!

Thanks,

Gabriela

GOAL 5 & HISTORIC RESOURCES MEETING

Required:

GOV: Gabriela Goldfarb, Richard Whitman

DLCD: Jim Rue, Amanda Punton

OPRD: Lisa Sumption, Chrissy Curran, Ian Johnson

DOJ: Paul Garrahan

Optional:

DLCD: Carrie MacLaren, Rob Hallyburton

DOJ: Steve Shipsey

<http://doodle.com/poll/47hta9679qzu83a>

From: [GOLDFARB Gabriela * GOV](#)
To: [Punton, Amanda](#); [SHIPSEY Steve](#)
Cc: [JOHNSON Ian * OPRD](#); [CURRAN Chrissy * OPRD](#)
Subject: RE: Follow up to meeting
Date: Monday, November 16, 2015 5:23:10 PM

Amanda, thanks for this follow up with Steve – the question of whether there is an existing definition of owner under state law that would be an appropriate reference in this context, or whether one needs to be developed, is a key issue.

Steve, as a follow up, I understand DLCD and SHPO are developing a joint memo to inform our discussions of the history of conflicting values in the context of protecting Goal 5 resources and a path forward for resolving those conflicts. That memo should be done by the first days of December, and I would like to schedule a meeting of the group for that week. Will you be able to answer the question below by then?

Best,

Gabriela

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Governor Kate Brown, State of Oregon
Office: (503) 378-5232
Mobile: (971) 209-8277

New Scheduler: Nancy.Salber@Oregon.gov

From: Punton, Amanda [mailto:amanda.punton@state.or.us]
Sent: Monday, November 16, 2015 3:18 PM
To: SHIPSEY Steve <Steve.SHIPSEY@state.or.us>
Cc: JOHNSON Ian * OPRD <Ian.Johnson@state.or.us>; GOLDFARB Gabriela * GOV <Gabriela.GOLDFARB@state.or.us>
Subject: RE: Follow up to meeting

Hi Steve,

We are looking for more clarity on the state's definition of owner for the purpose of complying with ORS 197.772. Although the Lake Oswego Carman house case is expected to settle a question about the status of past and current owners, it is not expected to provide clarity with regard to public ownership and easements (or other non-fee simple interests). We are trying to better understand a local government's obligation to consider an owner's objection to a local historic designation. If state statute does not set narrow parameters for what type of "owners" have the right to object to a local historic designation, are local governments free to set their own parameters?

Amanda Punton | Natural Resource Specialist
Planning Services Division
Oregon Dept. of Land Conservation and Development
800 NE Oregon, #18 | Portland, OR 97232
Office: (971) 673-0961
amanda.punton@state.or.us | www.oregon.gov/LCD

From: SHIPSEY Steve

Sent: Monday, November 16, 2015 2:54 PM
To: Punton, Amanda
Cc: JOHNSON Ian * OPRD
Subject: RE: Follow up to meeting

Amanda,

I wasn't aware I was tasked with that, sorry. My understanding was that National Parks Service had settled the applicable definition of "owner" in the attached e-mail.

Steven Shipsey

503.947.4584 (Monday & Wednesday)
503.302.3006 (Tuesday & Friday – mobile)
503.934.0023 (Thursday – no messages)

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]
Sent: Friday, November 13, 2015 8:45 AM
To: SHIPSEY Steve
Cc: JOHNSON Ian * OPRD
Subject: Follow up to meeting

Hi Steve,

My memory is that you were going to look into the definition of "owner" in follow up to our last meeting? Ian and I are working on our memo and your piece would be helpful to us.

Amanda

Amanda Punton | Natural Resource Specialist
Planning Services Division
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Office: (971) 673-0961
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From: Punton, Amanda
To: JOHNSON Ian * OPRD
Subject: RE: Local Jurisdiction survey
Date: Wednesday, February 03, 2016 11:16:32 AM

Now that the legislative session is in full swing, Richard and Gabriela are probably fine with waiting on this.

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From: JOHNSON Ian * OPRD
Sent: Wednesday, February 03, 2016 9:42 AM
To: Punton, Amanda
Subject: RE: Local Jurisdiction survey

I am a bit behind on this project, but will respond before the end of the week.

Ian

Ian Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]
Sent: Monday, February 01, 2016 9:44 AM
To: JOHNSON Ian * OPRD
Subject: RE: Local Jurisdiction survey

Here you go.

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From: JOHNSON Ian * OPRD
Sent: Friday, January 29, 2016 1:46 PM
To: Punton, Amanda; GARRAHAN Paul; JOHNSON Ian * OPRD
Subject: RE: Local Jurisdiction survey

Amanda,

When you make those changes could you send the draft to me. I will look at it in light of the survey

info that we're getting through today.

Ian

Ian Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]
Sent: Wednesday, January 27, 2016 4:34 PM
To: GARRAHAN Paul; JOHNSON Ian * OPRD
Subject: RE: Local Jurisdiction survey

Thanks Paul, for looking it over. I'll make the changes.

Amanda Punton | Natural Resource Specialist
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From: GARRAHAN Paul
Sent: Wednesday, January 27, 2016 3:06 PM
To: Punton, Amanda; JOHNSON Ian * OPRD
Subject: RE: Local Jurisdiction survey

Amanda and Ian: I will add a couple comments on this draft. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Second, I've realized that the suggested bullet on refining the definition of "property owner" needs some further refinement—just a slight wording change in the final clauses of the passage. Here it my proposed revised language, with the changed part underlined:

- Clarify that the term "property owner," as used in ORS 197.277, includes (i) public entities and (ii) all owners of property interests that entitle the owner to exclusive and continuous use and possession of all or part of the property. Examples of owners in category (ii) are fee simple owners and owners of limited fee interests in rights-of-way, such as for railroads, irrigation canals, public highways and major high-voltage powerlines, but not for common utility easements such as for local water, gas, electricity, or communications services.

Please let me know if you have any questions.

Paul Garrahan

Oregon Department of Justice

971.673.1943 (Tue, Thu, Fri) (Portland)

503.947.4593 (Mon, Wed) (Salem)

503.929.7553 (Mobile)

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]

Sent: Monday, January 25, 2016 6:12 PM

To: JOHNSON Ian * OPRD; GARRAHAN Paul

Subject: RE: Local Jurisdiction survey

Ian,

This is good information. Do the survey returns inspire you to make other changes to the memo?

I have attached Draft 5 of the memo with information and edits from Paul inserted.

Amanda

Amanda Punton | Natural Resource Specialist

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From: JOHNSON Ian * OPRD

Sent: Monday, January 25, 2016 4:59 PM

To: Punton, Amanda

Subject: Local Jurisdiction survey

Amanda,

Here is a link to the survey where you can manipulate the data a bit more. I added some useful labels to the respondents and deleted duplicate entries. I found 4 duplicates where one entry was blank, likely a false start. I have two entries for Coburg, but the answers differ. I am inclined to delete the response from the person who I know is not their preservation planner, but it does not throw off the stats too much if we keep it. The PDFs I sent include the dups.

Here is the link: <https://www.surveymonkey.com/results/SM-HZCQKBJO/> the password is oprd.

Ian

Ian P. Johnson

Associate Deputy State Historic Preservation Officer

(503) 986-0678

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From: GARRAHAN Paul
To: Punton, Amanda
Subject: RE: Historic preservation memo
Date: Friday, January 22, 2016 2:52:28 PM

Amanda: As I referenced in our telephone call last week, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Under the assumption that LCDC has authority to further define the term, my recommendation on the memo would be to replace the final bullet (at the top of page 4 in the current draft, the sixth bullet in the list) with the following:

- Clarify that the term "property owner," as used in ORS 197.277, includes (i) public entities and (ii) all owners of property interests that entitle the owner to exclusive and continuous use and possession of all or part of the property. Examples of owners in category (ii) are fee simple owners, of course, and also owners of limited fee interests in rights-of-way, such as for railroads, irrigation canals, public highways and major high-voltage powerlines, but not including the owners of common utility easements such as for local water, gas, electricity, or communications services.

I will add that I think you should consider dividing the bullets under the DLCD "Potential Solution/Next Steps." The first four of those bullets clarify the baseline protection standard for locally designated historic properties, as indicated in the introductory paragraph. The final two bullets, however, are not about the protection standard but instead clarify the process for a property achieving the local designation. I would also recommend that you specifically note, in the fifth bullet, that the local process to consider whether a property on the National Register should be added to the local inventory will still be subject to the landowner consent requirement under ORS 197.772, using the definition of "property owner" as refined by LCDC.

Please let me know if you think I have addressed the question that you were hoping I would address, and if you would like to discuss this advice or have any other questions or feedback on it. Thanks.

Paul Garrahan

Oregon Department of Justice
971.673.1943 (Tue, Thu, Fri) (Portland)
503.947.4593 (Mon, Wed) (Salem)

503.929.7553 (Mobile)

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]

Sent: Friday, January 15, 2016 12:11 PM

To: GARRAHAN Paul

Subject: Historic preservation memo

Hi Paul,

I'm interested to see what you can add to the ownership piece.

Amanda

Amanda Punton | Natural Resource Specialist

Planning Services Division

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MEMORANDUM

DATE: February 25, 2015
TO: Richard Whitman, Natural Resources Policy Director, Governor's Office
Gabriella Goldfarb, Natural Resources Policy Advisor, Governor's Office
FROM: Ian Johnson, Associate Deputy State Historic Preservation Officer
Oregon Parks and Recreation Department (OPRD)
RE: Survey of Local Jurisdiction Historic Preservation Programs

At the request of Mr. Whitman for further information regarding local administration of the Goal 5 Oregon Administrative Rule (OAR) 660-023-0200 following a meeting on October 23, 2015, DLCD and the Oregon SHPO prepared a seventeen question survey. The survey sought to determine how many jurisdictions have historic preservation programs; how requests for demolition and removal from landmark lists are addressed; and what, if any, distinction jurisdictions make between properties listed in the National Register of Historic Places and those that are listed in local landmark registers.

Survey Design, Distribution, and Respondent Profile:

The survey was designed using the web-based free service, Survey Monkey, and distributed on Friday, January 8th. The survey remained open until Friday, January 29th. The Oregon SHPO distributed the survey directly to the agency's own list of Certified Local Governments (CLGs)¹ and all 36 counties using a list provided by DLCD. Local DLCD field representatives distributed the survey to individual cities.² In total, 76 unique responses were received, with 19 counties responding, including all 4 counties participating in the CLG program. Responding counties were generally concentrated along the coast and the I-5 and I-84 transportation corridors, but also included Deschutes, Crook, Klamath, and Lake Counties. Fifty-nine cities responded, with most concentrated along the length of the I-5 corridor, and, to a lesser extent, along the coast. Twenty-two of the responding cities participate in the CLG program. No county or city responses were received from Josephine, Jefferson, Wheeler, Grant, Wallowa, Harney, or Malheur Counties, and, most notably, Multnomah County.

The survey allowed users to skip questions that did not apply. Generally, each question received about 40 or more responses. The percentages given below are rounded to whole numbers and reflect actual responses to the question and not a percentage of the total number of respondents. General comments provided in this memo are informed by the narrative responses to each question provided by the survey participants. Respondents include both small and large communities from across the state, with and without preservation programs, and in both rural and urban settings. While not comprehensive, the survey is reasonably representative for discussion purposes. Aggregate data and individual responses from the survey are appended to this document.

¹ The Certified Local Government Program is a partnership between the National Park Service, OR SHPO, and local jurisdictions that provides pass through grants for communities that have established historic preservation programs that meet minimum federal standards.

² Due to an oversight, the survey was not sent to cities and counties in DLCD's NE region.

Survey Results:

The first two questions of the survey established if the jurisdiction had a preservation program, and, if so, what body was responsible for its administration. The majority of the respondents 87% indicated that they did have a Goal 5 historic resource element in their comprehensive plan and/or a local preservation ordinance that provided some level of protection for historic resources. Comments indicated that the process for adding properties to the local landmark register and the protections afforded these properties varied. In most cases, the city council or county commission and/or planning commission were charged with administering the preservation program. In 22 jurisdictions, 29% of the respondents, indicated that a quasi-judicial landmarks commission fulfilled this role, and 14 communities, or 18%, reported that an advisory body served this function.

The second series of questions focused on how jurisdictions applied the Goal 5 OAR as it relates to the protection of properties listed in the National Register of Historic Places. Because listing in the National Register is federal process, questions in this section focused on how jurisdictions treated these properties following listing. In general, it appears interpretation and application of the Goal 5 OAR varies widely.

The majority, 66%, of the communities indicated that they add individual properties listed in the National Register to their local landmark lists. Asked the same question about districts, the majority stated that they did not add districts; however, the comments received appear to indicate that many perceived this question as asking if their jurisdiction had established districts already. When adding National Register properties to the local landmark register, 52% of the 60 respondents answering the question noted that an official adoption process was used, while only 18% did so “automatically” without a “formal adoption process.” This trend was also true in the case of historic districts. National Register properties are generally protected by demolition delay, with 53% of jurisdictions having the authority to delay demolition for some period of time up to 120 days and 10% able to deny demolition beyond 120 days. However, only 46% had the authority to deny demolition.

Of the respondents, 34% do not add properties listed in the National Register to their Goal 5 inventory or a local landmark list, and only 3 respondents indicated that separate review criteria applied to National Register-listed properties not on the landmarks list. Compliance with the intent of the Goal 5 OAR to protect all properties listed in the National Register is likely even lower when considering that several jurisdictions noted that although they do have a local process to add properties listed in the National Register to their local landmark list that this only occurs when the property owner initiates the process. Of those communities implementing the Goal 5 OAR, the level of protection offered also varies widely.

The third series of questions focused on the addition of properties to the local landmark register. Given that local jurisdiction have full control over this process, the questions asked about designation and removal of locally-listed properties, as well as protective measures. When asked if the adoption process for adding resources to the local landmark register considered other land use and planning priorities not related to preservation concerns, 53% of those answering the questions said yes, while 47% said no. Owner consent is required for listing a property in a Goal 5 inventory or local landmark register under ORS 197.772. For this purpose, the overwhelming

majority indicated “owner” was not defined in their code, but was generally understood as the entity listed in the County records as “owner,” most often those with a fee-simple interest in the property.

When asked about protecting locally-listed properties, a slightly higher percentage of respondents reported they had the authority to delay or deny demolition of a property listed in the local landmark register compared to those listed only in the National Register. While properties listed in the National Register may only be removed through a federal process, properties listed in a local landmark register may be removed from the register subject to applicable Goal 5 processes. When answering how removal is accomplished, 38% of the 40 respondents answering the question noted that an owner would need to meet specific criteria, not including the owner’s own personal wishes; 30% stated that a property could only be removed in “narrow circumstances” in cases where the resource had “been damaged, destroyed, or was mistakenly or incorrectly added to the local landmark register;” and 33% indicated that an owner could remove their property from the local landmark register “for any reason.”

Conclusion:

Although the survey results are not comprehensive, the number and variety of respondents are generally representative, including cities and counties from around the state in both urban and rural areas. The results show a varied understanding and application of the Goal 5 OAR and an inconsistent approach to the treatment of properties listed in the National Register.

From: [Punton, Amanda](#)
To: [JOHNSON Ian * OPRD](#)
Subject: RE: Goal 5 OAR
Date: Monday, May 23, 2016 8:55:11 AM

I was clearing my plate so I had time to talk to you!

Amanda Punton | Natural Resource Specialist
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From: JOHNSON Ian * OPRD
Sent: Sunday, May 22, 2016 5:03 PM
To: Punton, Amanda <apunton@dlcd.state.or.us>
Subject: RE: Goal 5 OAR

Ok, let's do 10:00 then. BTW, what are you doing checking the work account ;)

Ian

Ian Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]
Sent: Sunday, May 22, 2016 4:58 PM
To: JOHNSON Ian * OPRD
Subject: RE: Goal 5 OAR

You can try me at 8:00, but I often don't get in until 8:30. 10:00 is a safer bet.

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amanda.punton@state.or.us | www.oregon.gov/LCD

From: JOHNSON Ian * OPRD
Sent: Sunday, May 22, 2016 4:53 PM
To: Punton, Amanda <apunton@dlcd.state.or.us>; JOHNSON Ian * OPRD <Ian.Johnson@state.or.us>
Subject: RE: Goal 5 OAR

Sorry I missed you Amanda, I got back later on Friday than anticipated. I can call you around 8 am

tomorrow for about 45 mins or at 10:00. I would not call between 9 and 10:00. Later in the day would also work. Let me know. You can text or call my work cell at 971.718.1137.

Ian

Ian Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]
Sent: Friday, May 20, 2016 9:35 AM
To: JOHNSON Ian * OPRD
Subject: RE: Goal 5 OAR

Call if you can at 4:00 today. If that that doesn't work out I am also in the office Monday; give me a rough time window and I'll try to stay off the phone.

Thanks,
Amanda

Amanda Punton | Natural Resource Specialist
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From: JOHNSON Ian * OPRD
Sent: Thursday, May 19, 2016 10:30 AM
To: Punton, Amanda <apunton@dlcd.state.or.us>; JOHNSON Ian * OPRD <Ian.Johnson@state.or.us>
Subject: RE: Goal 5 OAR

Amanda,

Thanks for your thoughts on this. I chatted with Gabriella yesterday and she'd like to distance the Pilot Butte Canal issue from this process; however, she did say that we could describe it as a "focusing event" if asked the larger question of why this rule and why now. She did ask that we couch it within other examples, and we have many. She also did note that she is currently unaware of any pending legislation regarding the canal, and would let us know if anything came up. She requested that we send her whatever documents we come up with to her, not for review, but just for her information.

We'll hit the outreach hard in mid- late June, which should give us time to refine our documents. We'll be taking the "meet them where they are" approach, meaning we're not posting these documents on the web, mailing them, or otherwise mass distributing them. Still, talking points sheets are nice to have over lunch or small meetings, especially when the information is so detailed.

I am around late Friday afternoon around 4, and then on the road the following week. I could do a call on Monday anytime, I will be traveling to Baker City, but not driving.

Ian

Ian Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]
Sent: Wednesday, May 18, 2016 3:12 PM
To: JOHNSON Ian * OPRD
Subject: RE: Goal 5 OAR

Hi Ian,

Here is the timeline we need to work within in order to get a rule amendment through our Commission by the end of the year:

July 21-22; Introduce the proposed rulemaking to LCDC at their meeting in Boardman.
For this meeting we need to know the general attitude of stakeholders towards possible rule amendments. I believe we don't have to get LCDC's blessing at the July meeting but it would be nice.

November 17-18; Final rule amendments adopted at the LCDC meeting in Redmond.

As far as the Pilot Butte Canal goes, the issue certainly raised awareness of the need to better understand how the Goal 5 rule for historic resources is being implemented around the state. I believe our review of the rule, its implementation, and SHPO's experience with the intersect between NR objectives and Goal 5 objectives reviled that rule amendments have the potential to improve historic resource protection in general. In other words, we moved beyond the canal issue early on in our conversations.

I provided Rob with the documents you recommend along with the document explaining the specific draft rule amendments we came up with. He will review them with our new audience in mind. At a minimum we need to create versions that speak to this larger stakeholder audience rather than the Governor's office. The content will be largely the same.

I just tried to call you. Let's try and find a time to talk this week, if not this afternoon then Friday.

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From: JOHNSON Ian * OPRD

Sent: Wednesday, May 18, 2016 1:26 PM

To: Punton, Amanda <apunton@dlcd.state.or.us>; JOHNSON Ian * OPRD <Ian.Johnson@state.or.us>

Cc: MacLaren, Carrie <cmaclaren@dlcd.state.or.us>; CURRAN Chrissy * OPRD

<Chrissy.Curran@state.or.us>; Rue, Jim <jrue@dlcd.state.or.us>; Hallyburton, Rob

<rhallyburton@dlcd.state.or.us>

Subject: RE: Goal 5 OAR

Amanda,

Thanks for getting back to me. We'll wait to hear back on the timeline. I agree, we should carefully review the documents to make sure that they assist in explain the process and do not detract. I have attached the documents from our last large group meeting and the memo from the Local Jurisdiction survey and raw data. I also attached the Goal 5 Memo that we worked on.

For the purposes of outreach, I believe that the "660-23-0200 amendment discussion" document and related attachments B and C make sense to share. The survey data and accompanying memo will also be useful. The document titled "Memo on G5 Historic Rule Change Draft8" is a good background document, but may be more useful for staff purposes given the 660-23-0200 amendment discussion" covers some of this.

One thing that is not covered specifically in these documents is that this discussion was prompted by the listing of the Pilot Butte Canal. I am curious about what everyone's comfort level is with discussing this with our constituents. I anticipate that many will want to know why DLCD and SHPO are doing this and what problem we're trying to solve. I don't believe that the explanation needs to be long, complex, or impugn any process, office, or individual, but I think that we'll need to answer this important question for folks so that they do not read between the lines and make up their own stories.

Please let me know what documents you believe are sharable as is, and which will need some modification. We can work together on those changes if you like. As far as how to approach this, we'll pull together our list and a plan and then chat with you and your colleagues about how best to approach this so that we can support the rule-making process.

I look forward to moving on to the next steps.

Ian

Ian Johnson

Associate Deputy State Historic Preservation Officer

(503) 986-0678

From: Punton, Amanda [<mailto:amanda.punton@state.or.us>]

Sent: Wednesday, May 18, 2016 9:54 AM

To: JOHNSON Ian * OPRD

Cc: MACLAREN Carrie; CURRAN Chrissy * OPRD; RUE Jim; HALLYBURTON Rob

Subject: RE: Goal 5 OAR

Hi Ian,

We will need to get an answer to your first question from DLCD management.

To answer your second question, I believe we wrote the document explaining the various proposed amendments for a general audience. We may want to add a statement that the draft amendments reflect various issues that could be addressed by amendments, and that we recognize that not all of the issues addressed will be seen as priorities as we work through the rule writing process.

I also think your report on the survey of local jurisdictions provides valuable information about the state of affairs. Much of this was incorporated into our explanation of the draft amendments, but I bet people will appreciate seeing the report itself.

If you want to use any of the background materials we developed for our early conversations with management and the GNRO, we should review them, and edit as needed, to make sure they focus on where we ended up, otherwise they might add confusion to our request for input.

Amanda

Amanda Punton | Natural Resource Specialist
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From: JOHNSON Ian * OPRD
Sent: Tuesday, May 17, 2016 5:02 PM
To: Punton, Amanda <apunton@dlcd.state.or.us>
Cc: CURRAN Chrissy * OPRD <Chrissy.Curran@state.or.us>
Subject: Goal 5 OAR

Amanda,

Sorry I did not return your call earlier. A couple of questions as we go out to our constituents on this.

1. What is DLCD's timeline on the rule? We want to meet DLCD's timelines.
2. What documents can we share with our constituents to help explain how we got to where we are? This will shape our strategy.

We are currently working up a list of key influence makers across the state. We'll use a variety of methods to reach them, but our initial plan is to give them the background of where we are and to let them know that this rule change will be coming forward and that there will be a formal opportunity to comment and to shape the process. We understand that COID is exploring

introducing legislation, and we'll discuss what the upside and downside is of each option.

Please let me know if you have any thoughts or ideas on this topic.

I am in the office through the end of the week and then traveling most of next week for business. I will have email and phone access at that time though.

Ian

Ian P. Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

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Visit our Blog, The Oregon Heritage Exchange: <http://oregonheritage.wordpress.com/>

From: [JOHNSON Ian * OPRD](#)
To: [GOLDFARB Gabriela * GOV](#); [Punton, Amanda](#)
Cc: [CURRAN Chrissy * OPRD](#); [Hallyburton, Rob](#); [SUMPTION Lisa * OPRD](#); [Rue, Jim](#); [MacLaren, Carrie](#); [WHITMAN Richard M * GOV](#)
Subject: RE: Goal 5 historic resources
Date: Tuesday, May 17, 2016 4:53:40 PM

We are currently reviewing our list of influence-makers and the strategy for reaching out to them. Chrissy and I are out of the office most of the rest of this month, but we'll move quickly on this in coordination with DLCD. We will keep the group informed of our progress. Please let us know if there are any groups or organizations that you would like to include in these preliminary discussions before the rule-making process begins.

If we could likewise be informed of any new legislation or legislative efforts on this issue that would also be useful.

Ian

Ian Johnson
Associate Deputy State Historic Preservation Officer
(503) 986-0678

From: GOLDFARB Gabriela * GOV
Sent: Tuesday, May 17, 2016 4:26 PM
To: JOHNSON Ian * OPRD; PUNTON Amanda
Cc: CURRAN Chrissy * OPRD; HALLYBURTON Rob; SUMPTION Lisa * OPRD; RUE Jim; MACLAREN Carrie; WHITMAN Richard M * GOV
Subject: RE: Goal 5 historic resources

All, apologies for the delay in this follow up.

Last week I spoke with Lisa Sumption and Carrie MacLaren to say the agency leads have done a great job identifying a plan of action for moving forward. From here forward, staff and leadership should coordinate among yourselves to execute that plan and just keep Richard and me updated at appropriate junctures.

Ian, that's a long way of saying yes, move forward, together with DLCD and or just circling back with DLCD as SHPO deems appropriate. Please do so as soon as possible to inform DLCD's decisions about greenlighting and timing to execute its part of the plan.

Let me know if that is clear or if further guidance is needed.

Best,

Gabriela

--

Gabriela Goldfarb, Natural Resources Policy Advisor
Office of Oregon Governor Kate Brown
Office: (503) 378-5232
Mobile: (971) 209-8277

From: JOHNSON Ian * OPRD [<mailto:Ian.Johnson@oregon.gov>]
Sent: Tuesday, May 10, 2016 5:24 PM
To: PUNTON Amanda <amanda.punton@state.or.us>; GOLDFARB Gabriela * GOV <Gabriela.GOLDFARB@state.or.us>
Cc: CURRAN Chrissy * OPRD <chrissy.curran@state.or.us>; JOHNSON Ian * OPRD <ian.johnson@state.or.us>; HALLYBURTON Rob <rob.hallyburton@state.or.us>
Subject: RE: Goal 5 historic resources

We are ready to move forward. Just let us know.

Ian

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: "Punton, Amanda" <amanda.punton@state.or.us>
Date: 5/10/16 3:22 PM (GMT-08:00)
To: GOLDFARB Gabriela * GOV <Gabriela.GOLDFARB@state.or.us>
Cc: CURRAN Chrissy * OPRD <chrissy.curran@state.or.us>, JOHNSON Ian * OPRD <ian.johnson@state.or.us>, HALLYBURTON Rob <rob.hallyburton@state.or.us>
Subject: RE: Goal 5 historic resources

Gabriela,

I spoke with Rob Hallyburton today and understand that the next step in moving towards possible rule amendment for Goal 5 historic resources is for SHPO to talk to folks in the historic preservation community. We would like to know what they think of the draft rule language Ian and I put together and the reasons for making these amendments. Can you confirm that this is correct.

Thanks,
Amanda

Amanda Punton | Natural Resource Specialist
Planning Services Division
Oregon Dept. of Land Conservation and Development
800 NE Oregon, #18 | Portland, OR 97232
Office: (971) 673-0961
amanda.punton@state.or.us | www.oregon.gov/LCD

From: Punton, Amanda
Sent: Wednesday, April 20, 2016 8:50 AM
To: GOLDFARB Gabriela * GOV <Gabriela.GOLDFARB@state.or.us>
Cc: JOHNSON Ian * OPRD <Ian.Johnson@state.or.us>
Subject: Goal 5 historic resources

Good morning Gabriela,

Have you had a chance to look over the attachments in the email I sent on April 4th? Ian and I (and probably our management) are waiting for further instruction.

Amanda

Amanda Punton | Natural Resource Specialist

Planning Services Division

Oregon Dept. of Land Conservation and Development

800 NE Oregon, #18 | Portland, OR 97232

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DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT

DIVISION 23

PROCEDURES AND REQUIREMENTS FOR COMPLYING WITH GOAL 5

660-023-0200

Historic Resources

(1) For purposes of this rule, the following definitions apply:

(a) "Designation" is a decision by a local government declaring that a historic resource is "significant" and including the resource on the list of significant historic resources.

(b) "Historic areas" are lands with buildings, structures, objects, sites, or districts that have local, regional, statewide, or national historic significance.

(b) "Historic Context Statement" is a policy document that describes the important, broad economic, social, and cultural patterns of development in an area impacting the physical development in a defined geographic area, which may be represented and identifies by historic properties/resources representative of the identified broad patterns. The document can serve as the foundation for decisions about the local significance of historic properties/resources.

(c) "Historic resources" are those buildings, structures, objects, sites, or districts that have a relationship to important events or conditions of the human past.

(d) "Historic resources of statewide significance" are buildings, structures, objects, sites, or districts listed in the National Register of Historic Places, and within approved national register historic districts pursuant to the National Historic Preservation Act of 1966 (PL 89-665; 16 U.S.C. 470).

(d) "National Register Resource" means buildings, structures, objects, sites, or districts listed in the National Register of Historic Places, and within approved National Register historic districts pursuant to the National Historic Preservation Act of 1966 (PL 89-665; 16 U.S.C. 470).

(e) [OPTION 1] "Owner" or "owners" means those individuals, partnerships, corporations or public agencies holding fee simple title to property. Owner or owners does not include individuals, partnerships, corporations or public agencies holding easements or less than fee interests (including leaseholds) of any nature. [36 CFR 60.3]

(e) [OPTION 2] "Owner" means a purchaser of real property under a recorded instrument of sale. In the case of multiple purchasers, "owner" may be a designee of the purchasers. [ORS 358.480(14)]

Commented [HR1]: A RAC member suggested that we add a definition of "demolition." Is that needed? What would it be?

Commented [H2]: Many communities already have a definition for demolition, usually based on how much of the building is removed. I believe that this suggestion was made based on the fear of a building being largely dismantled to the extent that it is demolished, but does not trigger the demolition code. This seems to me to be getting into the weeds for a rule. - Ian

Commented [H3]: Need to define "inventory" – the act of identifying historic properties eligible for local designation, and the "list" which is the actual list of what is designated.

Ian

Commented [HR4]: We heard from at least one RAC member that this could be clearer. Any suggestions?

Commented [PA5]: Whatever we do we need to understand how this definition relates to NR sites and the process that applies to them. I think we may want to retain two categories of "significant".

Local designation is independent of NR designation. Currently the rule links NR designation with local land use controls in some places. Ian

Commented [H6]: Do we also need a definition for local landmarks? Ian

Commented [HR7]: I have a question into Shipsey about defining "owner" differently for a site and a district. No answer yet.

Commented [H8]: May be problematic to include "designees" given that you cannot verify this through the Assessor and would then have to have a process to check if someone would have authority to speak for the owner. I provide them option 1 and 2. - Ian

(e) [OPTION 3] "Owner" or "owners" means those individuals, partnerships, corporations or public agencies holding fee simple title to property or a property interest that entitles the possessor of the property interest to exclusive and continuous use and possession of all or part of the property. Examples of property interests constituting ownership are limited fee interests in rights-of-way, such as those for railroads, irrigation canals, public highways and major high-voltage powerlines, but not for common utility easements such as those for local water, gas, electricity, or communications services.

(e) (f) "Protect" means to require local government review of applications for demolition, removal relocation, or major exterior alteration of a historic resource, or delay of permits to provide opportunities for restoration and continued preservation of historic resources.

(2) National Register Resources must be considered significant under OAR 660-023-0030(4). For these resources, local governments are not required to follow the standard process described in OAR 660-023-0040 and 660-023-0050. Instead, local governments must:

(a) Protect all National Register Resources, regardless of whether these resources are designated in the local plan or land use regulations by requiring a 120-day delay for demolition, relocation or major exterior alteration and require the owner of the National Register Resource to consider options to the proposed demolition, relocation, or major exterior modification.

(b) Amend the comprehensive plan and land use regulations to protect National Register Resources in conformity with subsection (a). Comprehensive plans and land use regulations may include measures to protect National Register Resources in addition to those required in subsection (a). Until such local regulations are adopted, subsection (a) shall apply directly to National Register Resources listed after -----.

(c) Apply additional local protection measures to NR sites listed after ----- through a designation process pursuant to section (5).

(d) A local government may apply additional local protection measures to a district listed in the National Register of Historic Places without a designation process under section (5) if the local government's program to achieve Goal 5 pursuant to OAR 660-023-0050 was acknowledged prior to the effective date of this rule and the program permitted implementation of protection measures to National Register districts without a designation process.

(2)(3) Local governments are not required to amend acknowledged plans or land use regulations in order to provide new or amended inventories or programs regarding historic resources, except as specified in this rule lists of historic resources or programs protecting historic resources except as provided in section (2). The requirements of the standard Goal 5 process (see OAR 660-023-0030 through 660-023-0050) in conjunction with the requirements of this rule apply when local governments choose to adopt new or amend acknowledged historic preservation plans and regulations. However, the sequence of steps in the standard process is not recommended, as per

Commented [HR9]: Where did this come from? Do we know that it's correct?

This was language recommended by Shipsey to address the Governor's concerns about certain interests. - Ian

Commented [PA10]: The definition in our draft came from Paul Garrihan.

Commented [PA11]: Should this be "and"?

Yes, and - Ian

Commented [PA12]: " in addition to historic resources determined to be significant through application of (section' of this rule/OAR 660-023-003(4)) sites (and districts) on the NR of historic places are considered significant.

I would say that if they are listed they are "significant." The wording here appears to suggest that after NR listing another process is required to establish significance for the provisions of this section to apply. Ian

Commented [PA13]: We should have two or three options listed for various degrees of protection.

Yes, I agree. We can vary the timeframes, require a process for demo or relocation, or prescribe more specifically what alteration means. - Ian

A couple of ideas:

Option 1 - what we have written now.

Option 2 - Longer wait periods, requirement that the owner demonstrate good faith effort for demo or relocation before

Commented [HR14]: Will this necessarily require an amendment to the comp plan? That is, would the land use regulations conceivably be the only thing that needs

Commented [PA15]: Good question. I don't think the current rule is clear about the relationship of the protection

Commented [PA16]: I believe that if this subsection is expanded to allow another tier of local protection, it would

Commented [PA17]: If there is no local designation process there is no trigger for applying the state owner consent rule.

Commented [HR18]: Meh. I put it in to see what it looks like, and I don't know if I like it. It seems to call attention

Commented [HR19]: We seem to randomly interchange "inventory" and "list." Which word is correct?

Commented [PA20]: Section 2 only applies to NR sites. think it should be the other way around. A local designation

Commented [PA21]: Do we need to callout specific sections? Possibly the sections that are specific to voluntary programs and not sections specific to NR site protection.

Commented [H22]: First time this shows up. We previously talk about contexts in the definitions, do we want to talk about plans here? Ian

From: [Rue, Jim](#)
To: [PUNTON Amanda](#); [MACLAREN Carrie](#); [WHITMAN Richard M * GOV](#); [HALLYBURTON Rob](#)
Cc: [GOLDFARB Gabriela * GOV](#)
Subject: FW: Notice Request from Matt Gadow
Date: Monday, July 18, 2016 8:34:08 AM
Attachments: [Notice Request for Matt Gadow.pdf](#)

Jim Rue | Director

Director's Office

Oregon Dept. of Land Conservation and Development

635 Capitol Street NE, Suite 150 | Salem, OR 97301-2540

Direct: (503) 934-0002 | Cell: (503) 881-0667 | Main: (503) 373-0050

jim.rue@state.or.us | www.oregon.gov/LCD

From: Brian Sheets [mailto:brian@brs-legal.com]

Sent: Saturday, July 16, 2016 11:41 AM

To: Rue, Jim <jrue@dlcd.state.or.us>

Subject: Notice Request from Matt Gadow

Director Rue,

Please see the attached notice request for Matt Gadow regarding actions related to the [Pilot Butte Canal Historic District in Deschutes County](#). Please let me know if you have any questions.

Sincerely,

Brian R. Sheets

BRS Legal, LLC

PO Box 764

Troutdale, OR 97060

Phone: (503) 830-1448

brian@brs-legal.com

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Hoge, Tabatha L

From: Macpherson, Greg
Sent: Monday, August 01, 2016 2:49 PM
To: Cribbins, Melissa
Cc: Hallyburton, Rob; Lidz, Jerry; MacLaren, Carrie; Rue, Jim
Subject: LCDC Rulemaking on Goal 5 Historic Resources
Attachments: Item_12_Goal_5_Historic_Rule_Initiate.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Categories: FYI

Melissa,

We missed seeing you at the July Commission meeting in Boardman. It provided a great perspective on an economically dynamic part of the state.

I'm writing to ask whether you would be willing to serve on the rulemaking advisory committee for the project we launched based on the memo attached. A key question is what stature should be given in Goal 5 inventories of historic resources to designations under the National Register of historic places. The rulemaking arises, in part, due to the designation of an irrigation canal in the Bend area for the National Register to prevent it being converted to an underground pipe. But the rule will be of general applicability.

Catherine Morrow chose not to serve because she knows the players in the canal situation and I decided I should not do so because my law firm represents the irrigation district. The other commissioners at the meeting (Bart, Jerry and Robin) are loaded up with other duties. Therefore, I'm hoping you can take it on. You could participate in meetings via zoom. I don't think it is expected to take many meetings, but Rob Hallyburton could provide more detail.

Please let us know. Thanks.

Greg

Greg Macpherson | LCDC Commissioner
Oregon Dept. of Land Conservation and Development
635 Capitol Street NE, Suite 150 | Salem, OR 97301-2540
Main: (503) 373-0050
greg.macpherson@state.or.us | www.oregon.gov/LCD

LeBart_emailled_correspondence

ALLEN Jason * OPRD

From: Don LeBart <don.lebart@gmail.com>
Sent: Tuesday, June 14, 2016 11:23 AM
To: ALLEN Jason * OPRD
Subject: COID's Nominations of Two Canals for the National Register of Historic Places
Attachments: 20160208 PilotButteCanalHistoricDistrictPressRelease.pdf

To: Oregon's State Advisory Committee on Historic Preservation

The following is in reference to your upcoming meeting on June 16-17, 2016:

I live on the section of the Pilot Butte Canal that was recently listed in the National Register of Historic Places. I have attached the press release for your review.

While the community is very pleased, and proud, to have this historic designation, we continue to have concerns that COID will find a way to pipe this historic treasure to increase their hydroelectric output and subsequent revenues. During your evaluation of COID's nominations to the National Register of Historic Places, please ask the following questions:

1. Why did COID not nominate the section of the Pilot Butte Canal that has received listing in the National Register of Historic Places? It was the foundation of the water delivery system to every other section that they now nominate.
2. Since COID did not nominate the section that has received listing in the National Register of Historic Places, what is their motivation now to nominate these two segments of the canal? Why the sudden interest in preserving historic landmarks?
3. If these two nominations are accepted and receive listing in the National Register of Historic Places, will COID pledge publically to your committee, and for the record, that they will not use these listings as a legal tool (MOA) to subsequently pipe the segment of the Pilot Butte Canal between Cooley Road and Yeoman Road in Bend and unincorporated Deschutes County that currently has listing in the National Register of Historic Places?

If COID will not make this commitment, I would humbly ask you to deny their two requests for nomination. The Oregon State Advisory Committee on Historic Preservation clearly wants to protect historic locations that can enrich and educate generations in the future. It would be a tragedy if COID presented historic nominations that were accepted and then used them to destroy another historic treasure of potentially more value. Please make certain this does not happen.

Please confirm receipt of this correspondence. Thank you.

Most sincerely,
Don & Gail LeBart
63390 Old Deschutes Road
Bend, OR 97701



Virus-free. www.avast.com

Public Comments



Brian R. Sheets
Licensed in Oregon

PO Box 764 • Troutdale, OR 97060 • Phone: (503) 830-1448
E-Mail: brian@brs-legal.com

June 14, 2016

VIA EMAIL ONLY

Oregon State Historic Preservation Office
Attn: Tracy Zeller
725 Summer St. NE, Suite C
Salem, OR 97301
Email: Tracy.Zeller@oregon.gov

**RE: Comments on Nomination to the National Register of Historic Places for:
Irrigation Projects in Oregon, 1850-1978 (Multiple Properties Document)
Central Oregon Canal: Brasada Ranch Segment
Pilot Butte Canal: Downtown Redmond Segment**

Dear Chair Schallert and members of the State Advisory Committee on Historic Preservation:

This firm represents Matt and Suzanne Gadow, residents of unincorporated Deschutes County, Oregon, and we submit this comment on their behalf. Central Oregon Irrigation District ("COID") submitted three documents to the SHPO: 1) Multiple Property Documentation ("MPD") for "Irrigation Projects in Oregon, 1850-1978"; 2) Nomination to the National Register of Historic Places ("NRHP") under the MPD for "Pilot Butte Canal: Downtown Redmond"; and 3) Nomination to the NRHP under the MPD for "Central Oregon Canal: Brasada Ranch Segment." While we are neutral to the end result of the MPD and two NRHP nominations' acceptance, the documents require scrutiny, revision, and resubmittal based on a number of factors.

1. The MPD should be revised to include an inventory of irrigation assets already listed in the NRHP.

Section H of the MPD includes the methods of the survey performed by the MPD proponents, however there is no mention or description of currently protected NRHP resources. Sections E and F similarly omit current NRHP protected irrigation properties. By listing currently protected resources and the associated acceptance criteria, the SACHP can evaluate whether this document is congruent with prior NRHP listed properties and the criteria used in listing them. Without demonstrating that the MPD is congruent with prior NRHP listings, it forms a new standard for NRHP listing based on arbitrary evaluative criteria. The criteria used and accepted in prior NRHP listing should be the standard for eligibility, and listing the NRHP listed irrigation properties *statewide*¹ will assist the SHPO in determining whether the proposal of new NRHP protection is warranted. Listing NRHP resources and their selection

¹ Statewide listings are appropriate because of the scope of the MPD's statewide geographical limits.



criteria will assist future proponents of NRHP listing to use as a reference in deciding the most likely applicable criteria type. Based on previously listed properties, future proponents and SHPO can use actual historical criteria used in selecting a property, rather than the speculative criteria categories proposed in the MPD.

Given the limited scope of the survey performed in comparison to the geography proposed (discussed below), listing NRHP irrigation properties in the surveyed area could demonstrate the ratio of surveyed areas to historic properties, assuming that the survey is demonstrated as representative of the proposed geographical area. Because the MPD fails to include presently protected resources and their evaluative criteria, the MPD should be returned for inclusion of presently protected NRHP listed irrigation assets for the entire State of Oregon.

2. The survey conducted is too narrow in comparison to the geographical area under consideration.

The geographical survey of the affected areas is extremely limited in comparison to the geographical scope of the document. The MPD intends to cover the entirety of Oregon, however the survey was limited to two irrigation systems in Oregon: COID and the Vale project. Without analysis and surveying of the affected eligible structures in the entirety of the MPD's proposed geography, the survey fails to accurately list the totality of eligible properties, or even an estimation of eligible properties. The survey data is also unavailable for public review in conjunction with this MPD review, thereby making the data presented to SHPO unchallengeable at this stage. Given its statewide impact and tie to federal funding, the MPD also likely requires NEPA analysis, with at least an Environmental Assessment prior to its adoption by the National Park Service.²

Moreover, the MPD does not state methods for determining whether the sampling of the two irrigation systems is representative of the entire irrigation infrastructure of Oregon. To the extent that the MPD is deficient in its survey of eligible properties, or it cannot demonstrate its sampling is representative of the geography proposed, the MPD's geographical scope should be contained to the surveyed areas: properties served by COID and the Vale Project.

3. The nomination for "Pilot Butte Canal: Downtown Redmond" fails to include references to already NRHP listed stretches and should include the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment).

² See NPS Director's Order ("DO") 12 and DO-12 Handbook. The proponents do not address how their proposal is excluded from NEPA consideration.



In February of 2016, the National Park Service added the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment) (“PBCHD”) to the NRHP. Strikingly, the PBCHD on the same canal is absent from the narrative in the proposed nomination for the Pilot Butte Canal: Downtown Redmond section. The nomination does not explain how the Downtown Redmond segment is historically significant aside from being part of the Pilot Butte Canal, nor does it provide a brief context on how the Pilot Butte Canal compares to other irrigation systems. The nomination similarly fails to explain what remains of other local canal systems and how they compare to the Pilot Butte Canal. The nomination does not compare this stretch of the Pilot Butte Canal to other stretches of the canal already listed, and the nomination fails to demonstrate why this section is significant in addition to a previously nominated PBCHD listed in the NRHP a mere four months ago.

Perhaps the reason why the PBCHD is omitted is because the proponents of the current nomination *strenuously* opposed its listing in the NRHP. While this may be why its discussion is excluded, it does not excuse the nominees from addressing the PCBHD. The proponents should include discussion and analysis on why the Downtown Redmond segment is additionally qualified for NRHP listing. While we support the additional listing of segments of the Pilot Butte Canal, the nomination must include discussion of comparative sections of the canal, and additionally justify its inclusion on the NRHP in addition to the PBCHD. Omitting the PBCHD in the overall analysis of the historical integrity fails to demonstrate that there are segments already listed for protection, and it fails to differentiate how the Downtown Redmond segment adds to the historical character of the canal. For the previously stated reasons, the nomination for the Downtown Redmond segment should be returned for revision to include discussion of already protected segments of the canal.

4. The Downtown Redmond segment is of questionable historical importance.

The nomination for the Downtown Redmond segment maintains that its association with the Central Oregon Project, as stated in the MPD, allows for this segment of the canal to be eligible for the NRHP. By this logic, any lengthy unimproved stretch of the Pilot Butte Canal is eligible, from the diversion at the Deschutes River, to the final delivery in Crook County. The nomination fails to address the “feeling” aspect of the evaluation criteria, as the development of “Downtown Redmond” around the area has changed the feeling of the canal.³ Moreover, roadways bound the canal on both sides immediately to the east and west, one being a busy US Highway. Also, there are no mentions of irrigation deliveries in the area, which leads to the conclusion that there are none or few, thereby detracting from the historical significance of this section of the canal. These issues dissociate the feeling of historic connection, and the nomination should be returned and revised to explain the nomination criteria in greater detail.

³ The Downtown Redmond segment is relatively straight, and described as six-feet deep. However without scale on the pictures in the nomination, six feet in depth may be overstated.

5. The Nomination for the Downtown Redmond section should be amended to indicate "Public-Local" property ownership, if demonstrated.

Irrigation districts are public quasi-municipal corporations with the power to condemn property for public purposes and hold property in a public capacity. *See* ORS Chapter 545. Whether a particular parcel is *operated* in a private or public capacity is irrelevant. Because COID is an Irrigation District organized under ORS Chapter 545, it is a public entity. COID claims to own the parcels in the Downtown Redmond segment, however no evidence of that ownership has been presented. Assuming it can be presented, the Nomination should be returned and revised to reflect the property ownership as "public-Local" at the beginning of the nomination.

CONCLUSION

The MPD represents a statewide system of categorizing historic resources based on a survey of two limited irrigation projects. The proponents were directed at the behest of SHPO and the Bureau of Reclamation to draft this document as a condition of continuing its piping projects, that if realized, will effectively destroy the historical aspects of irrigation systems. Given this tension, and the ability of the proponent to survey and present its own data, the SACHP should undertake the submission of the MPD with great scrutiny. The MPD has several shortcomings, including failing to include already protected historical properties and using a very limited scope survey to apply statewide standards. Similarly, the nomination for the Pilot Butte Canal – Downtown Redmond section should also be revised based on its ownership information, questionable limited historical content, and its outright avoidance in discussing the recent addition of the PBCHD.

We are mindful that an additional section of the Pilot Butte Canal is proposed for listing, and we are concerned that additional listings will be used to undermine the historical significance of the PBCHD, or use additional NRHP properties on the canal as mitigation for a re-energized piping effort through the PBCHD. Given the proponent's *vigorous objection* to the nomination of the PBCHD compared to its position in nominating the Downtown Redmond section, the SACHP should evaluate with close scrutiny the criteria applicable to the MPD and the associated listings. Deficiencies should be addressed, and the documents returned for review.

We appreciate your time in listening to our concerns, and we look forward to your decision.

Sincerely,



Brian R. Sheets
BRS Legal, LLC

cc: Clients

State Advisory Committee
c/o Mr. Jason Allen
Oregon State Historic Preservation Office
725 Summer St. NE. Suite C
Salem, OR 97301

June 14, 2016

RE: Irrigation Projects in Oregon 1850-1978—Pilot Butte Canal: Downtown Redmond Segment
Irrigation Projects in Oregon 1850-1978—Brasada Ranch Segment

Dear State Advisory Committee,

After reviewing these two nominations I simply had to write you. As a proponent of the successful Pilot Butte Canal Historic District (Cooley Road-Yeoman Road Segment) I became aware of National Register requirements and found these nominations appalling. Remember your official duty is protecting historical sites in Oregon, and not serving political whims. You may have received considerable pressure to pass these nominations, but you need to tell Central Oregon Irrigation District (COID) "NO" because these nominations are not acceptable for presentation to the National Register. They contain misinformation, exclusions of pertinent facts, and are based on faulty premises. In example, I will state just a few of my reasons and show you some appropriate photos concerning the Pilot Butte nomination. Mr. Allen of SHPO told me to include the photos in the body of the narrative, so I have. In numbered paragraphs I will identify what nomination subheading I am primarily addressing in italics.

1. *Summary Paragraph*— The downtown Redmond canal section is totally owned by COID. There is no way COID can substantiate stopping the nomination boundary when the canal continues in a straight line with similar terrain, vegetation and use on both sides of the property line. Only the fence line (wooden posts strung with wire) on the left side of the canal differentiates where the nominated area ends (roughly in line with the first telephone pole in the below photo). No other nomination for an historic district could consider only ownership of property an acceptable boundary line. COID's decision was based on expediency, hiding their actions from the public, and their true goals which I will discuss later.



2. *Summary Paragraph*-- The downtown Redmond section is not representative of all the Pilot Butte Canal System. You may ask why this segment was chosen. When looking for sections of the canals to nominate to fulfill the MOA requirements, COID studied only parcels of land that they owned (which is only about 2 to 3 miles of the total 22 mile Pilot Butte Canal). The distance from where the Pilot Butte Canal surfaces from the pipe under Highway 97 in the industrial section of Bend to the nominated "downtown Redmond section" is roughly 18.5 miles. Of the 18.5 miles, COID only owns about 8 % of that (most stretches shorter than this ½ mile section). 20% of the canal is owned by other governmental entities like the City of Bend, the City of Redmond, and even the USA. 3% of the ownership of the Pilot Butte Canal is "null" or hidden from public records. **The remaining 69% of the canal is on private property.** The irrigation companies sold citizens the land as much as a century ago to make money, and only retained an easement for the canal. Citizens have the canal land on deeds and pay taxes on them, but COID does not want those landowners notified of piping and hydropower related plans. COID prefers blindsiding the residents. The Land Use Board of Appeals (LUBA) decision proved COID is not interested in conservation, but rather only interested in hydropower and its profit. COID's goal is NOT history, but destruction for money in their pockets. COID has been very outspoken about their goals to build at least 8 additional hydropower plants on the canals. Current laws require public hearings for hydropower, but COID has quietly changed or ignored laws and codes (while blocking public notification). COID's goal is total destruction all 700 miles of their system for profit. Due to a sweetheart deal with Pacific Power, COID is paid considerably more per kilowatt than even Bonneville Dam. COID is nominating one of their own small "junk" sections because it would be difficult to pipe with multiple structures across the canal, it is located near the end of their system so there is considerably less water in the canal making hydropower unprofitable in this location, and they could make all arrangements without public notification. COID only sees hydropower profits for themselves and they want to destroy the more historical and picturesque areas of the canals in Bend or Tumalo (including the already listed Pilot Butte Canal Historic District (Cooley Road-Yeoman Road Section)) and therefore immediately excluded them from consideration before looking for sites to nominate.

3. *Pilot Butte Canal: Downtown Redmond Segment—1. Pilot Butte Canal (1903-1905)*

The actual geology of an area should be correct in a nomination. When the Pilot Butte Canal Historical District (Cooley Road-Yeoman Road Segment) nomination was being prepared, SHPO required all reference to the basalt canal bed be removed and replaced with "rocks". SHPO threatened to not forward our nomination approved by your committee "as written" to the National Register unless that was done. But SHPO allowed COID to use "basalt" to describe the Redmond area which is sand, gravel, and rocks in an area of fast and easy construction. COID does finally admit in the last sentence that "the riprap and lining of the channel floor are characterized by stone and gravel of various sizes" but they expect you to overlook that sentence. The National Register nomination for the Pilot Butte Canal Historic District (Cooley Road-Yeoman Road segment) (PBCHD) which your committee read and approved in February 2015 described the downtown Redmond stretch of the Pilot Butte Canal as "medium integrity, but lacks

distinction.” “This stretch was the fastest to construct and was unchallenging.” “The small, shallow canal has a smooth gradient and lacks riprap.”

The actual downtown Redmond segment of the canal at the south end of the nominated section—the banks are sand and gravel, with a few rocks. This is not riprap, and definitely not basalt. Most of the banks are just weeds in the sand and gravel.



(note: the truck is driving on Highway 97 heading to Madras)

4. *Pilot Butte Canal narrative description—on the top of page 4—COID claims that the downtown Redmond portion “measures 2500 feet long, 6 feet deep, and has a consistent width of approximately 25 feet through its entire length.” The COID water gauge located within the section actually shows that the water is about 18 inches deep. The empty canal photos in the nomination also show the minimal depth. The canal is between 15 to 20 feet wide.*



6. *Weir (circa 1940)* Yes, there is an hand-operated weir in this section. The Pilot Butte Canal Historical District has 3 functioning and continually used weirs, and all have the “wheels” to activate them as well as padlocked chains for COID control. This small Redmond Weir leads to a very narrow lateral that is immediately adjacent the canal for one city block.



5. *Lateral*—“2-4 feet wide, 2-3 feet deep and 530 feet long” per COID’s nomination. It doesn’t tell you that it is concrete at one end, and about 1 to 1 ½ feet wide and less than a foot deep where the water is. The still water is a great breeding location for mosquitos. The lateral is sealed on both ends. It is too small to have been a major agricultural lateral serving several large farms.



6. *Narrative Description*—It was required that we fully describe, photograph, and measure all parts of the Pilot Butte Canal from the Deschutes River to the pipes leading to North Unit Canal and to Lone Pine Irrigation—requiring considerable time and effort— but COID is allowed to use a one-size-fits-all couple of paragraphs? The canal systems are similar to the Oregon Trail in that they look very different in different locations. To put it in a different way, can you declare that an 8 lane freeway in downtown Portland is just the same in geology, looks, history, and purpose as a small residential mountain road with no center line in Joseph, Oregon? Both roads are governmentally maintained, but they are totally different, and one cannot take the place of the other. COID is attempting to sell you the mistaken philosophy of similarity so that you will incorrectly assume all canal sections are interchangeable. There is no one size fits all in canals. COID already destroyed an irreplaceable 40 foot water fall on the City of Bend Juniper Ridge project with no remorse. The only reason that COID is treating the canals in this manner is to intentionally mislead you into thinking they are all the same so you will allow COID to destroy all other sections of the 700 mile canal system including the section already on the National Register. Perhaps a direct comparison of 2 different segments might prove that they do not look the same and each additional stretch should each be evaluated for future modifications in open public hearings on their own merits in their local jurisdiction as is presently required by law. Voting should exclude anyone personally financially benefiting from hydropower plans in any manner.

This is a photo of the 15 to 20 foot wide, 18 inch deep Downtown Redmond Segment. The whole ½ mile is perfectly straight and flat. It is crossed by 7 non-contributing roads and pipes. It is rocky and sandy in the canal bed and sides. This section is “medium integrity, but lacks distinction” per the prior National Register description for this segment of the canal.



Below is a photo of the National Register listed Pilot Butte Canal Historical District (PBCHD) which ranges from 20 to 81 feet wide, and between 3 to 10 feet deep. It meanders and curves for 1 ½ miles and even contains small natural islands. It has a basalt bed and black basalt riprap along its sides. There are no pipes and only one historical road crossing this segment. This section has the highest rating in all seven aspects of integrity of any stretch of the Pilot Butte Canal. A peaceful historic walk describing the history, economic impact, geology, and wildlife of canals is envisioned for this segment.



The two COID nominations (Pilot Butte Canal: Downtown Redmond Segment and Central Oregon Canal: Brasada Ranch Segment) required much work from someone, but the information contained is deceptive and faulty. These two nominations should each be comprehensively reviewed by your committee as would any other nomination. These nominations are full of errors, exclusions, and intentionally misleading narrative (like calling a buried industrial pipe a "conduit"). In the Brasada Ranch Segment the canal is piped and buried for at least a ¾ mile stretch across the Dry River (the center of their nomination area) and the wooden trestle has been rebuilt for marketing of Brasada Ranch and daily golf cart use by golfers and maintenance personnel and is not 50 years old. Please do not approve these 2 untruthful nominations.

You previously reviewed and approved an excellent nomination on the Pilot Butte Canal Historic District (Cooley Road-Yeoman Road segment) (PBCHD). COID managed to delay every step in the process as long as possible including at National Register and received full cooperation from SHPO. All PBCHD records, submissions and questions were immediately shared with COID, who used them without documenting the source in COID submitted documents. SHPO actively assisted those in opposition to our nomination. However SHPO never shared anything from COID and their supporters with us in spite of our repeated requests. Our nomination was approve "as written" in your committee, but SHPO required major comprehensive rewrites of the nomination at least four times before it was submitted to the National Register. We were also required to add information and photos about the complete Pilot Butte Canal and other Central Oregon

irrigation districts. And now COID is pushing very hard to get your approval on 2 nominations which are sadly as faulty as the MOA to which they desire to apply. In spite of repeated requests to SHPO that we be notified of all actions concerning the Pilot Butte Canal, and SHPO's agreement to do so, we only were notified of the June 16 proceedings on June 4 when COID announced in a professionally prepared press release on the front page of the local newspaper about these nominations. We requested an extension on this hearing at SHPO and just opposite of everything granted to COID, our request was denied. There has been no effort on COID's part to rebuild the historic waterfall they destroyed with the Juniper Ridge hydropower project that is also required in the MOA. It cannot be rebuilt, moved or put back in original condition because it has been totally destroyed and is now a COID concrete forebay structure. The problems with the MOA are too numerous to discuss here, but it should be totally revoked since it is based on an equally faulty Section 106. Neither the Section 106 nor the MOA should ever have been approved by SHPO for required legal procedures were not followed on either document.

Please do whatever you can to help protect the Pilot Butte Canal Historic District (Cooley Road-Yeoman Road Section) from COID destruction. Do not let any new nomination be used to replace our current listing. Don't throw the best segment of the Pilot Butte Canal, the PBCHD, under the COID bulldozer for the downtown Redmond, Brasada Ranch, or any other inferior COID self-gratifying nomination. As you know from your previous review, the PBCHD is very historic and representative of original use, economic and social growth of the canal systems, and teeming with wildlife. Please help save the best honest canal history in Oregon. Do what you can to protect the PBCHD since it is now on the National Register. Do not approve the current COID MOA with these two devious, incorrect and unrepresentative nominations.

I wish I could attend the meeting on the 16th, but I already had a commitment that same day. If I had known about this meeting before the press release in the Bulletin on June 4, 2016, I would have planned on attending. Did COID plan a summer meeting many hours drive from Bend, announce it only one week before it is to occur by using a major, professionally prepared press release to hide the relevant information, and deny all requests for continuation from actual landowners of the canal in order to have it used as COID's intentionally deceptive "public notification"? Tell them no—these two nominations should not be approved. SHPO would not give us a continuation so I was unable to obtain, read, or comment on the MPD or other documents prepared by COID, but I am sure they are vaguely worded self-serving hydropower plans to override the existing laws put in place to protect citizens, private property, and historic districts. COID desires to use your committee as a scapegoat while they steal and destroy private property and eradicate real Central Oregon history for their own profit. As a quasi-municipal governmental agency they are exempt from taxes, and use the money for lawyers, public relations efforts, and lobbying politicians. Please do not approve any COID documents on June 16 for they are nefariously designed to circumvent existing laws and harm the historic canals.

Thank You, Aleta Warren (a.warren.bend@gmail.com)

NATIONAL REGISTER NOMINATION EVALUATION SHEET

SACHP Meeting Date: 6/16/2016

PROPERTY
ADDRESS:

IRRIGATION PROJECTS IN OREGON, 1850-1978

MULTIPLE CITIES, MULTIPLE CO COUNTY

EVALUATOR:

DATE:

X

OK

see below

Concerns

INTEGRITY: Major alterations or additions? New materials? Altered setting? Moved? etc.

INTEGRITY: Major alterations or additions? New materials? Altered setting? Moved? etc.

X

and non-contrib. features
OK
and

Concerns

DESCRIPTION: Is the property adequately described? Too general? Too specific? Have contrib. been clearly identified?

DESCRIPTION: Is the property adequately described? Too general? Too specific? Have contrib.

X

OK

Concerns

SIGNIFICANCE Has the appropriate Criterion been used? Has it been justified? Is the context

SIGNIFICANCE Has the appropriate Criterion been used? Has it been justified? Is the context sufficient in breadth and depth to support the claims of significance? Is the narrative history complete and of the appropriate detail?

and CONTEXT:

X

OK

Concerns

FACTS AND Are the appropriate and best sources used? Are key dates and facts accurate and supported with references?

X

OK

Concerns

TECHNICAL: Typos, grammar, organization and flow of the narrative, etc.

TECHNICAL: Typos, grammar, organization and flow of the narrative, etc.

X

OK

Concerns

SUPPORTING

MATERIALS: Adequate photos, maps, drawings, etc.?

OTHER ISSUES AND COMMENTS: The Redmond Historic Landmarks Commission reviewed the proposal and is supportive of the proposal as long as the piping is completely underground and support leaving the remaining channel unchanged (i.e. no grading or removal of historic structures). The HLC also expressed concern for protection of any found artifacts as a result of the piping and questioned whether bridge crossings would be allowed, the actual width of the designation, and the phasing plan for piping of COID canals.

Steven G. Liday
steven.liday@millernash.com
503-205-2362 direct line

June 14, 2016

**BY FIRST-CLASS MAIL AND
ELECTRONIC MAIL**

tracy.zeller@oregon.gov

State Advisory Committee on Historic Preservation
c/o Oregon State Historic Preservation Office
Attention: Tracy Zeller
725 Summer Street N.E., Suite C
Salem, Oregon 97301

Subject: Comments on the Background and Effect of the NRHP Nominations by
COID

Dear Members of the State Advisory Committee on Historic Preservation ("SACHP"):

Miller Nash Graham & Dunn LLP represents Aleta Warren. This letter concerns the nominations by the Central Oregon Irrigation District ("COID") of two properties for the National Register of Historic Places (the "NRHP"), which are being evaluated by SACHP during its meeting on June 16 and 17. The primary focus of this letter is not on the details or technical eligibility of the properties, but on the context and effect of these nominations.

Although facially about preservation, the goal of these nominations is the intended destruction of most other segments of historic canals within COID's system—including the Pilot Butte Canal Historic District that was named to the NRHP earlier this year.¹ COID, the State Historic Preservation Office ("SHPO"), and the Bureau of Reclamation ("BOR") have entered into an unlawful agreement whereby COID is required to preserve one segment of each of its main canals in order to destroy the rest. As explained below, this agreement is the result of a faulty and indefensible review process under Section 106 of the National Historic Preservation Act ("NHPA") and the National Environmental Policy Act of 1969 ("NEPA").

¹ Pilot Butte Canal Historic District (Cooley Road—Yeoman Road Segment).
<http://www.oregon.gov/oprd/HCD/NATREG/Pages/Pilot-Butte-Canal-Historic-District.aspx>.

Ms. Warren and many others have worked tirelessly to persuade COID, SHPO, and BOR to fulfill their obligations under federal law—but they have flatly refused. We now ask the members of SACHP—in their role of overseeing SHPO and the NRHP nomination process in Oregon—to prevent the unnecessary destruction of historical resources.

1. Historical Background of COID's NRHP Nominations and the Related Section 106 Agreements.

In or around 2012, COID initiated plans to pipe a portion of the I-lateral canal near Alfalfa, Oregon. COID's irrigation system consists of two main canals, the Pilot Butte Canal and the Central Oregon Canal, with numerous laterals off these mains canals. This particular I-lateral is part of the Central Oregon Canal system and more than 15 miles from the Pilot Butte Canal.

Because the project was to be partially funded with federal money, it was required to be vetted under NHPA and NEPA. Generally speaking, these laws require the parties involved in a federally-funded project to determine the impact of the project on historic properties and avoid or mitigate those effects. 40 CFR § 1508.1 *et al*; 36 CFR § 800.1 *et al*. This process requires a number of formal steps and public involvement throughout. NHPA also requires that SHPO be involved in the process (commonly referred to as Section 106) because SHPO "reflects the interests of the State and its citizens in the preservation of their cultural heritage." 36 CFR § 800.2(c)(1)(i). The results of the NHPA analysis and the chosen mitigation are frequently formalized in a "memorandum of agreement" between SHPO and the agencies involved.

In 2012, pursuant to this law, COID contacted SHPO so that the two public agencies could conduct a Section 106 review of the I-lateral piping project and develop a mitigation plan for this protected historic property. During the summer and fall of 2012, COID, its archeologist contractor, and SHPO engaged in negotiations over the necessary mitigation for the piping project. There is no indication that public notice was provided, or that the public was involved in any way, during this process.

These negotiations resulted in a Memorandum of Agreement that was executed by BOR, COID, and SHPO in the fall of 2012. (Exhibit 1 – "2012 MOA".) The 2012 MOA was limited by its own terms to satisfy the Section 106 responsibilities for the I-lateral piping. (2012 MOA, ¶ II.) As mitigation for that project, COID was required to edit and complete the Multiple Property Document (the "MPD"), *Historic Agricultural*

Resources in Central Oregon (which already existed in draft form)², and enter into a "programmatic agreement." (2012 MOA, ¶ II(A)-(B).) The completed MPD and programmatic agreement were to be used to evaluate other portions of the COID irrigation system, and more efficiently fulfill the parties' Section 106 responsibilities for future piping projects. *Id.*

In January 2013, COID submitted an application for a BOR grant for a new project to pipe a portion of the Pilot Butte Canal (named the Juniper Ridge Phase II project). The Pilot Butte Canal is not connected to the I-lateral, which is part of the Central Oregon Canal system. These canals are more than 15 miles apart.

On January 2, 2013, COID contacted SHPO about the mitigation that would be required for this new piping project. One day later, SHPO stated that the parties could simply use the 2012 MOA, amended to include this new project. (Exhibit 2.) This decision was in contradiction to the 2012 MOA, which required the completion of the MPD and a programmatic agreement before evaluating subsequent projects in a systematic fashion. No public notice was provided about this decision, and the public was not involved in any way. Even the landowners whose property this segment of canal flows over were not notified of this global MOA amendment impacting the historic resource on their property.

In May 2013, COID was selected for the BOR grant for the Juniper Ridge Phase II piping project. (Exhibit 3.) In September 2013, SHPO officially informed BOR that the parties could re-write their 2012 MOA to specifically name this new project and thus "satisfy" their Section 106 obligations for the Pilot Butte Canal piping project. (Exhibit 4.)

In February 2014, COID, BOR, and SHPO re-executed the MOA for the I-lateral canal—except now it purported to apply to future piping projects within COID's system. (Exhibit 5, "2014 MOA", ¶¶ 2, 3(B).) The most significant change to the MOA was the additional mitigation requiring COID to preserve one segment from each of the canals. (2014 MOA, ¶ 3(B)(3).) Despite the MOA's new far-reaching terms, it was still titled "For Piping of a Segment of the I-Lateral, ALFALFA VICINITY, DESCHUTES COUNTY, OREGON." As before, this global MOA amendment that impacts vast swaths of historic canals in central Oregon was done with no public outreach and no notice to the impacted owners in violation of NHPA and NEPA law.

² We have not had adequate time to review the MPD and, therefore, can provide no substantive response in regard to the document. We request that the SACHP postpone its consideration of the document to allow Ms. Warren and other impacted parties an opportunity to review and provide comment.

Unfortunately, the terms of this invalid MOA state that COID is the party that selects the two segments to be preserved. The 2014 MOA also states that upon completion of the MPD and preservation of two canal segments, "all adverse effects resulting from subterranean piping of all canals, laterals, sub-laterals, and ditches will be considered to be fully mitigated, and may proceed without Section 106 or ORS 358.653 (as appropriate) consultation with Reclamation or SHPO." (Again, no public notice or public involvement was provided prior to the execution of this new MOA.)

In other words, the invalid 2014 MOA appears to state in part that approval of the MPD and the two segments of canal proposed by COID—now before the SACHP—will allow COID to destroy all other segments of its canal without any additional historical review (at least at the state and federal level). And the first segment that COID intends to destroy is the Pilot Butte Canal Historic District—which is already listed on the NRHP.

2. The Section 106 Process Related to COID Nominations Violated Both the NEPA and the NHPA.

COID and BOR have systematically excluded the public from being involved in the NEPA and Section 106 review of the I-lateral and Juniper Ridge Phase II piping projects. They have refused to provide public notice, hold public hearings, make documents available for review, or otherwise allow any public involvement. Even the owners of the land under the historic canals were not given notice or allowed to comment before the 2012 MOA and its amendments were made.

These actions are a clear violation of the both NEPA and NHPA. The NEPA and NHPA mandates to involve the public are not suggestive—they are mandatory.³ The failure to do so is grounds for a court-ordered injunction to redo the

³ 36 CFR § 800.2(d) provides:

"(1) Nature of involvement. The views of the public are essential to informed Federal decisionmaking in the section 106 process. The agency official shall seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, the likely interest of the public in the effects on historic properties, confidentiality concerns of private individuals and businesses, and the relationship of the Federal involvement to the undertaking.

"(2) Providing notice and information. The agency official must, except where appropriate to protect confidentiality concerns of affected parties, provide the public with information about an undertaking and its effects on historic properties and seek public

Section 106 process. *See Montana Wilderness Ass'n v. Fry*, 310 F Supp 2d 1127, 1151 (D Mont. 2004).

COID, SHPO, and BOR also engaged in an unauthorized process for the 2014 MOA. There is no authority that allows amending a past Section 106 MOA to include a subsequent project. Only a programmatic agreement can somewhat function in this way, and the 2012 MOA did not meet those additional requirements (or even purport to be such a document). 36 CFR § 800.14. Thus, the parties' revision of the 2012 MOA to state that it also covered the Juniper Ridge Phase II project was invalid, and does not constitute a Section 106 review for that project.

Finally, the parties failed to develop and evaluate alternatives or modifications to the piping plans to minimize the adverse effect on historic properties. 36 CFR § 800.6(a); 40 CFR § 1508.20). The focus of the review process was instead on fast-tracking the piping projects and minimizing the interference with COID's development plans. Thus, the terms of the invalid 2014 MOA allows COID to select the segments to be preserved. It is unclear why SHPO (as the representative protecting the state's historic resources) did not insist on preservation of all segments on the NRHP, or

comment and input. Members of the public may also provide views on their own initiative for the agency official to consider in decisionmaking." * * *

40 CFR § 1506.6 provides:

"Agencies shall:

"(a) Make diligent efforts to involve the public in preparing and implementing their NEPA procedures.

"(b) Provide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents so as to inform those persons and agencies who may be interested or affected.

"(1) In all cases the agency shall mail notice to those who have requested it on an individual action."

* * *

"(c) Hold or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements applicable to the agency. * * *

"(d) Solicit appropriate information from the public.

"(e) Explain in its procedures where interested persons can get information or status reports on environmental impact statements and other elements of the NEPA process." (Emphasis added.)

* * *

at least preservation of the segments with the highest integrity. A review of e-mails produced by SHPO indicate little analysis of the value or comparative integrity of the segments selected by COID. This type of rubber-stamping approval is expressly forbidden by NEPA and NHPA case law. *See Metcalf v. Daley*, 214 F3d 1135, 1142 (9th Cir. 2000) ("the comprehensive 'hard look' mandated by Congress and required by the statute must be timely, and it must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made").

3. The Segments Selected by COID Are Not for Historical Purposes and Do Not Satisfy the 2014 MOA.

The segments proposed by COID do not even satisfy the terms of the invalid 2014 MOA, which are:

1. The segments will be high-integrity, substantial, contributing segments (minimally, one substantial segment each in the Pilot Butte Canal and the Central Oregon Canal) to the overall eligible District;
2. The segment should include a variety of features, such that it well-represents the function and appearance of the water conveyance system, as it appeared as an intact system;
3. The segment should be of sufficient length that on-site interpretation (see Stipulation 8.3(b), below) can be achieved in an attractive, well-organized fashion, without crowding or overwhelming the resource itself. (2014 MOA, ¶ 3(B)(3)(A).)

As pointed out in comments by Ms. Warren, the segments nominated by COID are not of high historic value. The segments nominated by COID were not selected for their historical value, but for their lack of interference with COID's plans to generate and sell hydroelectric power. It cannot be argued that the segment of the Pilot Butte Canal already on the NRHP does not meet the standards above, or is less worthy of preservation. The only issue with that segment is that it interferes with COID's plan to generate additional power at its nearby hydroelectric plant.

Ms. Warren and other concerned members of the public agree with the overall goals of piping some irrigation canals—if done in a responsible way that protects Oregon's historical resources and allows land owners to be involved in the decision. Conservation of water and preservation of wildlife should be top priorities. But

generation of power and revenue for COID should not take priority over the preservation of historic resources.

4. Request for the SACHP to Reject COID Nominations and Direct the Parties to Fulfill Their NEPA/NHPA Obligations.

The preservation of historic resources is of the utmost importance to the State of Oregon. *See* ORS 358.605, 358.475, 358.653, Goal 5, etc. To that end, SHPO was created and empowered by the Oregon legislature. ORS 358.612, 358.565. Unfortunately, it appears (from our review of documents obtained under public information requests) that SHPO is under political pressure to abdicate its primary responsibility and instead fast-track COID piping projects. Thus, it appears SHPO has been complicit in excluding the public from meaningful involvement in the NEPA/NHPA reviews of the canal piping projects. SHPO has repeatedly declined to provide notice of activity or decisions related to the process—including this very meeting of SACHP. Despite numerous requests for notice of relevant activity, SHPO failed to notify the owners of the Pilot Butte Canal Historic District of the COID nominations.

In stark contrast to its treatment of the public, SHPO immediately forwarded to COID all information relating to the 2014 NRHP nomination for Pilot Butte Canal Historic District. A review of SHPO's relevant emails shows that SHPO continues to provide COID with a summary or copy of almost all substantive communication it has with members of the public opposed to the piping of the Pilot Butte Canal. SHPO is recognized under both federal and state law as the agency representing Oregon's interest in protecting the state's historical resources. At a minimum, SHPO should be neutral between COID and the public opposed to the destruction of historic resources—and certainly not acting as an agent for COID.

Fortunately, the Oregon legislature foresaw these types of pressures and created an independent, non-political committee to advise and oversee SHPO. Under ORS 358.622, the SACHP has the responsibility of not only reviewing nominations for the NRHP, but also is required to "advise the State Historic Preservation Officer on matters of policy, programs and budget[.]"

We respectfully request that the SACHP perform both of these functions now. We ask that the SACHP reject the nominations by COID in order to prevent the destruction of better, already recognized, historic canals. At a minimum, SACHP should postpone a decision on these nominations and the MPD until the interested members of the public have a reasonable opportunity to review and comment.

State Advisory Committee on Historic Preservation

June 14, 2016

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We also ask that the SACHP advise SHPO to insist that BOR and COID fulfill their Section 106 obligations for all piping projects, including Juniper Ridge Phase II. This should involve SHPO notifying BOR and COID that the invalid 2014 MOA does not cover the Juniper Ridge Phase II project and insisting that the parties conduct a new Section 106 review that complies with federal law. Even if the 2014 MOA was not invalid under federal law, its own terms state that it does not apply to properties that are listed on the NRHP. (2014 MOA, ¶ 2: "This MOA does not apply to projects affecting any feature or element that is or may be individually eligible for listing in the National Register of Historic Places. Federal undertakings that affect these elements of the District will continue to be reviewed under standard Section 106 review processes (36 CFR 800).")

If BOR, COID, and SHPO refuse to comply with their obligations under NEPA and NHPA for the Juniper Ridge Phase II project, Ms. Warren may be forced to file a lawsuit to prevent the parties from moving ahead with their plans to unlawfully destroy historic properties.

Please let me know if you would like any additional information, or additional supporting documentation, for the matters discussed above.

Very truly yours,



Steven G. Liday

cc: Ms. Aleta Warren

Enclosures:
Exhibits 1-5

MEMORANDUM OF AGREEMENT
No. R12MA13723
AMONG
THE U.S. BUREAU OF RECLAMATION,
THE OREGON STATE HISTORIC PRESERVATION OFFICE
AND
CENTRAL OREGON IRRIGATION DISTRICT

For
Piping of a Segment of the I-Lateral

ALFALFA VICINITY, DESCHUTES COUNTY, OREGON

This Memorandum of Agreement, hereinafter referred to as "MOA", is made and entered into by and between the United States Of America, acting through Columbia-Cascades Area Office, Bureau of Reclamation, Department of the Interior, hereinafter referred to as "**Reclamation**", the Central Oregon Irrigation District, hereinafter referred to as "**District**", and the Oregon State Historic Preservation Office, hereinafter referred to as "**SHPO**", pursuant to the Reclamation Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplementary thereto and other applicable State laws and regulations, and Section 106 of the National Historic Preservation Act (36 CFR 800).

I. Background

WHEREAS, the Bureau of Reclamation (Reclamation), in consultation with the Oregon State Historic Preservation Office (SHPO), determined that the Central Oregon Irrigation District's I-Lateral (Lateral) is eligible for the National Register of Historic Places as a contributing feature of the Central Oregon Irrigation District, a linear irrigation water conveyance system;

WHEREAS, the District is intending to install within the prism of the Lateral approximately 4,800 ft. of a maximum diameter 63-inch diameter HDPE pipe, located in sections 25, 26 and 36 of T.17S R.14E (for water conservation aimed at improving operation efficiencies and restoring anadromous fish habitat), and has documented the extent of the Lateral within the current undertaking's Area of Potential Effects for historic and archaeological resources to standards acceptable to Reclamation and SHPO;

WHEREAS, the Bureau of Reclamation (Reclamation), in consultation with the Oregon State Historic Preservation Office (SHPO), determined that replacement of the open I-Lateral with the pipe will have an adverse effect upon the historic integrity of the Lateral;

WHEREAS, Reclamation notified the Advisory Council on Historic Preservation (Council) of the adverse effect on the I-Lateral pursuant to 36 CFR Section 800.6(a)(1), and in a letter dated September 17, 2012, the Council indicated that their participation is not needed in the consultation for resolution of adverse effects from this undertaking;

II. Implementing Actions

The Reclamation, SHPO and the District agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effects of the undertaking on historic properties, and adherence to the terms of this agreement satisfy the Section 106 responsibilities for addressing the effects of the undertaking on historic properties.

STIPULATIONS

The Central Oregon Irrigation District will ensure that the following actions will occur:

A. Historic Documentation: Following all applicable guidance provided by the National Park Service and SHPO for the preparation of Multiple Property Documents (MPD), the District will edit the MPD, *Historic Agricultural Resources in Central Oregon*, which is currently in draft form, as prepared by Claeysens and Tomlinson (2006) under a previous Reclamation water conservation grant.

The MPD will establish standards by which eligibility and integrity can be evaluated across the entire COID irrigation water conveyance system. Section E will include a summary of the history of irrigation in Central Oregon and a complete context for the District. Section F shall include general registration requirements pertaining to all irrigation districts and their associated water systems in Central Oregon, and specific registration criteria for District resources. The selection and definition of property types and eligibility of the identified properties for listing in the National Register of Historic places shall be based primarily on field work documenting the system, and secondarily on Historic American Engineering Record (HAER) and/or Historic American Building Record (HABS) documentation, determinations of eligibility for associated features such as dams, diversion dams, and hydroelectric facilities for components of the COID system, and other secondary sources. The remaining sections of the document shall be edited as needed to reflect the changes made in Section E and F. A GIS-based map of the entire system identifying the extent and features of the COID, and any other necessary appendixes shall be included..

The draft MPD will be submitted to Reclamation and SHPO no later than three years from the date of the last signature on this document for review and comment. The final document must be revised as requested by Reclamation and SHPO and submitted to the National Park Service for listing in the National Register one calendar year from date of submission of the draft document.

B. Development of a Programmatic Agreement (PA) The District shall enter into a Programmatic Agreement (PA) with the SHPO to allow for the more efficient fulfillment of the agency's obligations under Section 106 of the National Historic Preservation Act, as amended and Oregon Revised Statute 358.653 as applicable. All parties shall use the MPD to identify contributing segments of the canal system to be managed under the PA and any subsequent documents created as part of the process. The PA will include, at a minimum:

- A list of routine maintenance and minor construction activities and actions that do not adversely affect the historic resource and that are exempt from regular review by the SHPO
- A provision to address emergency situations where catastrophic breach of the canal or other unforeseen event or eminent threat endangers human life or property. Such a provision shall allow the District to act on the immediate situation without consultation and address compliance with applicable cultural resource laws in consultation with appropriate federal and state agencies and stakeholders at a later time.
- An inadvertent discoveries clause, which will outline procedures to be followed when unknown, unanticipated cultural resources are discovered due to District activities.
- A description of annual reporting requirements and timetable for reporting activities undertaken by the District where the provisions of the PA were applied.
- A defined effective period of 10 years with provisions for the document to be reviewed at 5 years from last date of signature, amended as necessary, and the effective period continued, based on consultation.

The PA may also include a probability model for subsurface archaeological sites, cultural resource treatment plans, and preservation plans, as agreed to by the signing Parties.

The District and the SHPO as well as any other interested, consulting parties will be signatories to the PA.

III. Period of Performance

This Agreement shall become effective on the date of the last signature hereto and extend three years after the date of the last signature. The MOA will also be considered terminated once all stipulations are complete, or five years after the date of the last signature on this document. Any party may terminate this MOA by providing 30 days written notice to the other party(ies). Any party may formally request modification of the agreement by providing a written request to the other party(ies).

IV. Designated Contacts

For Reclamation:

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 Archeologist
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For SHPO:

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Salem, OR 97301-1266
Phone (503) 986-0579
Fax (503) 986-0793
Email: Jason.Allen@state.or.us

V. General Provisions

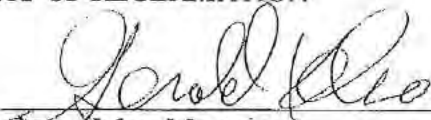
A. Nothing herein shall or shall be construed to obligate any party to expend funds or involve their respective agencies in any contract or other obligation for the future payment of money in excess of appropriations authorized by law and administratively allocated for the purposes and projects contemplated hereunder.

B. No Member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of this MOA or to any benefit that may arise out of it.

C. The parties agree to comply with all Federal statutes relating to nondiscrimination, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, religion, sex, or national origin; Title IX of the Education amendments of 1972, as amended, which prohibits discrimination on the basis of sex; the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990, as amended, which prohibit discrimination on the basis of disability; the Age Discrimination in Employment Act of 1967, as amended, which prohibits discrimination based on age against those who are at least 40 years of age; and the Equal Pay Act of 1963.


SIGNATORIES

BUREAU OF RECLAMATION

BY: 
Gerry Kelso, Manager
Columbia-Cascades Area Office

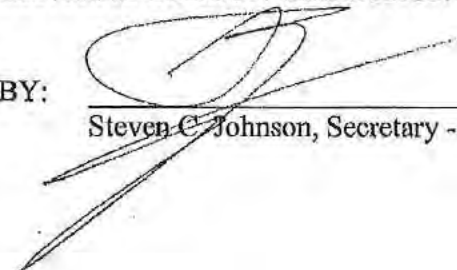
DATE: 9/2/12

OREGON STATE HISTORIC PRESERVATION OFFICE

BY: 
Roger Roper
Deputy State Historic Preservation Officer

DATE: 10-5-12

CENTRAL OREGON IRRIGATION DISTRICT

BY: 
Steven C. Johnson, Secretary - Manager

DATE: 27 Sept. 2012

From: [JOHNSON Ian * OPRD](#)
To: [JOHNSON Ian * OPRD](#)
Cc: [JOHNSON Ian * OPRD](#)
Subject: FW: RE: SHPO Case 12-0948
Date: Monday, May 09, 2016 11:00:23 AM
Attachments: [PBC PIPED MAP.pdf](#)
[JR Project Site Map.pdf](#)

-----Original Message-----

From: Laura Wollam [mailto:lauraw@coid.org];
Sent: 1/7/2013 12:33:23 PM
To: JOHNSON Ian * OPRD [mailto:JohnsoI@PRD.STATE.OR.US];
CC: ALLEN Jason * OPRD [mailto:AllenJa@PRD.STATE.OR.US];
Subject: RE: SHPO Case 12-0948

<!--[if mso 9]--> <!--[endif]-->

Hi Ian,

I am attaching a map of the PBC that shows the piped and unpiped sections. The total length of the PBC is 26.2 miles with 4.4 miles currently piped and 21.8 miles currently open canal.

I am also attaching the project map from Ward Tonsfeldt's report that he created when he did the historic/cultural review of this project area.

Please let me know what our next steps are after you have had a chance to review this information.

Thanks!

Laura

Laura Wollam

*Water Use Specialist / Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct
Redmond, OR 97756
Phone: 541-504-7577
Email: lauraw@coid.org*

From: Ian Johnson [mailto:ian.johnson@state.or.us]
Sent: Thursday, January 03, 2013 1:14 PM
To: Laura Wollam
Cc: Jason Allen
Subject: RE: SHPO Case 12-0948

Laura,

Thanks for contacting us. Just to make sure we're talking about the same case I am attaching all the paperwork we have for 10-1873, a project proposed for the Pilot Butte Canal.

We can wrap the mitigation for the earlier project into the MOA for 12-0948; however, that will need to be a formal amendment process, and, as part of the deal we want to see segment(s) of Pilot Butte Canal preserved, as is, either watered or not, and interpreted. Since the MOA calls for an Multiple Property Document, preserved sections of the canal could be listed in the Register using this document.

As noted in my earlier letter, it is unclear in our records how much of the canal has already been piped and what the integrity of the remaining sections are. We'll need to know how much is left before we move forward. A good starting point might be a map that shows what is and is not piped and the area of the proposed project, which was missing from the first submission. We can discuss later what more information may be needed to complete and FOE and if/how we may amend the MOA.

Please contact me if you have any other questions.

Ian

Ian P. Johnson, Historian
Oregon SHPO
725 Summer Street NE, Suite C
Salem, Oregon 97301
Ph: (503) 986-0678
Fax: (503) 986-0793

Visit our website:
www.oregonheritage.org

Comments or suggestions:
Heritage.Programs@state.or.us

>>> "Laura Wollam" <lauraw@coid.org> 1/3/2013 7:52 AM >>>
Hi Jason,

I found a case number for this project. It is 10-1873.

Laura Wollam
Water Use Specialist / Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct
Redmond, OR 97756
Phone: 541-504-7577
Email: lauraw@coid.org

-----Original Message-----

From: Jason Allen [<mailto:jason.allen@state.or.us>]
Sent: Wednesday, January 02, 2013 10:51 AM
To: Laura Wollam
Cc: Ian Johnson
Subject: Re: SHPO Case 12-0948

Hi Laura,

I'll look into this and let you know what I find. I may have to do some

digging, since I'm not familiar with the project. I'll be in touch, likely tomorrow or Friday, if that works.

Cheers,
-Jason

Jason M. Allen, M.A.
Historic Preservation Specialist
Oregon State Historic Preservation Office
725 Summer St. NE, Ste. C
Salem, OR 97301-1266
503-986-0579
jason.allen@state.or.us

Please Note: An updated version of the SHPO Clearance Form is now available for download at:
http://cms.oregon.gov/oprd/HCD/SHPO/pages/preservation_106.aspx

>>> "Laura Wollam" <lauraw@coid.org> 1/2/2013 10:41 AM >>>
Good morning Ian & Jason,

I have a couple of questions for you regarding our most recent MOA and plans for a PA.

We are going to be submitting an application for WaterSMART funding for a new project, and are working on the NEPA requirements. This project is the 2nd phase of previous piping project in the Bend area, but not on the COC which feeds the I-Lat for our current MOA. The project is being completed on our other main canal that flows through Redmond and Terrebonne.

Since our current MOA for Case #12-0948 includes completing the draft report that Paul Claeysens did, what is going to be required of us to have SHPO sign off for this project? I believe we had already submitted a historical & cultural report, or at least a draft report for this piping project a couple of years ago to you (2010 I believe), but we did not follow-up as the project got shelved for a couple of years until the design process was more complete. I am sorry, but I don't have a case number for our submittal to you.

Will we need to do a new MOA for this project, or will we be able to work off of the existing MOA?

Thanks,

Laura

Laura Wollam

Water Use Specialist / Grant Specialist

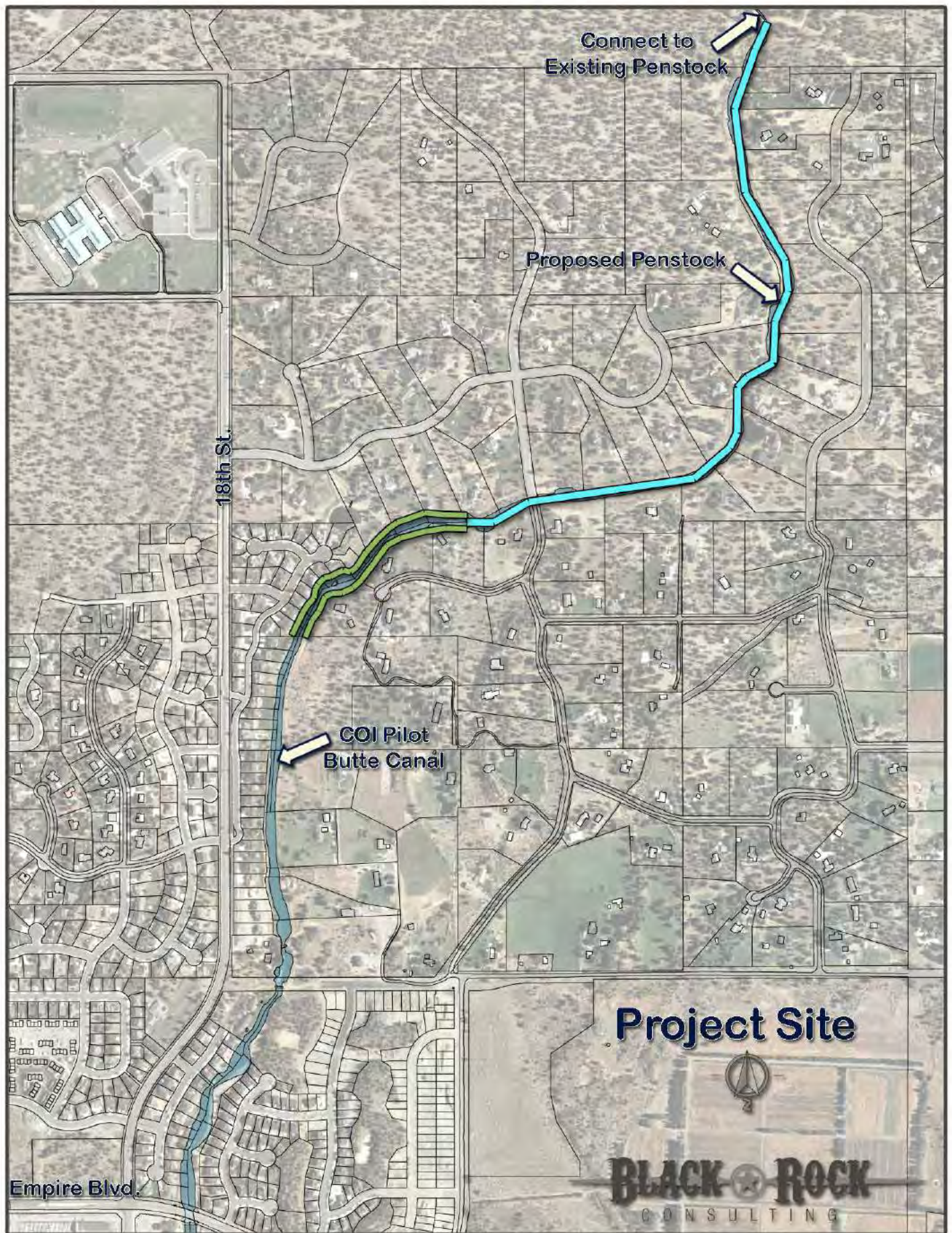
Central Oregon Irrigation District

1055 SW Lake Ct

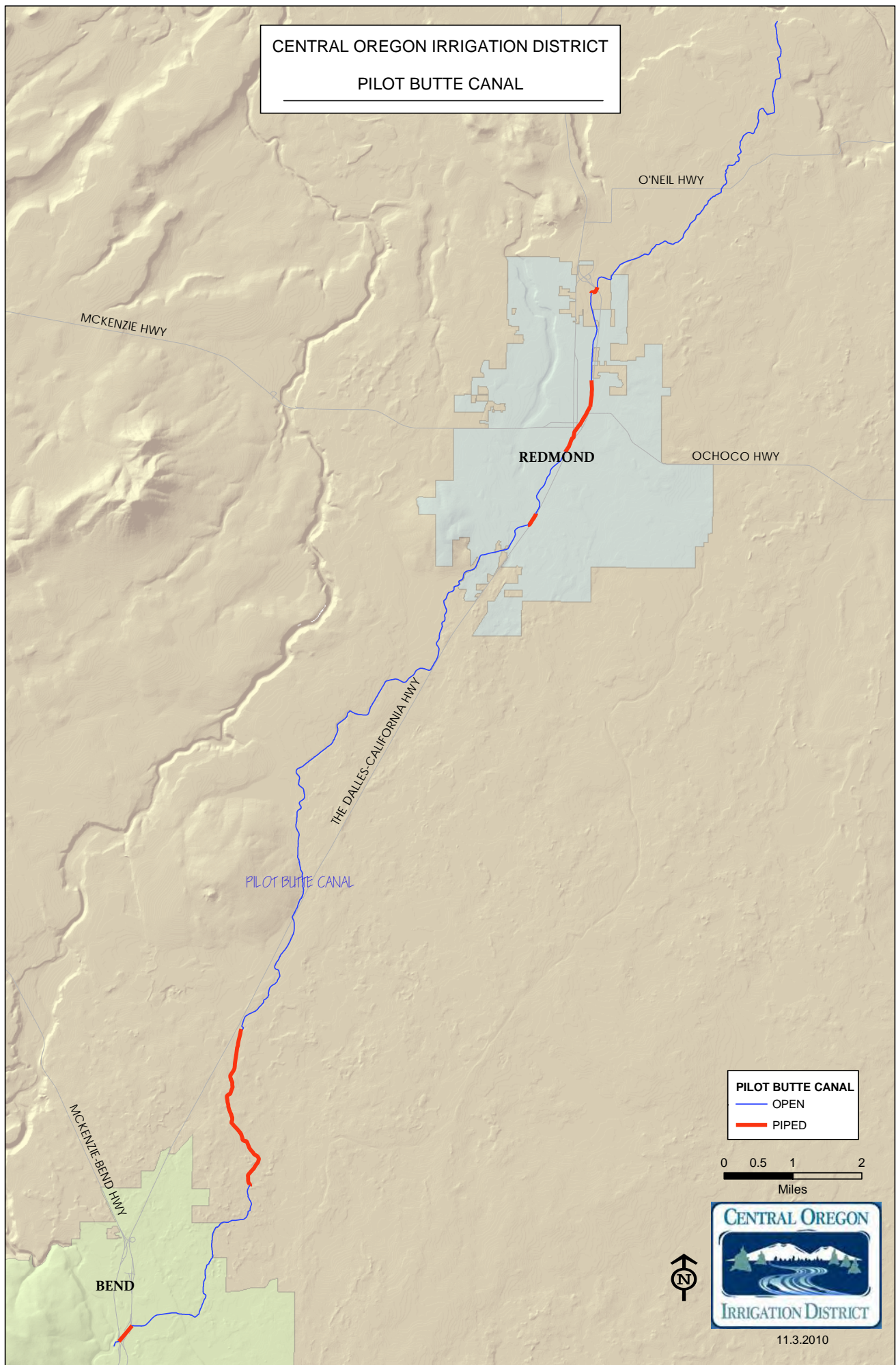
Redmond, OR 97756

Phone: 541-504-7577

Email: lauraw@coid.org



CENTRAL OREGON IRRIGATION DISTRICT
PILOT BUTTE CANAL



From: [JOHNSON Ian * OPRD](#)
To: [JOHNSON Ian * OPRD](#)
Cc: [JOHNSON Ian * OPRD](#)
Subject: FW: Pilot Butte Canal Project Timeline
Date: Monday, May 09, 2016 10:47:17 AM

-----Original Message-----

From: JOHNSON Ian * OPRD [mailto:Ian.Johnson@oregon.gov];
Sent: 4/9/2015 9:20:42 AM
To: CURRAN Chrissy * OPRD [mailto:Chrissy.Curran@oregon.gov];
Subject: Pilot Butte Canal Project Timeline

Chrissy,

Here is the project summary. Not every detail, but most of them. Please let me know if you would like more or less information – probably much much less.

Ian

Overview:

In consideration of the desire to conserve water and, where appropriate, produce hydroelectric power, the Central Oregon Irrigation District (COID) is engaged in a multi-year plan to pipe the majority of the Pilot Butte and North Unit Canals in Deschutes County. Much of this work will be paid for with federal pass-through grants. While most work completed thus far progressed without much public interest, there is considerable controversy regarding the piping and development of a hydroelectric facility on the Pilot Butte Canal in Township 17 South, Range 12 East, Section 15, W. M., Bend and unincorporated Deschutes Co. The project area is a relatively urban environment with several residences in close proximity to the Canal. In the last several years, and particularly recently, neighbors have sought to stop the project through various local, state, and federal processes due to concerns regarding property values; safety of the hydroelectric facility; and aesthetics.

The Oregon SHPO reviewed this project under two distinct and administratively separate federal programs, each with its own goals and outcomes. Section 106 of the 1966 National Historic Preservation Act, as amended (NHPA) requires agencies to seek consultation with the State Historic Preservation Office for projects funded with federal monies and under other circumstances. The goal of this program is not to prevent a project nor to prevent destruction of a resource, but rather to walk the agency through a process that considers the impact of an

action on a historic property. The SHPO provides guidance regarding the eligibility of the resource for listing in the National Register of Historic Places; the potential impact of the project on the qualities that make the property eligible for listing; and appropriate mitigation measures should the historic property be negatively impacted. Under this process, the federal agency is responsible for compliance with the law. In early 2014 our office began receiving public inquiries regarding the Juniper Ridge II project concerning our review process and the opportunity for public comment. Our office provided information and project documents, but referred all requests for public comment to Bureau of Reclamation (BOR), the project sponsor. To date, the federal agency has declined to re-examine the project or the MOA in consideration of comments received from the public.

Also established under the NHPA, the National Register of Historic Places seeks to recognize properties important in American History. As stated in federal law, any individual can propose that any property be listed. Owners may prevent the listing of their property by objecting in writing; . Owner is narrowly defined in federal regulations as only those who have fee-simple title to the property. The National Register program is honorific, requiring no federal or state oversight; however, Oregon's administrative rule for Goal 5 requires local governments to "protect" properties of "statewide significance," defined as those listed in the Register. The proponents of the Pilot Butte Canal have on several occasions stated to staff that they are pursuing listing in the National Register to gain local control over the fate of the Canal segment. As described below, efforts to list the Canal in the Register are ongoing. Attempts to list the Canal segment in the Bend and Deschutes County local landmarks registers have been unsuccessful due to the local definition of "owner" under ORS 197.772. The state law provides owners an opportunity to prevent their property from being listed in a local landmark register by objecting to the process before the property is listed. Local interpretation of the law defines COID as an owner.

Below is a more detailed synopsis of the Federal Compliance and National Register processes.

Federal Compliance Process:

In August 2010 our office received a request for concurrence for the Juniper Ridge Phase II project (SHPO Case No. 10-1873), which called for the piping of the Pilot Butte Canal and development of a hydroelectric facility, location described above. Federal law requires agencies to seek consultation with the State Historic Preservation Office under Section 106 of the NHPA for projects funded with federal monies. In this particular case, the Canal is maintained by the Central Oregon Irrigation District (COID), but the project is funded by a U.S. Bureau of Reclamation (BOR) pass-through grant. To our knowledge, no other federal agency is involved with the project. However, local authorities are involved in the local planning process.

In reviewing the documentation, the Oregon SHPO concurred with BOR that the Pilot Butte Canal was eligible for listing in the National Register, but disagreed with the assessment that the proposed project would not adversely affect the qualities that made the canal eligible for listing due to a lack of information regarding the overall condition of the resource. This response went unanswered until February 2013 when COID and BOR proposed surveying the entirety of the Canal, which SHPO agreed to. Subsequently, BOR reaffirmed its prior conclusion that the project would not adversely affect the Canal; however, our office disagreed. In a letter dated 9/9/2013 our office stated our position, but noted that the Memorandum of Agreement (MOA) mitigating adverse effects created by Phase II of the North Unit Irrigation District Water and Energy Conservation Initiative (SHPO Case No. 12-0948) addressed the piping of the entirety of the Pilot Butte and North Unit canals. The document was signed in October 2012. Because the existing MOA addressed piping the entirety of the resource, our office recommended amending the MOA to specifically include the Juniper Ridge Phase II project as a project mitigated under the document and to more specifically state that proposed piping projects were covered by the provisions of the agreement even as the MOA's stipulations were still being carried out. The amended MOA was signed in February 2014.

National Register Process:

In November 2014 our office received an application to list the Pilot Butte Canal Historic District in the National Register of Historic Places. The document was reviewed and returned to the proponents for corrections, which were made, and the document was deemed complete and scheduled for the February 2015 meeting of the State Advisory Committee on Historic Preservation (SACHP), a nine-member governor appointed board of experts in various preservation-related fields. The proposed Pilot Butte Canal Historic District encompasses the entirety of the Pilot Butte Canal, generally bound by Yeoman Road to the south and Cooley Road to the North in Bend and unincorporated Deschutes County, including an area measuring 50' from the centerline of the canal on either side creating a single corridor measuring 100' in width.

The SACHP reviewed the nomination at their regular meeting on Thursday, February 19, 2014 at 1:00pm in Eugene, approving the document on a 4 to 2 vote. A copy of the Pilot Butte Canal Historic District nomination document as reviewed by the SACHP is on our website at http://www.oregon.gov/oprd/HCD/NATREG/Pages/nrhp_sachphome.aspx. The document will be held by our office for a 90-day comment period until May 21st. During this period, the proponents will have the opportunity to revise the document in order to address issues raised during the hearing. A final review copy will be ready in early May. Before the document is sent to the National Park Service (NPS) for final consideration, Christine Curran, the Deputy State Historic Preservation Officer, will make a recommendation to the agency. NPS is the federal agency responsible for the administration of the National Register of Historic Places. NPS will review the document for 45 calendar days, to approximately July 9th. We would expect to receive notification of the agency's decision by email the following week, around

July 16th. This timeline is approximate, and subject to change.

Throughout the remainder of the review process, the petition will be judged by NPS' criteria for determining the significance of historic properties. Property owners may object to listing by submitting a certified statement that they are the property owner of real property within the district boundary and that they object to listing. Anyone not objecting to the nomination, is, according to NPS regulations, considered to be supportive of the petition. Property owners, agencies, municipalities, and the general public are invited to comment at any point during the review process, now through approximately July 9th.

To broadly inform the community of the pending petition, a letter was sent to each property owner within the district boundary, the Mayor of Bend, Deschutes County Commission, Bend and Deschutes County Landmarks Commissions, the document preparers, and COID. A press release targeting local media was issued 10 days before the meeting.



Oregon

John A. Kitzhaber, MD, Governor

Parks and Recreation Department

State Historic Preservation Office

725 Summer St NE, Ste C

Salem, OR 97301-1266

(503) 986-0690

Fax (503) 986-0793

www.oregonheritage.org

September 9, 2013

Mr. Gerald Kelso

Bureau of Reclamation

1201 NE Lloyd Blvd STE 750

Portland, OR 97232



RE: SHPO Case No. 10-1873

Pilot Butte Canal Juniper Ridge Piping Proj Phase 2

Dear Mr. Kelso:

Thank you for submitting documentation on the project referenced above. While the Oregon State Historic Preservation Office (SHPO) acknowledges that the integrity of the subject section of the Pilot Butte Canal is diminished, we believe that the majority of this segment retains sufficient integrity for listing in the National Register and that the proposed piping project will adversely affect the resource's character-defining features.

However, we believe that the Memorandum of Agreement (MOA) mitigating for the adverse effect to historic properties for Phase II of the North Unit Irrigation District Water and Energy Conservation Initiative (SHPO Case No. 12-0948) signed in September 2012 among the Bureau of Reclamation (BOR), our office, and the Central Oregon Irrigation District (COID) is sufficient to address this adverse effect. As noted in personal correspondence with Chris Horting-Jones, as written the MOA does not adequately address how COID's ongoing piping projects should be addressed. We propose amending the document to allow projects to proceed, while carrying out the previously-agreed to stipulations that will identify what portions of the system should ultimately be preserved.

Until the MOA can be amended, and if BOR is amenable, we ask that the agency concur with our Determination of Eligibility, Finding of Effect, and mitigation for this project in writing, and confirm that the agency will seek an amendment to the existing MOA to resolve the issues noted in this letter. It is our hope to have the document amended within the next several months, sooner if possible. Please contact me if there are any further questions, comments, or concerns.

Sincerely,

Ian P. Johnson, M.A.

Historian

(503) 986-0678

ian.johnson@state.or.us



MEMORANDUM OF AGREEMENT
No. R14MA13733
AMONG
THE U.S. BUREAU OF RECLAMATION,
THE OREGON STATE HISTORIC PRESERVATION OFFICE
AND
CENTRAL OREGON IRRIGATION DISTRICT

For
Piping of a Segment of the I-Lateral

ALFALFA VICINITY, DESCHUTES COUNTY, OREGON

This Memorandum of Agreement (MOA) is entered into by Bureau of Reclamation, Columbia-Cascades Area Office (Reclamation), the Oregon State Historic Preservation Office (SHPO) and the Central Oregon Irrigation District (District) to define their respective roles in mitigation efforts related to the piping of the I-Lateral of the Central Oregon Irrigation District System (System). This MOA outlines separate, but related mitigation for the current undertaking (subterranean piping of a Segment of I-Lateral) and the proposed future piping of the remainder of the canals, laterals, sub-lateral and ditches within the District. This MOA replaces MOA No. R12MA13723 thereby canceling it in its entirety.

1. Background

The District is located in Deschutes County. The District provides irrigation water within the Central Oregon Tri-county area with 43,000 acres delivered to water users in the vicinity of Bend, Alfalfa, Powell Butte, Redmond, and Terrebonne, within the upper Deschutes River basin.

A. I-Lateral Piping

Under the current undertaking, the District intends to protect and improve water quality and improve water delivery by converting approximately 4,800 feet of open ditch laterals within the I-Lateral of the System to pipe, in T17S R14E Sections 25, 26 and 36.

The District has been awarded a grant through Reclamation's WaterSMART Program to perform the work. Because Reclamation-administered Federal funds will be involved in this project, the Section 106 process of the National Historic Preservation Act was applied to identify affected historic properties.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), the District has documented the extent of the Lateral within the current undertaking's Area of Potential Effects for historic and archaeological resources to standards acceptable to Reclamation and SHPO.

Reclamation, in consultation with SHPO, determined that replacement of the open I-Lateral with the pipe will have an adverse effect upon the historic integrity of the Lateral. Reclamation notified the Advisory Council on Historic Preservation (Council) of the adverse effect on the I-Lateral pursuant to the Code of Federal Regulations (CFR) 36 CFR Section 800.6(a)(1), and in a letter dated September 17, 2012, the Council indicated that their participation is not needed in the consultation for resolution of adverse effects from this undertaking.

Specific mitigation strategies designed to address the adverse effect of this undertaking are identified below, in section 3.A.

B. Future Piping of Canals, Laterals, sub-Laterals, and Ditches

Through discussions between Reclamation, SHPO, and the District related to future project planning and the stated intentions of the District, a proposal to programmatically mitigate for future adverse effects related to the future piping of canals, laterals, sub-laterals, and ditches throughout the District has been developed. This MOA is intended to provide mitigation for such future piping efforts.

Specific mitigation strategies designed to address the adverse effects of these future undertakings are identified below, in section 3.B.

C. Interim Management

Until the Programmatic Agreement is signed and in place, all consultation regarding non-Federal undertakings will be reviewed by SHPO under standard State review practices, as defined in Oregon State Regulations (ORS) 358.653.

This MOA is entered into under the authority of the National Historic Preservation Act of 1966 as amended, as specified in the regulations in 36 CFR 800, and specifically in Section 6(c) – Resolution of Adverse Effects without the Council.

2. Purpose and Applicability

This MOA will serve to define the necessary actions for documentation of the System in its current state, define in more detail the historical significance, contextual setting, character-defining characteristics and the contributing properties within the System, and set the parameters by which future actions to pipe the System can be accomplished. This MOA will reduce the need to consult with the SHPO on a case-by-case basis when qualifying future activities (defined as subterranean piping of canals, laterals, sub-laterals, and ditches) take place on the System, and provides for a schedule that allows the SHPO to be updated on implemented actions.

This MOA does not apply to projects affecting any feature or element that is or may be individually eligible for listing in the National Register of Historic Places. Federal undertakings that affect these elements of the District will continue to be reviewed under standard Section 106 review processes (36 CFR 800). Non-Federal projects will continue to be reviewed under ORS 358.653.

3. Implementing Actions

A. Piping of I-Lateral

The SHPO, Reclamation, and the District agree that the current undertaking, consisting of the subterranean piping of approximately 4,800 feet of the I-Lateral, currently an open-ditch structure, represents an adverse effect to the National Register-eligible District water conveyance system. In order to mitigate that adverse effect, the following shall be implemented:

1. Reclamation will:

- (a) Consult with the proper interested parties, such as the Council, SHPO, and the Confederated Tribes of the Warm Springs Reservation.
- (b) Ensure that mitigation efforts defined in this MOA as part of the current undertaking (identified below, Section 3.A.2) are completed to the standards set forth below.

2. The District will:

- (a) Perform or cause to be performed the Historic Documentation of the System:

- Following all applicable guidance provided by the National Park Service and SHPO, the District will conduct a historic properties inventory of the entirety of the District facilities and infrastructure related to water conveyance (i.e., not to include district offices and equipment/vehicle maintenance or storage facilities). This inventory will document all water-conveyance system buildings and structures, provide locational information (in GIS format, using lines to represent canals, etc., and points or polygons, as appropriate, to represent features) for all water conveyance-related buildings and structures, as well as associated features. The inventory will meet the requirements set forth for Reconnaissance Level Surveys, as defined in the document, "Guidelines for Historic Resource Surveys in Oregon." Prior to initiation of the survey, a written, detailed survey design will be submitted to SHPO for review and concurrence.
- This inventory will be completed and submitted to Reclamation and SHPO for draft review within three (3) years of the date of the final signature on the document. Comments and revision requests from Reclamation and/or SHPO will be addressed, and a final version of the inventory will be submitted within one (1) year of the receipt of such comments.

B. Future Piping of Canals, Laterals, sub-Laterals, and Ditches Elsewhere Within the District

SHPO, Reclamation, and the District understand that it is the intention of the District to convert significant portions of the system of open canals, laterals, sub-laterals and ditches within the District to a subterranean, piped system. In order to mitigate for future adverse effects that would arise from these efforts, Reclamation, SHPO and the District have agreed to mitigate programmatically through the following measures in order to reduce time, effort, and resources required to conduct standard Section 106 and/or ORS 358.653 consultation:

1. Develop a Programmatic Agreement (PA)

- (a) Reclamation, SHPO, and the District shall enter into a PA to allow for the more efficient fulfillment of the entity's obligations under Section 106 of the National Historic Preservation Act, as amended, and Oregon Revised Statute 358.653, as applicable.
- (b) All parties shall use the Multiple Property Document (see Section 3.B.2., below) to identify contributing segments of the canal system to be managed under the PA and any subsequent documents created as part of the process. The PA will include, at minimum:
 - A list of routine maintenance and minor construction activities and actions that do not adversely affect the historic resource and that are exempt from regular review by SHPO;
 - A provision to address emergency situations where catastrophic breach of the canal or other unforeseen event or eminent threat endangers human life or property. Such a provision shall allow the District to act on the immediate situation without consultation and address compliance with applicable cultural resource laws in consultation with appropriate federal agencies and stakeholders within 30 days of the incident.
 - An inadvertent discovery clause, which will outline procedures to be followed when unknown, unanticipated cultural resources are discovered due to District activities;
 - A description of annual reporting requirements and timetable for reporting activities undertaken by the District where the provisions of the PA were applied;

- A defined effective period of ten (10) years with provisions for the document to be reviewed at five years from last date of signature, amended as necessary, and the effective period continued, based on consultation. If appropriate, the effective period can be extended for an additional ten (10) years (with an additional five-year review), subject to the agreement of Reclamation, SHPO, and the District.
- (c) The PA may also include a probability model for subsurface archaeological sites, cultural resource treatment plans, and preservation plans, as agreed to by the signing Parties.
 - (d) Reclamation, SHPO, and the District, as well as any other interested, consulting parties, will be signatories to the PA.
 - (e) Until the PA is signed and in place, all consultation regarding future federal undertakings (those not covered under Stipulation A) affecting the District water conveyance system will be reviewed by Reclamation and SHPO under standard Section 106 review practices, as defined in 36 CFR 800.

2. Develop Multiple Property Document (MPD)

- (a) Following all applicable guidance provided by the National Park Service and SHPO for the preparation of MPDs, the District will edit the MPD, *Historic Agricultural Resources in Central Oregon*, which is currently in draft form, as prepared by Claeysens and Tomlinson (2006) under a previous Reclamation water conservation grant. The MPD will be prepared sufficiently such that subsequent Irrigation Districts are able to add their district-specific contexts and registration requirements. The MPD elements will be based on the results of the Reconnaissance Level Survey inventory created as a result of Stipulation A.2. (above). The MPD elements to be developed include:
 1. General framework for the functioning of the MPD, once registered, including Sections A through D (complete), Sections E-I such that deal specifically with the District, but that includes general introductions, contexts, and registration requirements that will be applicable across all irrigation districts included in the final MPD;
 2. Establishment of the various historic contexts pertaining to the history and significance of the District. The historic context(s) will be based on historical research, and supported by historical documents and images;
 3. Development of associated property types and general and type-specific registration requirements through which identified elements of the system can be evaluated for eligibility (including consideration of significance and integrity) for inclusion in the NRHP through the framework of the MPD; and
 4. A GIS-based map of the entire system identifying the location, extent, and features of the District, and any other necessary appendices, shall be included. The map should identify elements and sections of the System as either contributing or non-contributing to the District as a comprehensive historic resource.
- (b) The draft MPD (including all GIS information) will be submitted to Reclamation and SHPO for review and comment within three (3) years of the date of the final signature of this MOA. Draft MPD and nomination materials will be submitted to Reclamation and SHPO for review by SHPO and the Oregon State Advisory Committee on Historic

Preservation (SACHP). The District will address any SHPO and SACHP comments prior to forwarding the document to the National Park Service for final consideration.

3. Preservation and Interpretation

- (a) Following completion of the draft MPD elements described above (Stipulation B.2.a-b), the District, in consultation with Reclamation and the SHPO, shall select appropriate, contributing segments to be listed in the National Register of Historic Places through the MPD. These segments will be selected based on the following criteria:
 - 1. The segments will be high-integrity, substantial, contributing segments (minimally, one substantial segment each in the Pilot Butte Canal and the Central Oregon Canal) to the overall eligible District;
 - 2. The segment should include a variety of features, such that it well-represents the function and appearance of the water conveyance system, as it appeared as an intact system;
 - 3. The segment should be of sufficient length that on-site interpretation (see Stipulation B.3 (b), below) can be achieved in an attractive, well-organized fashion, without crowding or overwhelming the resource itself.
- (b) Once selected, the identified segment will be cleaned, repaired, and returned to working condition in a way that meets the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the immediate vicinity prepared such that it creates a welcoming, attractive environment for the public visitation and interpretation of the resource.
- (c) The interpretation of the resource will be achieved through the use of static or active displays that relate the history, function, and significance of the Central Oregon Irrigation District water conveyance system. Such displays will be presented in a format that is weather- and vandal-resistant, attractive, and engaging. Draft content and layout of the interpretive display(s) will be submitted to Reclamation and SHPO for review and comment, and if any revisions are requested, revised versions will be submitted for a second review prior to fabrication. Upon acceptance of the draft content by Reclamation and SHPO, the District will cause the interpretive display to be constructed.
- (d) Once constructed, the interpretive site and displays must be maintained by the District in an attractive and functioning condition.

4. Completion of this MOA

The terms of this MOA will be considered to be completed when the above implementing actions (A-B) have been completed to the satisfaction of Reclamation and SHPO. Upon completion of the implementing actions, all adverse effects resulting from subterranean piping of *all canals, laterals, sub-laterals, and ditches will be considered to be fully mitigated*, and may proceed without Section 106 or ORS 358.653 (as appropriate) consultation with Reclamation or SHPO.

5. Period of Performance

This MOA shall become effective on the date of the last signature hereto and extend three years after the date of the last signature. The MOA will also be considered terminated once all stipulations are complete, or five years after the date of the last signature on this MOA. Any party may terminate this MOA by providing 30

days written notice to the other party(ies). Any party may formally request modification of the MOA by providing a written request to the other party(ies).

If this MOA is terminated prior to completion of the above stipulations, then all projects undertaken from the date of the final signature not covered by the PA (should it be in effect) on this MOA must be reviewed under standard review practices under Section 106 of the National Historic Preservation Act, or under ORS 358.653, as appropriate.

6. Modifications

Reclamation, SHPO or the District may formally request modification of this MOA. Modifications shall be made by mutual consent of Reclamation, SHPO and the District by the issuance of a written modification to this MOA, signed and dated by all parties prior to any changes being performed.

7. Principal Contacts

The principal contacts for this MOA are:

For Reclamation:

Chris Horting-Jones
Archeologist
1375 SE Wilson Ave. #100
Bend, OR 97701
Phone (541) 389-6541
Fax (541)-389-6394
Email: chortingjones@usbr.gov

For the District:

Laura Wollam
Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct.
Redmond, OR 97756
Phone (541) 504-7577
Fax (541) 548-0243
Email: lauraw@coid.org

For SHPO:

Jason Allen
Historic Preservation Specialist
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1266
Phone (503) 986-0579
Fax (503) 986-0793
Email: Jason.Allen@state.or.us

8. General Provisions

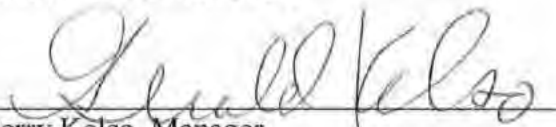
- a. Reclamation's responsibility for ensuring completion of consultation with SHPO for future undertakings identified in Section 3.B. is limited only to those that qualify as Federal undertakings. Projects identified in Section 3.B. that do not qualify as Federal undertakings are subject to review by the SHPO under ORS 358.653, and the responsibility for consultation and completion will rest with the District.
- b. Completion of the mitigation stipulations will be considered to satisfy the requirements for mitigation of adverse effects for a previous undertaking (Pilot Butte Canal Juniper Ridge Piping Project Phase 2 [SHPO Case# 10-1873]) that has not yet been mitigated as of the date of the final signature on this MOA.
- c. This MOA is neither a fiscal nor a funds-obligating document for Reclamation. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties of this MOA will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOA does not provide such authority.
- d. Nothing herein shall be construed to obligate Reclamation to expend or involve the United States of America in any contract or other obligation for the future payment of money in excess of the appropriations authorized by law and administratively allocated for the purposes and projects contemplated hereunder.
- e. No member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of the MOA or to any benefit that may arise out of it.
- f. Any information furnished to Reclamation, under this MOA, is subject to the Freedom of Information Act (5 U.S.C. 552).
- g. All parties to this MOA agree to comply with all Federal statutes relating to nondiscrimination, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, religion, sex, or national origin; Title IX of the Education amendments of 1972, as amended, which prohibits discrimination on the basis of sex; the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990, as amended, which prohibit discrimination on the basis of disability; the Age Discrimination in Employment Act of 1967, as amended, which prohibits discrimination based on age against those who are at least 40 years of age; and the Equal Pay Act of 1963.

9. Signatures

Reclamation, SHPO and the District will abide by the terms and provisions expressed or referenced herein.

BUREAU OF RECLAMATION

by:



Gerry Kelso, Manager
Columbia-Cascades Area Office

DATE:

2/12/14

OREGON STATE HISTORIC PRESERVATION OFFICE

BY:




Roger Roper
Deputy State Historic Preservation Officer

DATE:

2.25.14

CENTRAL OREGON IRRIGATION DISTRICT

BY:



Steven Johnson
Secretary-Manager

DATE:

14 Feb. 2014

~~ End of Document ~~

ALLEN Jason * OPRD

From: Greg Vernon <gregvernon65@gmail.com>
Sent: Wednesday, June 15, 2016 11:57 AM
To: ALLEN Jason * OPRD
Subject: Fwd: COID Request for Historic Designation

Follow Up Flag: Follow up
Flag Status: Completed

Sent from my iPad

Begin forwarded message:

From: Greg Vernon <gregvernon65@gmail.com>
Date: June 14, 2016 at 7:01:39 AM PDT
To: jasonallen@oregon.gov
Subject: COID Request for Historic Designation

My name is Greg Vernon and I live at 63385 Old Deschutes Rd. Bend, Oregon. I live on the 1.5 miles of Pilot Butte canal that recently was designated historic. COID has made numerous efforts to be allowed to pipe this section of the canal without regard for the land owners who own title to the land. They have the authority to pipe the canal if they follow the conditional use cited in our zoning. COID and their advocates have repeatedly said it will not impact property values. This is absurd as I had a real estate broker give me an opinion and he concluded that I would lose \$150,000 in property value.

Now COID is trying another end run by submitting three sections for historic designation and including MOA's that would trump zoning and allow them to pipe our section of the canal. I am a reasonable person and know the difference between right and wrong. Please reject their requests and make them do what is right.

Sent from my iPad

Reclamation Comments on the MPD table FINAL v4_MPD04202017

Reclamation Comments on the MPD

Page	Location	Comment	Revision Status
-	Global	In 2015, Reclamation staff commented on an earlier draft of this document, but the reviewing staff never received the revised version to see if the author ever made the requested changes. Unfortunately, review of this December 2016 version shows that the author did not address Reclamation’s concerns. Given that this MPD has the potential to set precedent for a large number of Reclamation facilities, it needs to respond to Reclamation’s needs as one of the property owners.	Hess has gone through the document and changes to address most (but not all) of the comments provided below. Changes in response to some of the comments were not made based on negotiations with the Oregon SHPO staff to allow the MPD to move forward to help preserve the efficacy of the COID and VOID MOAs.
1	Section A	The title provides a misleading timeframe for this MPD. The title include the time range “1902-1978,” but the Tualatin Project is the only Reclamation Project that stretches to this late date and it is only mentioned in a table. Aside from this minor mention of the Tualatin Project, the narrative only covers up to the 1960s. Please revise the title to be more in keeping with the actual content of the MPD.	No change made. The revised MPD now contains a provision that would allow this document to be applied only to those Reclamation Projects that have an addendum added. This will allow for Reclamation and other concerned parties to have a role in the MPD development process as it applies to individual projects and districts.
1	Section A	As indicated by the current title, the MPD is for the WHOLE state of Oregon, but except for the Rogue River Basin Project (and perhaps the Tualatin Project), it does not cover any of the private or Reclamation projects in the western half of Oregon. Virtually all of the examples provided in the MPD (for example, Figures 3-8, 10-20, 22-24, and 28) are from the Vale and Central Oregon projects. The narrative, as well, tends to emphasize central and eastern Oregon. Therefore the title should not be <i>Federal Irrigation Projects in Oregon</i> , as it does not cover the whole state adequately. Please revise the title to be more in keeping with the actual content of the MPD. With some minor changes in content, like removal of the Rogue River Basin Project, Tualatin Project, the Umatilla Project, and the Klamath Project, it would be appropriate to retitle this MPD to be <i>Federal Irrigation Projects in Central and Eastern Oregon</i> . Narrowing the scope of the MPD would also eliminate the administrative problems with an MPD that includes different Reclamation region offices. Furthermore, it would also narrow the range of irrigation districts that would need to be notified of the development of this MPD.	No change made. Please see comment above.
1	Section D	There should be a signature line reserved for the Federal Agency Official, which in this case would be Reclamation’s Federal Preservation Officer, since most of the federal irrigation features being considered in the MPD are Reclamation’s. This is consistent with guidance from the Keeper that MPDs should be treated in the same way as individual nominations, as they establish precedent for future nominations.	A comment has been added to the MPD to remind the OR SHPO to provide a signature line for the FPO.
E-3	-	Reclamation is uncomfortable with the definition of “Federal Irrigation Projects” used for this MPD. Reclamation realizes that the Central Oregon Project (COP) is included because of its relationship with the Carey Act; however, the COP is not a Federal project in the conventional sense because it is not owned or operated by a Federal agency. The inclusion of COP here also seems driven by the fact that the COID receives federal funding for some of its actions. While this does mean that Section 106 applies to some of COIDs actions (see Section H of the MPD), that mere fact does not make the COP a “Federal” irrigation project. Many reviewers have struggled with the broad scope of this MPD, and splitting the MPD into two related MPDs (one focused on Carey Act Projects that are owned by irrigation districts and another focused on irrigation projects owned by Federal agencies) would help to address this concern.	No change made. If Reclamation had involved itself earlier in the discussion regarding the scope of the MPD, we would have been in a better position to insist that the MPD focus just on COID and VOID.
E-3	-	Re: spatial and temporal scope of the MPD – Reclamation does not agree that Carey Act developments are “Federal” projects. The title should be revised to be something more along	No change made. Again, under the revised MPD, individual Reclamation Projects can only be added

Page	Location	Comment	Revision Status
		the lines of “20th Century Irrigation Developments in Eastern Oregon Resulting from the Carey and the Reclamation Acts.” The MPD also needs to be consistent and clear about the actual geographic area covered by the MPD, and that the latest a period of significance can extend is to 50 years back from the current date (i.e., to 1967). If the 1978 end date was based on completion of the Tualatin Project, then that is invalid if Western Oregon is not included in the MPD boundary area.	if there is an addendum that focuses just on that facility. This should help us address the inclusion of Tualatin.
E-4	1 st ¶	The author states that many Reclamation projects "have had a tremendous effect on Oregon..." That is only true of a few. Reclamation made this comment on an earlier version of this MPD and the author did not fully address Reclamation’s concerns. Some of the projects like Umatilla did have a tremendous impact, while others were just extensions of an existing irrigation project. In the area under the jurisdiction of the Columbia-Cascades Area Office, 6 of the 15 Reclamation projects are of this more minor type. Please revise this statement to more accurately reflect the impact of Reclamation’s projects.	Section reworded to more accurately reflect impacts.
E-24	4 th ¶	The Klamath Basin crosses the California-Oregon border, and Klamath Project facilities cross the border into the jurisdiction of the California SHPO. Reclamation would prefer to have this Project, which crosses the state boundary, handled as a unit in a separate document. In general, it is also recommended that this document address only those irrigation projects that lie entirely within the State of Oregon. This would eliminate the Boise Project, which has the majority of its facilities in the State of Idaho.	Klamath and Boise projects dropped from the MPD; MPD only discusses those projects entirely within the State of Oregon
E-24	4 th ¶	Re: "The Klamath project is one of the oldest reclamation projects in the nation." It is a stretch to make this claim, as the Klamath Project was the 15th Reclamation project approved. There were 10 other projects approved in 1903 and 1904 that really deserve that title. Therefore, it is incorrect to identify it as one of the oldest projects. This is another comment that Reclamation made about earlier versions of this document that the author did not fully address. Please revise this section to more accurately reflect the place of the Klamath Project in the history of the Bureau of Reclamation.	Klamath and Boise projects dropped from the MPD; MPD only discusses those projects entirely within the State of Oregon
E-28	4 th ¶	"The Prineville Dam (later named the Arthur R. Bowman Dam), in particular, represented the Bureau of Reclamation's postwar emphasis on creating water-based recreational facilities and along with the Prineville Reservoir, would become one of central Oregon's major recreational sites." This is incorrect. It’s a conjecture of the author, as the cited source materials do not make this same claim. Reclamation worked to foster recreation at other projects, and there was no specific emphasis on recreation by Reclamation at Prineville. Bowman Dam was built for flood control and water storage – not recreation. The author’s incorrect portrayal of Reclamation’s reasons for constructing this facility falsely amplifies the importance of recreation, lending the facility a historical significance that it does not really have. Please revise this section to more accurately portray the reasons why Reclamation was authorized to construct Bowman Dam.	Sentence deleted
E-30	Table 2	The Boise Project is listed with no history or clarification as to why it is in Oregon. Please provide an explanation of the inclusion of the Boise Project in this document. If its inclusion is minor and contains no structures, please remove it.	Klamath and Boise projects dropped from the MPD; MPD only discusses those projects entirely within the State of Oregon
F-31	Outline	Re: minimal units of structure eligible for nomination under this MPD - In terms of an irrigation work, the minimal property or structure that is appropriate to nominate for listing would be a main canal and associated sub-systems. Preferably, it would extend to include the diversion and other associated features (as parts of an historic district). To nominate an arbitrarily selected section of a canal or lateral is like nominating the front porch of a house separate from	An extensive revision was made to the beginning of Section F, especially in the discussion “Defining the Nomination Area,” to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.

Page	Location	Comment	Revision Status
		the rest of the building. Nominations of a property must utilize boundaries that are founded in the property's historical development or its design and function. This MPD clearly envisions arbitrarily defined boundaries that are not supported by the property's history or design. The draft Vale Project lateral nomination of a short segment of a lateral illustrates how the SHPO envisions this MPD being applied, and it is indefensible in terms of National Register requirements and intent. Please revise the MPD to make it clear that only main canals and associated subsystems can be considered for listing, and that individual elements need to be considered as part of larger wholes.	
F-31	Outline	Picking up the previous point regarding minimal units of structure, this nomination confuses section 106 processes and National Register nomination purposes. The author's flawed approach to what is a property (that it can be a small bit of the total designed structure) is clearly built upon applying the concept of the Area of Potential Effects for an undertaking being considered under Section 106. The APE is not a basis for nomination of a bit of property unless that bit has historical or design importance that can stand alone or be presented as importantly "representative" of what makes the larger property significant. Again, please revise the MPD to make it clear that isolated elements of larger wholes cannot be nominated for listing.	An extensive revision was made to the beginning of Section F, especially in the discussion "Defining the Nomination Area," to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-31	Outline	The MPD's flawed concept of what is a property is reflected in the definitions of the property types in this MPD. The MPD does not define logical property types, and they have failed to include some important types. For an irrigation system, the logical property types are as follows: <ul style="list-style-type: none"> • storage dam and diversion dam; • conveyance facility (with sub-types like main canal, secondary delivery, drains and waste water, appurtenant operations things like turnouts, check dams, etc.); • power plants; • properties used in system operation (offices/HQs; dam tender/gate keeper/ditch rider properties; maintenance yards; etc.); and • archaeological sites associated with the construction effort (construction camps; dumps; borrow areas, etc.). 	As per the staff discussion on 4/10/2017, Reclamation is not going to insist that this other kinds of property types be included, as it would require too much effort to fix in the time available. Instead, the proposal of Reclamation staff is to allow this MPD to move forward with its focus on water conveyances and that Reclamation would prepare its own MPD that is based on a more holistic understanding of the life cycle of Reclamation projects and the types of properties that result.
F-31	Outline	Structural components of a dam or canal should not be considered "properties." They are structural or operational components of what is a property. For example, a check dam in a canal is a component part, not a "property". This breaking down component parts as if they can be evaluated in isolation from the property they are a bit of is the equivalent of saying that the windows in a house, or its front porch, are eligible and can be nominated. We should not support this approach both because it is historically and structurally illogical, and insupportable within the requirements of the National Register. There may be the occasional exceptions, like the rare case where a sub-component is unique or a first test case of some design or concept that will prove to be of lasting engineering importance. However, these will be rare, not the rule. Please revise the MPD in keeping with these property types and sub-types.	An extensive revision was made to the beginning of Section F, especially in the discussion "Defining the Nomination Area," to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-33	"Historic Districts"	The MPD utilizes a flawed understanding of historic districts. For example, the MPD provides an example of a district being a canal (or piece of a canal) that has an array of the operational sub-types like turnouts. A district is not a collection of sub-types (as they define them) of a property. A better understanding of a district would be the diversion dam, the distinct main canal(s) and the distinct main laterals fed by that diversion, dam tender's or ditch rider housing complexes along the canals, etc.	An extensive revision was made to the beginning of Section F, especially in the discussion "Defining the Nomination Area," to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-34	"Registration"	Please include a provision in the registration requirements for conveyance systems stating that	An extensive revision was made to the beginning

Page	Location	Comment	Revision Status
	Criteria”	when a main canal has been determined ineligible for listing in the National Register, typically secondary systems under that canal are also not eligible for nomination under this MPD.	of Section F, especially in the discussion “Defining the Nomination Area,” to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-38	“Dam Functions”	The author lists several types of dams which Reclamation does not use, including “Detention Dams,” and “Saddle Dams.” If this MPD is for Federal reclamation projects, it is important that the MPD use appropriate Federal terminology for the types of structures. Please replace “Saddle Dams” with “Saddle Dikes.” Please insure that the other dam function names follow Reclamation conventions.	Change made from “Saddle Dams” to “Saddle Dikes”
F-40	“Dam Designs”	The author lists several types of dams which Reclamation does not use such as “Steel Dams.” Cofferdams are only temporary dams for the construction phase of a project and then removed. “Cofferdams” should be removed from this list, as cofferdams are temporary structures used to facilitate construction; they are not permanent structures.	No change made. While Reclamation may not use these dam types, it is possible that they may be appropriate for some of the Carey Act projects.
F-42	“Registration Requirements”; Pt. 2	Re: "They are most likely to be considered historically significant under Criterion A or C." The author does not make a strong case as to why an irrigation project would be eligible under Criterion A beyond COID or the Vale Project. They mention the history and some of the funding involved, but not <u>specific details</u> that would assist someone in determining if an irrigation project was eligible under Criterion A. If a property is going to be determined eligible under Criterion A, there should be something more than simple statements of "a significant impact" without more information as to what that impact was. Irrigation projects would be eligible under Criterion A if they changed the economy and settlement and development of the area. A good example is in the Yakima Valley of Washington where Reclamation's projects turned the valley into the fruit bowl of the nation, brought in large populations of people, and promised a future of independence in agriculture. Please provide a better description of what specific changes might lead an evaluator to conclude that a Reclamation project made “a significant contribution to the broad patterns of our history.”	Again, this MPD will only be applicable to COID and Vale Project. It will apply only to other Carey Act or federal reclamation projects when an appropriate addendum has been added that provides the needed detail.
F-43	“Registration Requirements”; Pt. 8	Except in very specific cases, as when a reservoir is highly engineered, Reclamation does not agree that reservoirs should be National Register eligible, either individually or as contributing elements. A typical reservoir is a fluctuating body of water that does not have consistent boundaries or characteristics. How can you justify eligibility for a large body of water that changes with the ebb and flow of the irrigation season? Reclamation made this comment about an earlier version of this document, but it was ignored. Please revise this section to indicate that reservoirs will be considered individually eligible or a contributing element only in exceptional circumstances.	Reservoir dropped as a property type from throughout the document.
F-50	Pt. 6	Re: “Sections of canals and laterals that retain good integrity may still contribute to the historical significance of a historic district or be individually listed in the National Register (depending on the associations), even though some sections of the same canal or lateral may have lost integrity.” Reclamation is uncomfortable with this statement, as it creates the possibility that a segment of canal could be considered to retain integrity even if the majority of the entire canal had been destroyed, thus eliminating the integrity of the canal as a whole. It is analogous to saying that a house retains integrity if one of the windows retains its original form, even if the rest of the house has changed. It is crucial to look at the whole canal to make that kind of determination. Please revise this registration requirement to insure that eligibility determinations consider the whole canal structure and not just segments of the larger whole.	An extensive revision was made to the beginning of Section F, especially in the discussion “Defining the Nomination Area,” to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-50	Pt. 6	Reclamation struggles with general statements such as piping canals and laterals “are	An extensive revision was made to the beginning

Page	Location	Comment	Revision Status
		considered significant changes that would constitute a loss of integrity” (pg. F-50, #6). The document indicates that even if one small portion of an eligible canal or lateral is being altered, it is an adverse effect to the integrity of the entire property. It is important to also consider the scale of the impact on integrity, which is common practice when evaluating effects to linear historic properties. For example, Reclamation recently reached a Finding of No Adverse Effects for the removal of a 400 ft.-long historic levee because there are over 26 miles of levees in the subject county. The MPD should include a discussion of the degree of impact and proportionality to the assessment of overall integrity.	of Section F, especially in the discussion “Defining the Nomination Area,” to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-50	Pt. 7	The MPD should put more attention on the position or importance of a particular feature within the system when considering eligibility. A “tiered approach” to eligibility (e.g., a “1 st -tier resource” refers to a main canal, as opposed to a “3 rd -tier resource” such as a sublateral or field ditch or invisible drain) has been applied successfully in other contexts. An eligibility matrix would be useful in this document to display this concept. Please see the attached example from Reclamation’s evaluation of eligibility of structures in the Columbia Basin Project.	An extensive revision was made to the beginning of Section F, especially in the discussion “Defining the Nomination Area,” to help ensure that secondary elements of irrigation systems are nominated on a stand-alone basis.
F-52	“Subtype: Headgate”	The proper term in a Reclamation context is “turnouts.” Reclamation made this comment about earlier drafts and the revision was not made. “Turnouts” are a Reclamation term used for those laterals off the main canal, while “headgates” are at the start of a main canal system. Please revise this term to be consistent with Reclamation practice.	Addition to the text made to clarify Reclamation’s use of this terminology
F-55	“Subtype: Check Structure”	Please make sure that steel is included as one of the types of material used in the construction of check structures.	Addition made
F-55	2 nd ¶	Re: "Similarly, the radial or ‘Taintor Gate’..." Taintor gates are not used in laterals, sublaterals, etc. They are only used on Main Canals. This should not be in this section and it needs to be separated. Reclamation made this comment about earlier drafts and our comments were not addressed. Please revise this section to put the discussion of Taintor Gates in its proper section.	Addition to the text made to clarify Reclamation’s use of this terminology
F-56	“Subtype:Spillway”	This is an incorrect use of the term “spillway.” It needs to be “wasteway,” as spillways are for dams. Wasteways are for canals.	Revision made
F-57	5 th ¶	Re: “A rectangular weir is typically the oldest weir...found in most Oregon irrigation projects." Since this document is covering Federal irrigation projects, this statement is not true as more than 95% of Reclamation projects in Oregon use Cipolletti weirs. Please revise this section to more accurately reflect the kinds of weirs actually used.	Revision made
F-60	3 rd ¶	Re: "The concept of the weir box was first developed in the late 1940s...in the construction of the agency's Yakima Project in central Washington State." That date of late 1940s is not correct, as Yakima boxes are clearly visible in photos from the early 1930s and before. In fact, the Sunnyside and Tieton divisions of the Yakima Project utilized these boxes and they were built between 1906 and 1916. Please revise this statement to more accurately reflect the historical record.	Revision made
H-65	2 nd ¶	“Memorandum of Agreements” should instead be “Memorandums of Agreement” or “Memoranda of Agreement” (2 instances)	Revision made

Insert the CBP matrix at the end of the document after it has been turned into a PDF}

Sheets_061416

ZELLER Tracy * OPRD

From: Brian Sheets <brian@brs-legal.com>
Sent: Tuesday, June 14, 2016 3:19 PM
To: ZELLER Tracy * OPRD
Subject: Comment for June 16, 2016 SACHP Meeting re Oregon Irrigation
Attachments: Comments to SACHP re Oregon Irrigation.pdf

Tracy,

Please see the attached comment for the June 16, 2016 SACHP meeting in White City. The comments address agenda item 6, specifically the Oregon Irrigation proposals.

Please confirm that you have received the attached comment, and thank you for your consideration.

Sincerely,

Brian R. Sheets
BRS Legal, LLC
PO Box 764
Troutdale, OR 97060
Phone: (503) 830-1448
brian@brs-legal.com

Confidentiality notice: This communication may contain information that is privileged and/or confidential. It is intended only for the individual or entity named above. If you are neither the intended recipient nor an agent or employee responsible for delivering the document to the intended recipient, you may not read, disseminate, copy or distribute this information. If you receive this communication in error, please notify us immediately to arrange for the return of the original or the deletion of any electronic communication.



Brian R. Sheets
Licensed in Oregon

PO Box 764 • Troutdale, OR 97060 • Phone: (503) 830-1448
E-Mail: brian@brs-legal.com

June 14, 2016

VIA EMAIL ONLY

Oregon State Historic Preservation Office
Attn: Tracy Zeller
725 Summer St. NE, Suite C
Salem, OR 97301
Email: Tracy.Zeller@oregon.gov

**RE: Comments on Nomination to the National Register of Historic Places for:
Irrigation Projects in Oregon, 1850-1978 (Multiple Properties Document)
Central Oregon Canal: Brasada Ranch Segment
Pilot Butte Canal: Downtown Redmond Segment**

Dear Chair Schallert and members of the State Advisory Committee on Historic Preservation:

This firm represents Matt and Suzanne Gadow, residents of unincorporated Deschutes County, Oregon, and we submit this comment on their behalf. Central Oregon Irrigation District ("COID") submitted three documents to the SHPO: 1) Multiple Property Documentation ("MPD") for "Irrigation Projects in Oregon, 1850-1978"; 2) Nomination to the National Register of Historic Places ("NRHP") under the MPD for "Pilot Butte Canal: Downtown Redmond"; and 3) Nomination to the NRHP under the MPD for "Central Oregon Canal: Brasada Ranch Segment." While we are neutral to the end result of the MPD and two NRHP nominations' acceptance, the documents require scrutiny, revision, and resubmittal based on a number of factors.

1. The MPD should be revised to include an inventory of irrigation assets already listed in the NRHP.

Section H of the MPD includes the methods of the survey performed by the MPD proponents, however there is no mention or description of currently protected NRHP resources. Sections E and F similarly omit current NHRP protected irrigation properties. By listing currently protected resources and the associated acceptance criteria, the SACHP can evaluate whether this document is congruent with prior NRHP listed properties and the criteria used in listing them. Without demonstrating that the MPD is congruent with prior NRHP listings, it forms a new standard for NRHP listing based on arbitrary evaluative criteria. The criteria used and accepted in prior NRHP listing should be the standard for eligibility, and listing the NRHP listed irrigation properties *statewide*¹ will assist the SHPO in determining whether the proposal of new NRHP protection is warranted. Listing NRHP resources and their selection

¹ Statewide listings are appropriate because of the scope of the MPD's statewide geographical limits.



criteria will assist future proponents of NRHP listing to use as a reference in deciding the most likely applicable criteria type. Based on previously listed properties, future proponents and SHPO can use actual historical criteria used in selecting a property, rather than the speculative criteria categories proposed in the MPD.

Given the limited scope of the survey performed in comparison to the geography proposed (discussed below), listing NRHP irrigation properties in the surveyed area could demonstrate the ratio of surveyed areas to historic properties, assuming that the survey is demonstrated as representative of the proposed geographical area. Because the MPD fails to include presently protected resources and their evaluative criteria, the MPD should be returned for inclusion of presently protected NRHP listed irrigation assets for the entire State of Oregon.

2. The survey conducted is too narrow in comparison to the geographical area under consideration.

The geographical survey of the affected areas is extremely limited in comparison to the geographical scope of the document. The MPD intends to cover the entirety of Oregon, however the survey was limited to two irrigation systems in Oregon: COID and the Vale project. Without analysis and surveying of the affected eligible structures in the entirety of the MPD's proposed geography, the survey fails to accurately list the totality of eligible properties, or even an estimation of eligible properties. The survey data is also unavailable for public review in conjunction with this MPD review, thereby making the data presented to SHPO unchallengeable at this stage. Given its statewide impact and tie to federal funding, the MPD also likely requires NEPA analysis, with at least an Environmental Assessment prior to its adoption by the National Park Service.²

Moreover, the MPD does not state methods for determining whether the sampling of the two irrigation systems is representative of the entire irrigation infrastructure of Oregon. To the extent that the MPD is deficient in its survey of eligible properties, or it cannot demonstrate its sampling is representative of the geography proposed, the MPD's geographical scope should be contained to the surveyed areas: properties served by COID and the Vale Project.

3. The nomination for "Pilot Butte Canal: Downtown Redmond" fails to include references to already NRHP listed stretches and should include the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment).

² See NPS Director's Order ("DO") 12 and DO-12 Handbook. The proponents do not address how their proposal is excluded from NEPA consideration.



In February of 2016, the National Park Service added the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment) (“PBCHD”) to the NRHP. Strikingly, the PBCHD on the same canal is absent from the narrative in the proposed nomination for the Pilot Butte Canal: Downtown Redmond section. The nomination does not explain how the Downtown Redmond segment is historically significant aside from being part of the Pilot Butte Canal, nor does it provide a brief context on how the Pilot Butte Canal compares to other irrigation systems. The nomination similarly fails to explain what remains of other local canal systems and how they compare to the Pilot Butte Canal. The nomination does not compare this stretch of the Pilot Butte Canal to other stretches of the canal already listed, and the nomination fails to demonstrate why this section is significant in addition to a previously nominated PBCHD listed in the NRHP a mere four months ago.

Perhaps the reason why the PBCHD is omitted is because the proponents of the current nomination *strenuously* opposed its listing in the NRHP. While this may be why its discussion is excluded, it does not excuse the nominees from addressing the PCBHD. The proponents should include discussion and analysis on why the Downtown Redmond segment is additionally qualified for NRHP listing. While we support the additional listing of segments of the Pilot Butte Canal, the nomination must include discussion of comparative sections of the canal, and additionally justify its inclusion on the NRHP in addition to the PBCHD. Omitting the PBCHD in the overall analysis of the historical integrity fails to demonstrate that there are segments already listed for protection, and it fails to differentiate how the Downtown Redmond segment adds to the historical character of the canal. For the previously stated reasons, the nomination for the Downtown Redmond segment should be returned for revision to include discussion of already protected segments of the canal.

4. The Downtown Redmond segment is of questionable historical importance.

The nomination for the Downtown Redmond segment maintains that its association with the Central Oregon Project, as stated in the MPD, allows for this segment of the canal to be eligible for the NRHP. By this logic, any lengthy unimproved stretch of the Pilot Butte Canal is eligible, from the diversion at the Deschutes River, to the final delivery in Crook County. The nomination fails to address the “feeling” aspect of the evaluation criteria, as the development of “Downtown Redmond” around the area has changed the feeling of the canal.³ Moreover, roadways bound the canal on both sides immediately to the east and west, one being a busy US Highway. Also, there are no mentions of irrigation deliveries in the area, which leads to the conclusion that there are none or few, thereby detracting from the historical significance of this section of the canal. These issues dissociate the feeling of historic connection, and the nomination should be returned and revised to explain the nomination criteria in greater detail.

³ The Downtown Redmond segment is relatively straight, and described as six-feet deep. However without scale on the pictures in the nomination, six feet in depth may be overstated.



5. The Nomination for the Downtown Redmond section should be amended to indicate “Public-Local” property ownership, if demonstrated.

Irrigation districts are public quasi-municipal corporations with the power to condemn property for public purposes and hold property in a public capacity. *See* ORS Chapter 545. Whether a particular parcel is *operated* in a private or public capacity is irrelevant. Because COID is an Irrigation District organized under ORS Chapter 545, it is a public entity. COID claims to own the parcels in the Downtown Redmond segment, however no evidence of that ownership has been presented. Assuming it can be presented, the Nomination should be returned and revised to reflect the property ownership as “public-Local” at the beginning of the nomination.

CONCLUSION

The MPD represents a statewide system of categorizing historic resources based on a survey of two limited irrigation projects. The proponents were directed at the behest of SHPO and the Bureau of Reclamation to draft this document as a condition of continuing its piping projects, that if realized, will effectively destroy the historical aspects of irrigation systems. Given this tension, and the ability of the proponent to survey and present its own data, the SACHP should undertake the submission of the MPD with great scrutiny. The MPD has several shortcomings, including failing to include already protected historical properties and using a very limited scope survey to apply statewide standards. Similarly, the nomination for the Pilot Butte Canal – Downtown Redmond section should also be revised based on its ownership information, questionable limited historical content, and its outright avoidance in discussing the recent addition of the PBCHD.

We are mindful that an additional section of the Pilot Butte Canal is proposed for listing, and we are concerned that additional listings will be used to undermine the historical significance of the PBCHD, or use additional NRHP properties on the canal as mitigation for a re-energized piping effort through the PBCHD. Given the proponent’s *vigorous objection* to the nomination of the PBCHD compared to its position in nominating the Downtown Redmond section, the SACHP should evaluate with close scrutiny the criteria applicable to the MPD and the associated listings. Deficiencies should be addressed, and the documents returned for review.

We appreciate your time in listening to our concerns, and we look forward to your decision.

Sincerely,

Brian R. Sheets
BRS Legal, LLC

cc: Clients

SKM_C754e17021415100

ALLEN Jason * OPRD

From: Lori K. Murphy <lmurphy@lynchconger.com>
Sent: Tuesday, February 21, 2017 10:43 AM
To: ALLEN Jason * OPRD
Subject: Mark Huber Testimony

Jason,

Thank you for your call. Per my voicemail, my client does not reside directly along the nominated segment; his residence is along the preserved Pilot Butte Canal segment. Therefore, we did not submit the notarized form. Please send his testimony directly to the National Park Service.

Best regards,

Lori

LORI K. MURPHY

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(Please note my email address has recently changed)

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LYNCH CONGER McLANE LLP
ATTORNEYS AT LAW

February 14, 2017

Oregon State Advisory Committee on Historic Preservation (SACHP)
In care of Jason Allen,
Oregon State Historic Preservation Office
725 Summer St NE, Suite C
Salem, OR 97301

Re: Opposition to Three National Register Nominations

Dear Members of the Oregon State Advisory Committee on Historic Preservation (SACHP),

On behalf of our client, Mark Huber, who is an owner of a portion of the Pilot Butte Canal, this firm offers the information and comments on three related nominations that will be heard by the Oregon SACHP on February 16, 2017:

1. Federal Irrigation Projects in Oregon, 1901-1978 Multiple Property Document (the "MPD")
2. Pilot Butte Canal: Downtown Redmond Segment Historic District (the "PBCHD Redmond")
3. Central Oregon Canal: Brasada Ranch Segment Historic District (the "COCHD Brasada")

We carefully reviewed the nominations and conclude that they do not meet the criteria for listing on the National Register of Historic Places (NRHP) nor is it in the best interest of the National Register of Historic Places program, the citizens of the region, or the state to proceed on the nominations.

A. Improper Segments Selected in Submitted Nominations

The Summary of Identification and Evaluation Methods, as addressed in Segment "H," pages H-65 and H-66 of the MPD, references the background of agreements entered into between the U.S. Bureau of Reclamation, the Oregon State

Historic Preservation Office ("SHPO"), and Central Oregon Irrigation District ("COID"). These 2012 and 2014 agreements addressed the proposed piping of the original open-lateral irrigation systems (the "MOAs"). See EXHIBIT A.

The proponent's MPD request follows and is designed to seek Oregon SHPO's consent to and approval of all future piping projects submitted by COID in exchange for the listing of one segment of each canal that will presumably remain un-piped and preserved. Yet, the selection of which parts of the canal should be listed are absent from the underlying Agreements. In other words, the particular segments of the canals to be listed were never specified.

The Agreements also do not address the methodology to be used in selecting segments of the canals for listing nor do they address the level of protection for any listed segment of the canals. Typically, the preservation of any resulting listings is mandated by statute to be the responsibility of local jurisdictions. Per statewide land use statutes, the local jurisdictions shall preserve and protect all properties and districts listed in the National Register. Yet here, without any historic preservation plan, the current maintenance of the preserved segments of the canals is dependent on COID and the local landowner.

It is notable that the proponent is seeking to list two segments of the canals in the PBCHD Redmond and COCHD Brasada nominations that were never proposed for piping in the first place. Neither segment is remarkable as to its age, distinction, integrity or significance. It is preposterous that the COCHD Brasada canal segment is a part of a golf cart path on a high-end resort, is not 50 years old, conveys no water and appears to be built by the resort, and could not possibly be associated with a 111-year old irrigation canal.

It is crucial that the SACHP ensure that a meaningful segment of each grand historic canal be identified and listed because the MOAs allow all other segments to be demolished and piped. Because of the historical significance and impressive size and age of the two canals, it is imperative that any selected segments should display the full volume of water (400-450 cubic feet per second in the up to 83-foot wide Pilot Butte Canal and the 527 cubic feet per second in the larger Central Oregon Canal) and the methodology of the workmen and horse teams that created the gravity system through challenging rock. Any listed segments must be able to interpret the original purpose of providing water for agricultural purposes. They must retain the historic integrity of the setting and structure and be at least 50 years old.

The listed NRHP Pilot Butte Canal Historic District (Yeoman Road – Cooley Road Segment) provides the following information about the canal in Redmond:

“Description of Characteristics of Segment 9 of the Pilot Butte Canal”

“Segment 9 in Redmond has low integrity with three portions being piped and others being realigned and rebuilt. This highly altered segment is entirely within the city limits of Redmond for 6 miles and drops 169 feet in elevation. Urbanization and road construction have resulted in 1.5 miles of the canal being piped in three segments both above ground and under ground. The canal is narrow and shallow in Redmond with a variety of lava flows, large rock, small rubble, or sand and grass in the beds and on the shallow sides. A rocky waterfall drops just feet away from the Comfort Suites Redmond Airport at 2243 SW Yew Avenue. The canal in the city is constrained between streets and urban residential, commercial, and industrial developments.”



“Segment 9

The photo of the smooth canal in Redmond was taken looking north with North Canal Blvd. and Home Depot on the left and the intake to a pipe that runs under US Highway 97 at the top. Smith Rock State Park is visible in the background.”

The photo above is of the shallow, urban segment nominated by COID. It is neither a challenging nor representative segment of the canal. Further, it is sandwiched between a Redmond city street and the Redmond Bypass of Highway 97. Home Depot is on the left side and Walmart Supercenter is to the north. Any historic setting is long gone.

This nominated segment of canal is wholly inappropriate for consideration. An alternate and preferred segment to be nominated by COID in the Redmond area should be the Segment 7 south of Redmond, located between Deschutes Junction and Redmond. This segment has much higher integrity.¹ A bonus for this segment is that

¹ Pilot Butte Canal Historic District (Cooley-Road – Yeoman Road Segment), National Register of Historic Places Registration Form, Page 23.

the canal winds into the ODOT right-of-way for Highway 97 and is close to the highway in several locations, adding to its public visibility.

B. Historical Context

There are three critical documents that must be reviewed in order to understand the context of the proponent's nominations:

- 1) Oregon SHPO Clearance Form, aka "Section 106", for Resource: Pilot Butte Canal, September 9, 2013, attached here as EXHIBIT A and hereinafter referred to as the "Section 106";

The SHPO Staff relied upon the Section 106 to determine eligibility and condition of the segment of the canal that would be demolished in the piping project.

- 2) Correspondence from Oregon Parks and Recreation Department to Bureau of Reclamation dated September 9, 2013 re: SHPO Case No. 10-1873, Pilot Butte Canal Juniper Ridge Piping Proj Phase 2, attached here as EXHIBIT B, and hereinafter referred to as the "OPRD Letter"; and

The OPRD Letter summarizes the Section 106 and asks the Bureau of Reclamation to concur with the determination of Eligibility, Finding of Effect, and mitigation for Pilot Butte Canal piping project Phase 2.

- 3) Memorandum of Agreement No. R14MA13733, Among the U.S. Bureau of Reclamation, The Oregon State Historic Preservation Office and Central Oregon Irrigation District for Piping of Segment of the I-Lateral, Alfalfa Vicinity, Deschutes County, Oregon, dated February 2014, attached here as EXHIBIT C and hereinafter referred to as the "MOA".

The MOA adds the Pilot Butte Canal piping project Phase 2 to the agreement between the parties regarding the piping of the Central Oregon Canal. The underlying MOA agreement requires COID to nominate at least one segment of each canal for preservation in exchange for allowing the piping of the remaining segments of each canal.

C. Private Nomination of the Pilot Butte Canal

Independent of the agreements between the parties, on October 31, 2014, over 200 private landowners and interested parties nominated a mile and a half of the 22-mile-long main Pilot Butte Canal to the National Register of Historic Places (the "NRHP"). This occurred six months after the COID, SHPO and Bureau of Reclamation signed the 2014 MOA.

The nominated segment has the highest degree of historic integrity of the entire canal. The SACHP reviewed this nomination in February of 2015. After the most arduous legal scrutiny of any nomination in the state, and after many additions required by SHPO staff, such as to inventory and evaluate the entire canal and justify why the entire canal was not nominated and to compare the canal to at least three other irrigation canals in Central Oregon (the Arnold Irrigation District, the Tumalo Irrigation District and the Swalley Irrigation District), and to add more information about the construction and significance of the nominated segment to Segment 8, the nomination was signed by the Keeper last February 2016. Compare the following photo from page 4 of that nomination taken in the middle of the historic district with the photo of the Redmond segment above.



“The Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment) has a distinctive natural appearance that is a direct result of the geology, use of native materials found in place, and time-consuming, difficult construction in challenging conditions.² Photographer looking north.³”

D. Section 106 and MOA Contain Misrepresentations and Faulty Information

The underlying Section 106 for the Juniper Ridge Phase II Piping Project and the resulting questionable MOA that preceded the nominations before SACHP include faulty and misleading information. In fact, both documents are currently being challenged in U.S. District Court.

² Dubuis, John, Dec. 1, 1914, Report to Desert Land Board on Central Oregon Project, State Printing Department, 1915; and Energy Trust of Oregon, Inc. Open Solicitation, Juniper Ridge 3/27 MW Hydropower, January 23, 2008, page 1; Google Earth 2014 web site; Pat Kliewer Interview with COID General Manager Ron Nelson, April 2000; Oregon State Engineer, United States Department of the Interior, Bureau of Reclamation, “Deschutes Project”, December 1914, UC Berkley Library. page 110.

³ Unless otherwise noted, all photos were taken by Patricia A. Kliewer between February and October 2015.

In 2016, a property owner in the project area filed suit against COID, the Oregon SHPO and the Bureau of Reclamation. This case is current and has not reached a decision. The US District Court, Eugene Division Case is CV No. 6:16; cv; 01788; mc. Joseph Vance of Miller Nash Graham and Dunn, LLP, Attorneys at Law, Vancouver, Washington represents the plaintiff, Aleta Warren, and the respondents are the Bureau of Reclamation, the Oregon SHPO, and COID.

E. The Pilot Butte Canal Historic District (Yeoman Road - Cooley Road Segment) Already Fulfills the MOA Requirement

The proponent selected a segment where it owns the underlying land instead of evaluating the entire canal and determining which segment met the National Park Service criteria for listing. As a result, it improperly nominated an insignificant segment of the Pilot Butte Canal. Another way of meeting the MOA requirement is to note that the previously listed segment of the Pilot Butte Canal, the Pilot Butte Canal Historic District (Yeoman Road - Cooley Road Segment) already fulfills the MOA requirement. No additional segment needs to be nominated.

Prior to the MOA, SHPO staff became concerned in about 2010 that the historically significant late 19th Century and early 20th Century irrigation canals in Central Oregon were being piped for water conservation and power production at a fast rate. As staff concurred with successive Section 106 forms for piping projects, they entered into discussions with the Bureau of Reclamation and COID. The Bureau is partially funding the piping and hydropower projects.

COID is a relatively well-funded and well-staffed irrigation district in the Deschutes River basin. It is managed and served by over 30 paid staff and is led by an elected board of directors selected by the patrons or water right holders in its system. COID operates and maintains two separate and distinct canals.

The oldest canal is the 1904 Pilot Butte Canal, a north-flowing canal carrying 400 to 450 cubic feet per second with a diversion point north of downtown Bend, which serves a variety of urban, recreational, city, educational and rural users in Bend, Deschutes Junction, Redmond, and Terrebonne. The average parcel size served by the district is 6 acres. The Pilot Butte Canal drops 631 feet in elevation during its 22-mile length. The second canal, the Central Oregon Canal, which has a larger capacity and longer length, began construction in 1905 and has its diversion point south of Bend and serves patrons in Bend and east to Alfalfa. It drops 711 feet during its 40-mile length.

By 2012, COID constructed a hydropower plant on each canal and the general manager, Steven Johnson, announced that COID was planning to ask for government grants and loans to construct 8 to 10 more seasonal power plants where there were elevation drops and significant flows of irrigation water. Miles of pipes would be at least 9-feet in diameter and where excavation easements could not be secured, the pipes would be placed in the leveled canal beds and rest on gravel and be covered with

several feet of dirt in resulting mounds about 12 feet tall and 30-feet wide. It is unknown if the current easements and local zoning codes will allow that proposal or the construction of hydropower plants and piping. The laying of such large pipes would require pipes to be laid outside of the COID easements in any section of the segment that has a sharp curve. For any area like that, COID would need to negotiate new easements with the landowners.

The benefits and costs of the proposed seasonal hydropower projects are also widely debated. Stacked averages of data kept by the Oregon Department of Water Resources for Deschutes River water diverted to the Pilot Butte Canal by COID, since the Juniper Ridge Hydropower plant was put on line, show that more water was diverted after the piping project than before. During last year, 2016, COID diverted the most water in its history. Obviously, the power plants need a steady source of water. This demand is the opposite of conservation projects; when irrigation water is not flowing in the off season, no power is generated. Also, if water flow was reduced due to patron's conservation efforts, power production and revenues would accordingly drop. The generators need a sustained amount of water, in opposition to the community's desires to increase river flows, efficiency measures made by the users, increased participation in the in-stream leasing program to save water, and other water saving practices. Another reason for the total increase of water diverted last year was that the amount of water is tied to the needs of the hydropower plant to achieve maximum output during the months of use and no longer tied to the varying needs of patrons during the short growing season. The seasonal water flow step up and step down practices of a hundred years are being ignored.

F. I-Lateral of the Pilot Butte Canal in Alfalfa

The COID project reviewed by SHPO staff in 2012 was a request for a pipe on a segment of the "I" Lateral of the Central Oregon Canal near Zell Pond in the community of Alfalfa. Piping the "I" Lateral near Zell Pond is complete.

The "I" Lateral is larger than several main canals in the Deschutes River Basin. It serves several public recreational reservoirs such as Reynolds Pond and hay farms and pastures. The MOA detailing the agreement to pipe the lateral was signed by the three parties: Roger Roper of the Oregon SHPO, Steven Johnson of COID, and Gary Kelso of the Bureau of Reclamation, Columbia-Cascades Area Office. The MOA correctly identified the location of the project as "Alfalfa Vicinity, Deschutes County, Oregon and gave the correct locations as T17S, R14E, Segments 25, 26 and 36. This location is south and slightly east of the community center at Alfalfa Store.



The "I" Lateral in Alfalfa, looking southeast, August 2016.



Piped "I" Lateral near Zell Pond. The road is on top of the pipe. Looking northwest away from Zell Pond.



Photo taken from the top of the buried pipe looking southeast over Zell Pond, fed by a pipe from the "I" Lateral.



Looking south to Reynolds Pond and Recreation area fed by irrigation water flowing through a gate on the "I" Lateral, south of the Alfalfa Store.

G. Juniper Ridge Phase II-2013 WaterSMART Project on the Pilot Butte Canal

The next year, on September 6, 2013, Ian P. Johnson of Oregon SHPO signed an Oregon SHPO Clearance Form for the Juniper Ridge Phase II-2013 WaterSMART Project on the Pilot Butte Canal. The project was to extend the 9-foot diameter steel pipe set in the bottom of the canal for one mile to connect onto the current 2.6 miles of piped canal at Juniper Ridge Hydropower Plant. The project's purpose was to increase "head" at the plant, resulting in more income from the sale of electricity.

H. Continuation of Errors and Confusion Abounds: No Action Should be Taken on the Nominations

A review of the MOA illustrates that there are serious errors that require a deeper review. The importance of the Section 106 is not to be understated because it was relied upon by staff who had never visited the project site. Because the form was erroneous, it snowballed into multiple errors. The Section 106 documents the previous findings of eligibility of the one mile of the Pilot Butte Canal that would be demolished by the Juniper Ridge Phase II-2013 WaterSMART Project. However, instead of describing the significant project area, it describes the highly altered North Canal, two miles west of the subject project. It also erroneously characterizes the lots sizes and the land use in the project area.

The Section 106 erroneously states that the subject site would be a non-contributing segment of the PBC if it was listed on the NRHP. Yet, the project area is completely within the Pilot Butte Canal Historic District (Yeoman Road – Cooley Road Segment) listed in 2016 and found to have exceptional integrity of structure, location, setting, feeling, etc.

Additionally, the Section 106 erroneously states there is no agriculture in the area, when in fact 11 irrigation ponds and many acres of irrigated pasture supporting livestock are in the project area and can be readily seen on Google Earth and by walking beside the canal. See the nomination of the Pilot Butte Canal (Yeoman Road - Cooley Road Segment). The Section 106 preparer provided four photos, on pages 6 and 7. The two misleading photos on page 7 should not have been included because they were taken at a location several miles west of the project area and out of the Area Potential Effect ("APE").

SHPO did not notify or seek any input from the property owners or local jurisdictions in the APE, which would have resulted in corrections to misinformation in the form. Nonetheless, Ian Johnson concluded that the canal is considered eligible for listing on the NRHP. However, because of the information in the Section 106, he checked the box for the one-mile-long project that would destroy the resource, "The project has NO EFFECT on a property that is eligible or already listed in the National

Register, either because there is no eligible property involved or the eligible property will not be impacted physically or visually.”

Within a week of this form being submitted by Chris Horting-Jones, several property owners within the project area wrote to the SHPO asking to be notified when a Section 106 report was submitted on the proposed piping project so they could comment on it. None had been or has ever been notified, nor had the two local jurisdictions or the two landmarks commissions that oversee this area. The Section 106 application submitted by the Bureau of Reclamation incorrectly stated the project location as “T17S, R12E, Segment 12 WBM”. It is unclear as to what the “B” in WBM stands for or why Segment 12 was given as the location. The correct location is T17S, R12E, Segment 15, WM. The incorrect location is about two miles east of the correct location. This created a problem with public access to the forms.

Although the Juniper Ridge Phase II-2013 WaterSMART Project is for the Pilot Butte Canal which is 14 miles west of the Central Oregon Canal at Alfalfa, the canals and piping projects were confused and lumped together from that point forward. The title of the MOA failed to include the location of the Juniper Ridge project or even the name of the Juniper Ridge project.

The 2012 MOA for the “I”-Lateral on the Central Oregon Canal in Alfalfa was resurrected and three lines were added to it. It continued to be titled exclusively for the buried piping of the “I”-Lateral in Alfalfa near Zell Pond and Reynolds Pond with the correct Alfalfa locations of a below-ground water conservation piping project. But, in Segment 8, General Provisions, a 3.5- line paragraph was inserted. The new Alfalfa “I”-Lateral MOA now included the Juniper Ridge Phase II – 2013 WaterSMART Project that was actually on the other canal, 14 miles away and was an above-ground project that would create a mound 12 feet tall and 30 feet wide extending out of the COID easement areas in back yards and in some case literally running through houses. This altered-MOA was signed by the parties again with no notification of the owners or the local jurisdictions.



This photo shows the house on the west side of the Pilot Butte Canal in the project area that is shown on COID's plans to have the pipe go outside its easement and go through the owner's kitchen.

The three nominations before you are the proponent's attempt to satisfy the MOA in exchange for Oregon SHPO's approval on all future requests to demolish segments of the two NRHP eligible canals for conservation piping and hydropower projects.

I. Ownership of the Canals

A common misconception is that COID owns the canals. Most of the length of both canals are in private ownership, with COID owning with a fee-simple interest a few lots crossed by each canal. Some private parties, mostly in the urban areas, own to the centerline of the canal. Those landowners, typically with larger land holdings, own the entire area of land on both sides of the canal and under the canal. The ownership of the Pilot Butte Canal in the listed historic district between Yeoman Road and Cooley Road was determined by the National Park Service (NPS) when Stoel Rives LLP, Attorneys at Law of Portland, OR argued that COID was the owner and should be able to object to the listing. The attorneys for the NPS determined that in this historic district, all of the land in the historic district is in private ownership and COID has an easement of approximately 50 feet on each side of the centerline to operate and maintain the canal for irrigation purposes. Judges in previous local lawsuits have determined that the irrigation districts do not have an easement below the canal bed and cannot dig or excavate below that level without securing a new easement with the property owners.

J. Zoning

COID applied for land use approval from Deschutes County in 2013 to allow the Juniper Ridge Phase II piping project. The area is zoned Single Family Residential-2.5 Acres. Piping is a conditional use in that zone, requiring a public hearing. However, in

2013, staff at the Community Development Department administratively approved the project with no notice to property owners and no posting of the site and forwarded that approval to the Oregon DEQ which is also providing funds. When the property owners discovered the irregular approval, their attorney Bruce W. White appealed it to the Oregon Land Use Board of Appeals (LUBA) and won. See James Curl and Sheryl Curl vs. Deschutes County and Central Oregon Irrigation District, LUBA No. 2013-086/095.

The Final Opinion and Order remanded the decision back to the county to correctly process it in compliance with the procedures code and zoning code. Knowing it would not meet the code, COID chose instead to unsuccessfully apply for a text amendment to change the code to meet their needs. The Planning Commission unanimously found that the facts of the Juniper Ridge Phase II Piping Project are not as portrayed and the public benefit is questionable and any benefit is likely outweighed by significant adverse effects to water quantity in the river and many unacceptable significant effects on property and public safety. COID still has no local approval for the project from either the City of Bend or Deschutes County. The project passes in both jurisdictions.

K. Conclusion

We recommend that the SACHP direct the SHPO to redo the Section 106 for Juniper Ridge Hydropower Phase II Piping Project with public involvement and notifications of owners and local jurisdictions. Also, the SHPO should nullify the MOA of 2014 which added the project to the 2013 MOA for the "I" Lateral on the Central Oregon Canal. Now that the project area and an additional half mile are listed on the National Register, the proponent's project should firmly be rejected.

Any future negotiations for acceptable nominations for the two canals as a trade for approval to pipe more of the canals needs to be comprehensive and include adequate public involvement. A preservation plan for each canal needs to be produced by COID and accepted by the City of Bend, City of Redmond, and the Deschutes County Community Development Departments.

At a bare minimum, it should be acknowledged that the Pilot Butte Canal Historic District (Cooley Road – Yeoman Road Segment) meets the requirement to list and preserve a segment of the Pilot Butte Canal, as required by the MOA.

Best Regards,



Lori K. Murphy, Esq.

Encls: Exhibits

Cc: Client

OREGON SHPO CLEARANCE FORM

Do not use this form for ODOT or Federal Highway projects or to record archaeological sites

-This form is for: federal cultural resource reviews (Section 106), state cultural resource reviews (ORS 358.653)

SECTION 1: PROPERTY INFORMATION

SHPO Case Number: 09-006/10-1873

Resource Name: Pilot Butte Canal

Street Address: T17S, R12E, Section 12 WBM (Bend 7.5 min. quadrangle)

City: Bend

County: Deschutes

Agency Project #: 13-09-COID

Project Name: Juniper Ridge Phase II - 2013 WaterSMART Project

If there is not a street address, include the Township, Range, and Section, cross streets, or other address description

Owner: ☒ Private ☐ Local Gov ☐ State Gov ☐ Federal Gov ☐ Other: _____

Are there one or more buildings or structures? ☒ YES ☐ NO - If no, skip to Section 2 and append photo(s)

Is the property listed in the National Register of Historic Places? ☐ YES - Individually ☐ YES - In a district ☒ NO

Original Construction date: 1904-1905 ☐ Check box if date is estimated

Siding Type(s) and Material(s): N/A

Window Type(s) and Material(s): N/A

Has the property been physically altered? ☐ No Alterations ☐ Few Alterations ☒ Major/Many Alterations

SECTION 2: APPLICANT DETERMINATION OF ELIGIBILITY - Check the appropriate box

The purpose of this review is to avoid impacts to properties that are "eligible" (historic) or already listed in the National Register of Historic Places. Fully establishing historic significance can be very costly and time consuming. Therefore initial evaluations are based on age (50 years or greater) and integrity (historic appearance), which are the minimum qualifications for listing in the National Register. Additional documentation may be needed further in the process, but typically initial evaluations allow the review process to proceed expeditiously.

☒ The property is considered **Eligible** at this time because it is already listed in the National Register or

- is at least 50 years old **and** retains its historic integrity (minimal alterations to key features)
- has potential significance (architectural or historical)

☐ The property is considered **Not Eligible** at this time because it:

- is less than 50 years old **or** is 50 years or older but there have been major alterations to key features
- is known to have no significance, based on National Register-level documentation and evaluation

SECTION 3: APPLICANT DETERMINATION OF EFFECT - Check the appropriate box

☒ The project has **NO EFFECT** on a property that is eligible or already listed in the National Register, either because there is no eligible property involved or the eligible property will not be impacted physically or visually.

☐ The project will have a minor impact on a property that is eligible or already listed in the National Register, and therefore there is **NO ADVERSE EFFECT**. Minor impacts include replacement of some, but not all, siding, doors, or windows, etc.

☐ The project will have a major impact on a property that is eligible or already listed in the National Register, therefore there is an **ADVERSE EFFECT**. Major impacts include full or partial demolition, complete residing, full window replacement, etc.

STATE HISTORIC PRESERVATION OFFICE COMMENTS - Official use only

Eligibility: ☐ Concur with the eligibility determination above.
☒ Do not concur with the eligibility determination above.

Effect: ☐ Concur with the effect determination above.
☒ Do not concur with the effect determination above.

Signed: _____

Date: 9/6/2013

RLS	
ILS	

IAN JOHNSON
503-986-0678

Comments:

ian.johnson@state.or.us

See comments dated 9/6/2013

OREGON SHPO CLEARANCE FORM

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SECTION 4: PREVIOUS ALTERATIONS TO THE BUILDING OR STRUCTURE

Only complete this section for buildings that are 50 years old or older. Describe any alterations that have already occurred to the building, such as material replacement, including siding, windows, and doors; any additions, including garages; and any removal or addition of architectural details, such as brackets, columns, and trim. Provide estimated dates for the work. Attach additional pages as necessary.

The approximately one mile section of the Pilot Butte Canal to be piped (financed by the 2013 WaterSMART grant) commences approximately 0.5 miles from the Bend City limits, to the southern terminus of the piping funded under an ARRA grant in 2009. It is a basalt rock and earthen canal four feet deep and 30-50 ft. in width on average with some areas as wide as 85-90 ft.

The approximately 26 mile-long Pilot Butte Canal was originally built by Deschutes Irrigation and Power (DIP) in 1904-1905 to deliver water to lands segregated under the Carey Act. The original diversion was south of Bend, with the Pilot Butte canal wending northward through the east side of town. DIP was reorganized as the Central Oregon Irrigation Co. in 1910, which constructed the North Dam and diversion (at the north end of Bend), and the North Canal in 1912. Water intended for irrigators north of Bend was diverted into the North Canal for 1.4 miles, then into the Pilot Butte Canal. Water which had been diverted into the PBC south of Bend was instead diverted into the Central Oregon Canal to irrigate lands in the Powell Butte and Alfalfa area. The PBC, north of the junction with the North Canal, was cut, isolating the "Old Pilot Butte Canal" from the "North Pilot Butte Canal" (Tonsfeldt 2010:15-16).

Modifications to the PBC from the North Dam to the Hydro-electric generating facility (a distance of approximately 6.4 canal miles) have included piping of a canal segment just downstream of the diversion to just east of the Highway 97 in the 1990s, due to construction of the Bend Parkway by ODOT (see attached maps). In 2009, a 2.8 mile section of the PBC (T17S R12E sections 3 and 10) was piped, and a small hydro-electric generating facility was constructed (SHPO Case 09-005). Segments of the canal prone to heavy seepage and water loss have been lined with shotcrete (need photo; date?) — a 350 ft. section from the diversion headgates at the river to the radial gates, and another 350 ft. section in the Boyd Acres area (personal communication, L Wollam, COID, 8/8/13). Additionally, bridges, checks and turnouts have been replaced or removed, and wooden flumes have been replaced with buried concrete siphons (NPS 1991:4), or removed altogether. Additional piped sections of the canal are located within the boundaries of the city of Redmond, as construction of the Hwy 97/Redmond Parkway required piping and burying of the canal along the city's east side.

Portions of the Pilot Butte Canal have been determined eligible to the National Register in the past several years. The North Canal (considered to be incorporated into the PBC) and the North Dam complex were determined eligible in 1991 and documented in the Historic American Engineering Record (HAER no. OR-61). The draft National Register Form (Claeyssens 2006) also recommended the PBC as eligible as a contributing feature of the historic Central Oregon Irrigation District. In 2009, the section of the PBC piped as funded by an ARRA Grant was determined to be eligible (SHPO Case #09-005). In 2010, the PBC was also determined eligible individually and as part of a district by AINW for the Federal Highway Administration/ODOT's US 97/Bend North Corridor Project

OREGON SHPO CLEARANCE FORM

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SECTION 5: PROJECT DESCRIPTION

Describe what work is proposed, including what materials will be used and how they will be installed. Specifically identify what historic materials will be retained, restored, replaced, or covered. Include drawings, photos, cut sheets (product descriptions), additional sheets, and other materials as necessary. For vacant lots, please describe the intended use.

Central Oregon Irrigation District is proposing to pipe approximately 1 mile of the Pilot Butte Canal, northeast of Bend, Oregon. The Canal, which delivers irrigation water to the Redmond/Terrebonne area, is approximately 26 mi. long, and open for the majority of that distance. This action will conserve 2,552 acre-feet of water by reducing seepage losses; the conserved water will be permanently restored instream in the Deschutes River and allocated to lands irrigated by the North Unit ID, which will reduce NUID's demand from the Crooked River.

The construction work will include a concrete forebay/trashrack in addition to the piping; all work will occur within COID's easement, the canal prism and ditchrider road – no new ground disturbance is anticipated. COID will retain the ditchrider road on the right (east) downstream side of the Canal.

SECTION 6: FUNDING SOURCE

☐ ARRA ☐ FCC ☐ FERC ☐ HUD ☐ ODOE ☐ USDARD ☐ USFS
☒ Other: Bureau of Reclamation WaterSMART Grant

SECTION 7: AGENCY CONTACT INFORMATION

Name of Organization Submitting the Project: Bureau of Reclamation, Columbia-Cascade Area Office

Project Contact Name and Title: Chris Horting-Jones, archaeologist

Street Address, City, Zip: 1375 SE Wilson Avenue #100 Bend, OR 97702

Phone: 541-389-6541 ext. 236

Email: Chortingjones@usbr.gov

Date of Submission: August 20, 2013

SECTION 8: ATTACHMENTS

REQUIRED

☒ 3 – 4, color, 4 x 5 photographs of the subject property, digital or print.
 One photo is sufficient for vacant property

AS NEEDED

Contact SHPO staff with questions

☒ Project area map, for projects including more than one tax lot

☐ Additional drawings, reports, or other relevant materials

☐ Continuation sheet for sections 4 or 5, or additional context to determine National Register Eligibility.

SHPO Mailing Address: Review and Compliance, Oregon SHPO, 725 Summer St. NE, Suite C, Salem, OR 97301
 Documents meeting all aspects of the digital submission policy may be submitted by email to
ORSHPO.Clearance@state.or.us

OREGON SHPO CLEARANCE FORM CONTINUATION SHEET

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CONTINUATION SHEET

- Include additional documentation for Section 4 or 5 as necessary. Attach maps, drawings, and reports as needed to illustrate current conditions and the planned project. If submitting this form by email, photos and maps may be inserted into continuation sheets.
- If completing a complete Determination of Eligibility (DOE) or Finding of Effect (FOE), use continuation sheets as necessary or include appendices.

Reclamation considers the initial 6.4 miles of the Pilot Butte Canal – from the North Diversion Dam, on the Deschutes River – to the hydroelectric generating facility, 2 mi. northeast of Bend - to be a non-contributing segment of the National Register-eligible Canal. This section of the conveyance feature has been extensively modified since initial construction, with concomitant loss of integrity of design, materials and workmanship: segments of the canal were realigned, piped and buried during construction of the Bend Parkway in the late 1990s, and as financed by an ARRA Grant in 2009. Additional segments have been permanently altered – canal walls covered with shotcrete, and the canal floor cemented to reduce heavy seepage through the highly fractured basalt bedrock. The canal also no longer retains any integrity of setting, feeling or association: the conveyance feature presently traverses an area characterized as industrial and commercial east of Highway 97, as well as land currently being developed as high-density residential developments. The one-mile APE itself wends through a neighborhood of 1+ acre developed residential lots, replacing the scattered agricultural homesteads segregated under the Carey Act which characterized the lands served by the Pilot Butte Canal immediately north of Bend. Irrigation water is no longer delivered to water users within the APE for agricultural purposes.

As a non-contributing segment, this undertaking will result in a No Adverse Effect determination. The remainder of the unpiped canal (some 20 miles), however, retains its contributing status, rendering the Pilot Butte Canal still eligible for the National Register.

In 2012, COID, The OR SHPO and Reclamation entered into a Memorandum of Agreement for mitigating the Adverse Effect to COID's Central Oregon Canal I-Lateral (SHPO Case 12-0678). COID has committed to developing standards for determining eligibility and integrity across the entire COID water conveyance system.

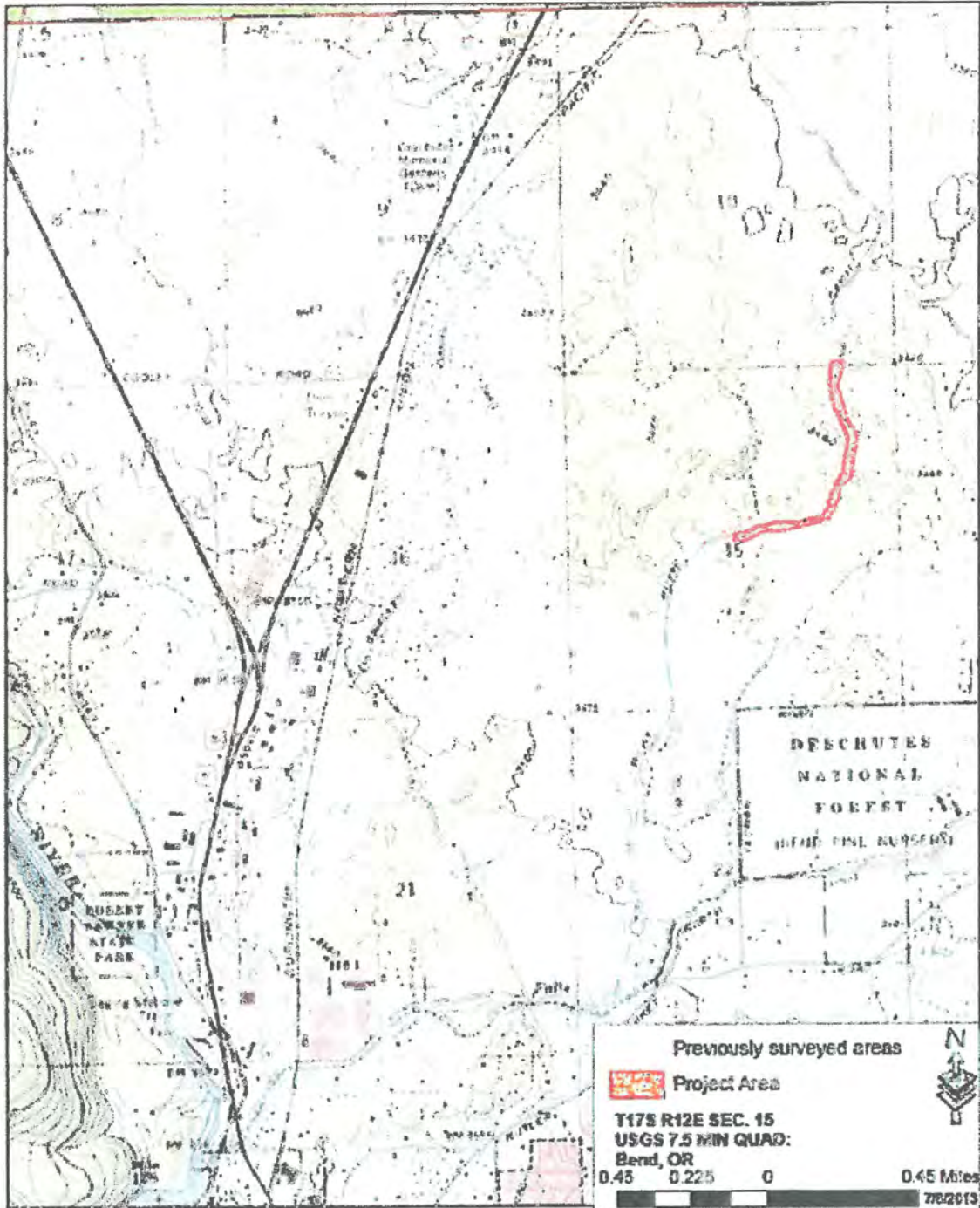
BIBLIOGRAPHY

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- 2013 Johnson, Steve, District Manager
Central Oregon Irrigation District Juniper Ridge Phase II. A Project Associated with North Unit Irrigation District Water and Energy Conservation Initiative. Reclamation WaterSMART Water and Energy Efficiency Grant Proposal. Central Oregon Irrigation District. Redmond, Oregon.
- 1991 National Park Service
North Canal Dam and Diversion Canals (Steidl and Tweet Dam and Diversion Canals). Deschutes River near North Division Street, Bend, Deschutes County, Oregon. Written Historical and Descriptive Data. Historical American Engineering Record, OR-9. Columbia Cascades Support Office, Seattle.
- 2010 Tonsfeldt, Ward and Dennis Gray
Cultural Resource Inventory of a Segment of the Pilot Butte Canal, Juniper Ridge Piping Phase II, Deschutes County, Oregon. East Slope Cultural Services, Inc., Bend, OR.

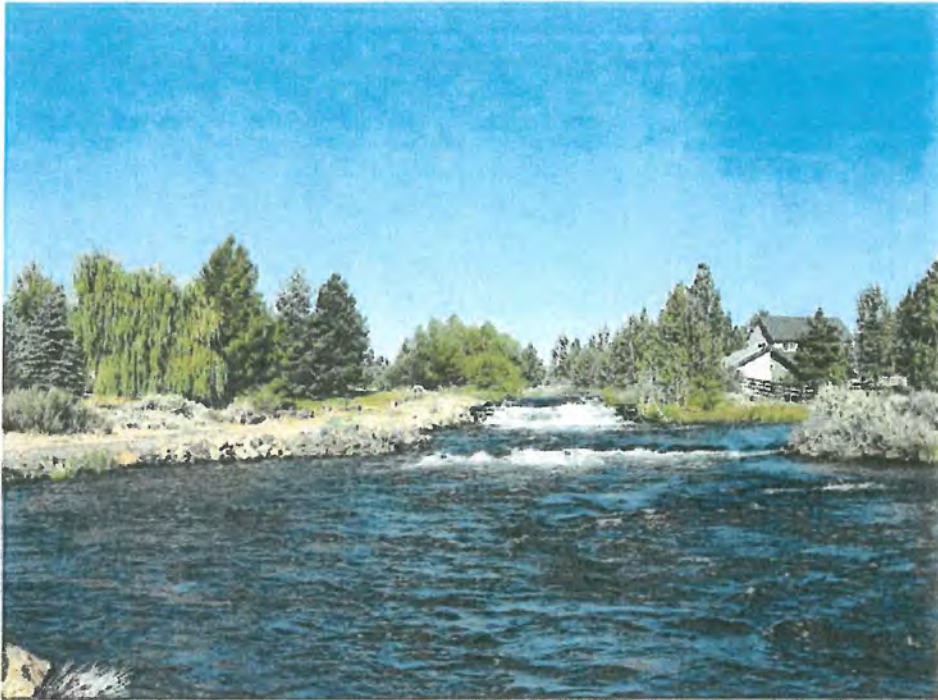
OREGON SHPO CLEARANCE FORM

CENTRAL OREGON IRRIGATION DISTRICT -
2013 WaterSMART Grant

Project Location



OREGON SHPO CLEARANCE FORM
Photos



Southernmost end of project area, facing west – proposed forebay with trash racks (beginning of piping) will be constructed between two small waterfalls, photo center.



Overview of residential properties encroaching on COID canal easement – both house and fenced yard are within easement.

OREGON SHPO CLEARANCE FORM



Overview of Pilot Butte Canal facing east at Boyd Acres Road. High density residential development in background. This photo is taken outside the APE, but within the non-contributing segment of canal.



View of Pilot Butte Canal looking west from Boyd Acres Road. Jeld-Wen window factory is to right, pedestrian bridge leads from Jeld-Wen parking lot. This photo is taken outside the APE, but within the non-contributing segment of canal.

OREGON SHPO CLEARANCE FORM

Overview of the Pilot Butte Canal (PBC) from the diversion on the Deschutes River northeast through Bend. The Canal is demarcated in light blue; it is piped from the diversion to just east of the Bend Parkway. Note the industrial/commercial and high density residential areas the canal traverses. GoogleEarth, 8/13/13.





Oregon

John A. Kitzhaber, MD, Governor

Parks and Recreation Department
State Historic Preservation Office
725 Summer St NE, Ste C
Salem, OR 97301-1266
(503) 986-0690
Fax (503) 986-0793
www.oregonheritage.org



September 9, 2013

Mr. Gerald Kelso
Bureau of Reclamation
1201 NE Lloyd Blvd STE 750
Portland, OR 97232

RE: SHPO Case No. 10-1873
Pilot Butte Canal Juniper Ridge Piping Proj Phase 2

Dear Mr. Kelso:

Thank you for submitting documentation on the project referenced above. While the Oregon State Historic Preservation Office (SHPO) acknowledges that the integrity of the subject section of the Pilot Butte Canal is diminished, we believe that the majority of this segment retains sufficient integrity for listing in the National Register and that the proposed piping project will adversely affect the resource's character-defining features.

However, we believe that the Memorandum of Agreement (MOA) mitigating for the adverse effect to historic properties for Phase II of the North Unit irrigation District Water and Energy Conservation Initiative (SHPO Case No. 12-0948) signed in September 2012 among the Bureau of Reclamation (BOR), our office, and the Central Oregon Irrigation District (COID) is sufficient to address this adverse effect. As noted in personal correspondence with Chris Horting-Jones, as written the MOA does not adequately address how COID's ongoing piping projects should be addressed. We propose amending the document to allow projects to proceed, while carrying out the previously-agreed to stipulations that will identify what portions of the system should ultimately be preserved.

Until the MOA can be amended, and if BOR is amenable, we ask that the agency concur with our Determination of Eligibility, Finding of Effect, and mitigation for this project in writing, and confirm that the agency will seek an amendment to the existing MOA to resolve the issues noted in this letter. It is our hope to have the document amended within the next several months, sooner if possible. Please contact me if there are any further questions, comments, or concerns.

Sincerely,

Ian P. Johnson, M.A.

Historian

(503) 986-0678

ian.johnson@state.or.us

EXHIBIT B
Page 1 of 1

MEMORANDUM OF AGREEMENT
No. R14MA13733
AMONG
THE U.S. BUREAU OF RECLAMATION,
THE OREGON STATE HISTORIC PRESERVATION OFFICE
AND
CENTRAL OREGON IRRIGATION DISTRICT

For
Piping of a Segment of the I-Lateral

ALFALFA VICINITY, DESCHUTES COUNTY, OREGON

This Memorandum of Agreement (MOA) is entered into by Bureau of Reclamation, Columbia-Cascades Area Office (Reclamation), the Oregon State Historic Preservation Office (SHPO) and the Central Oregon Irrigation District (District) to define their respective roles in mitigation efforts related to the piping of the I-Lateral of the Central Oregon Irrigation District System (System). This MOA outlines separate, but related mitigation for the current undertaking (subterranean piping of a Segment of I-Lateral) and the proposed future piping of the remainder of the canals, laterals, sub-lateral and ditches within the District. This MOA replaces MOA No. R12MA13723 thereby canceling it in its entirety.

1. Background

The District is located in Deschutes County. The District provides irrigation water within the Central Oregon Tri-county area with 43,000 acres delivered to water users in the vicinity of Bend, Alfalfa, Powell Butte, Redmond, and Terrebonne, within the upper Deschutes River basin.

A. I-Lateral Piping

Under the current undertaking, the District intends to protect and improve water quality and improve water delivery by converting approximately 4,800 feet of open ditch laterals within the I-Lateral of the System to pipe, in T17S R14E Sections 25, 26 and 36.

The District has been awarded a grant through Reclamation's WaterSMART Program to perform the work. Because Reclamation-administered Federal funds will be involved in this project, the Section 106 process of the National Historic Preservation Act was applied to identify affected historic properties.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), the District has documented the extent of the Lateral within the current undertaking's Area of Potential Effects for historic and archaeological resources to standards acceptable to Reclamation and SHPO.

Reclamation, in consultation with SHPO, determined that replacement of the open I-Lateral with the pipe will have an adverse effect upon the historic integrity of the Lateral. Reclamation notified the Advisory Council on Historic Preservation (Council) of the adverse effect on the I-Lateral pursuant to the Code of Federal Regulations (CFR) 36 CFR Section 800.6(a)(1), and in a letter dated September 17, 2012, the Council indicated that their participation is not needed in the consultation for resolution of adverse effects from this undertaking.

Specific mitigation strategies designed to address the adverse effect of this undertaking are identified below, in section 3.A.

B. Future Piping of Canals, Laterals, sub-Laterals, and Ditches

Through discussions between Reclamation, SHPO, and the District related to future project planning and the stated intentions of the District, a proposal to programmatically mitigate for future adverse effects related to the future piping of canals, laterals, sub-laterals, and ditches throughout the District has been developed. This MOA is intended to provide mitigation for such future piping efforts.

Specific mitigation strategies designed to address the adverse effects of these future undertakings are identified below, in section 3.B.

C. Interim Management

Until the Programmatic Agreement is signed and in place, all consultation regarding non-Federal undertakings will be reviewed by SHPO under standard State review practices, as defined in Oregon State Regulations (ORS) 358.653.

This MOA is entered into under the authority of the National Historic Preservation Act of 1966 as amended, as specified in the regulations in 36 CFR 800, and specifically in Section 6(c) – Resolution of Adverse Effects without the Council.

2. Purpose and Applicability

This MOA will serve to define the necessary actions for documentation of the System in its current state, define in more detail the historical significance, contextual setting, character-defining characteristics and the contributing properties within the System, and set the parameters by which future actions to pipe the System can be accomplished. This MOA will reduce the need to consult with the SHPO on a case-by-case basis when qualifying future activities (defined as subterranean piping of canals, laterals, sub-laterals, and ditches) take place on the System, and provides for a schedule that allows the SHPO to be updated on implemented actions.

This MOA does not apply to projects affecting any feature or element that is or may be individually eligible for listing in the National Register of Historic Places. Federal undertakings that affect these elements of the District will continue to be reviewed under standard Section 106 review processes (36 CFR 800). Non-Federal projects will continue to be reviewed under ORS 358.653.

3. Implementing Actions

A. Piping of I-Lateral

The SHPO, Reclamation, and the District agree that the current undertaking, consisting of the subterranean piping of approximately 4,800 feet of the I-Lateral, currently an open-ditch structure, represents an adverse effect to the National Register-eligible District water conveyance system. In order to mitigate that adverse effect, the following shall be implemented:

1. Reclamation will:

- (a) Consult with the proper interested parties, such as the Council, SHPO, and the Confederated Tribes of the Warm Springs Reservation.
- (b) Ensure that mitigation efforts defined in this MOA as part of the current undertaking (identified below, Section 3.A.2) are completed to the standards set forth below.

2. The District will:

- (a) Perform or cause to be performed the Historic Documentation of the System;

- Following all applicable guidance provided by the National Park Service and SHPO, the District will conduct a historic properties inventory of the entirety of the District facilities and infrastructure related to water conveyance (i.e., not to include district offices and equipment/vehicle maintenance or storage facilities). This inventory will document all water-conveyance system buildings and structures, provide locational information (in GIS format, using lines to represent canals, etc., and points or polygons, as appropriate, to represent features) for all water conveyance-related buildings and structures, as well as associated features. The inventory will meet the requirements set forth for Reconnaissance Level Surveys, as defined in the document, "Guidelines for Historic Resource Surveys in Oregon." Prior to initiation of the survey, a written, detailed survey design will be submitted to SHPO for review and concurrence.
- This inventory will be completed and submitted to Reclamation and SHPO for draft review within three (3) years of the date of the final signature on the document. Comments and revision requests from Reclamation and/or SHPO will be addressed, and a final version of the inventory will be submitted within one (1) year of the receipt of such comments.

B. Future Piping of Canals, Laterals, sub-Laterals, and Ditches Elsewhere Within the District
 SHPO, Reclamation, and the District understand that it is the intention of the District to convert significant portions of the system of open canals, laterals, sub-laterals and ditches within the District to a subterranean, piped system. In order to mitigate for future adverse effects that would arise from these efforts, Reclamation, SHPO and the District have agreed to mitigate programmatically through the following measures in order to reduce time, effort, and resources required to conduct standard Section 106 and/or ORS 358.653 consultation:

1. Develop a Programmatic Agreement (PA)

- (a) Reclamation, SHPO, and the District shall enter into a PA to allow for the more efficient fulfillment of the entity's obligations under Section 106 of the National Historic Preservation Act, as amended, and Oregon Revised Statute 358.653, as applicable.
- (b) All parties shall use the Multiple Property Document (see Section 3.B.2., below) to identify contributing segments of the canal system to be managed under the PA and any subsequent documents created as part of the process. The PA will include, at minimum:
 - A list of routine maintenance and minor construction activities and actions that do not adversely affect the historic resource and that are exempt from regular review by SHPO;
 - A provision to address emergency situations where catastrophic breach of the canal or other unforeseen event or eminent threat endangers human life or property. Such a provision shall allow the District to act on the immediate situation without consultation and address compliance with applicable cultural resource laws in consultation with appropriate federal agencies and stakeholders within 30 days of the incident.
 - An inadvertent discovery clause, which will outline procedures to be followed when unknown, unanticipated cultural resources are discovered due to District activities;
 - A description of annual reporting requirements and timetable for reporting activities undertaken by the District where the provisions of the PA were applied;

- A defined effective period of ten (10) years with provisions for the document to be reviewed at five years from last date of signature, amended as necessary, and the effective period continued, based on consultation. If appropriate, the effective period can be extended for an additional ten (10) years (with an additional five-year review), subject to the agreement of Reclamation, SHPO, and the District.
- (c) The PA may also include a probability model for subsurface archaeological sites, cultural resource treatment plans, and preservation plans, as agreed to by the signing Parties.
- (d) Reclamation, SHPO, and the District, as well as any other interested, consulting parties, will be signatories to the PA.
- (e) Until the PA is signed and in place, all consultation regarding future federal undertakings (those not covered under Stipulation A) affecting the District water conveyance system will be reviewed by Reclamation and SHPO under standard Section 106 review practices, as defined in 36 CFR 800.

2. Develop Multiple Property Document (MPD)

- (a) Following all applicable guidance provided by the National Park Service and SHPO for the preparation of MPDs, the District will edit the MPD, *Historic Agricultural Resources in Central Oregon*, which is currently in draft form, as prepared by Claeysens and Tomlinson (2006) under a previous Reclamation water conservation grant. The MPD will be prepared sufficiently such that subsequent Irrigation Districts are able to add their district-specific contexts and registration requirements. The MPD elements will be based on the results of the Reconnaissance Level Survey inventory created as a result of Stipulation A.2. (above). The MPD elements to be developed include:
 1. General framework for the functioning of the MPD, once registered, including Sections A through D (complete), Sections E-I such that deal specifically with the District, but that includes general introductions, contexts, and registration requirements that will be applicable across all irrigation districts included in the final MPD;
 2. Establishment of the various historic contexts pertaining to the history and significance of the District. The historic context(s) will be based on historical research, and supported by historical documents and images;
 3. Development of associated property types and general and type-specific registration requirements through which identified elements of the system can be evaluated for eligibility (including consideration of significance and integrity) for inclusion in the NRHP through the framework of the MPD; and
 4. A GIS-based map of the entire system identifying the location, extent, and features of the District, and any other necessary appendices, shall be included. The map should identify elements and sections of the System as either contributing or non-contributing to the District as a comprehensive historic resource.
- (b) The draft MPD (including all GIS information) will be submitted to Reclamation and SHPO for review and comment within three (3) years of the date of the final signature of this MOA. Draft MPD and nomination materials will be submitted to Reclamation and SHPO for review by SHPO and the Oregon State Advisory Committee on Historic

Preservation (SACHP). The District will address any SHPO and SACHP comments prior to forwarding the document to the National Park Service for final consideration.

3. Preservation and Interpretation

- (a) Following completion of the draft MPD elements described above (Stipulation B.2.a-b), the District, in consultation with Reclamation and the SHPO, shall select appropriate, contributing segments to be listed in the National Register of Historic Places through the MPD. These segments will be selected based on the following criteria:
 - 1. The segments will be high-integrity, substantial, contributing segments (minimally, one substantial segment each in the Pilot Butte Canal and the Central Oregon Canal) to the overall eligible District;
 - 2. The segment should include a variety of features, such that it well-represents the function and appearance of the water conveyance system, as it appeared as an intact system;
 - 3. The segment should be of sufficient length that on-site interpretation (see Stipulation B.3 (b), below) can be achieved in an attractive, well-organized fashion, without crowding or overwhelming the resource itself.
- (b) Once selected, the identified segment will be cleaned, repaired, and returned to working condition in a way that meets the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the immediate vicinity prepared such that it creates a welcoming, attractive environment for the public visitation and interpretation of the resource.
- (c) The interpretation of the resource will be achieved through the use of static or active displays that relate the history, function, and significance of the Central Oregon Irrigation District water conveyance system. Such displays will be presented in a format that is weather- and vandal-resistant, attractive, and engaging. Draft content and layout of the interpretive display(s) will be submitted to Reclamation and SHPO for review and comment, and if any revisions are requested, revised versions will be submitted for a second review prior to fabrication. Upon acceptance of the draft content by Reclamation and SHPO, the District will cause the interpretive display to be constructed.
- (d) Once constructed, the interpretive site and displays must be maintained by the District in an attractive and functioning condition.

4. Completion of this MOA

The terms of this MOA will be considered to be completed when the above implementing actions (A-B) have been completed to the satisfaction of Reclamation and SHPO. Upon completion of the implementing actions, all adverse effects resulting from subterranean piping of *all canals, laterals, sub-laterals, and ditches* will be *considered to be fully mitigated*, and may proceed without Section 106 or ORS 358.653 (as appropriate) consultation with Reclamation or SHPO.

5. Period of Performance

This MOA shall become effective on the date of the last signature hereto and extend three years after the date of the last signature. The MOA will also be considered terminated once all stipulations are complete, or five years after the date of the last signature on this MOA. Any party may terminate this MOA by providing 30

days written notice to the other party(ies). Any party may formally request modification of the MOA by providing a written request to the other party(ies).

If this MOA is terminated prior to completion of the above stipulations, then all projects undertaken from the date of the final signature not covered by the PA (should it be in effect) on this MOA must be reviewed under standard review practices under Section 106 of the National Historic Preservation Act, or under ORS 358.653, as appropriate.

6. Modifications

Reclamation, SHPO or the District may formally request modification of this MOA. Modifications shall be made by mutual consent of Reclamation, SHPO and the District by the issuance of a written modification to this MOA, signed and dated by all parties prior to any changes being performed.

7. Principal Contacts

The principal contacts for this MOA are:

For Reclamation:

Chris Horting-Jones
Archeologist
1375 SE Wilson Ave. #100
Bend, OR 97701
Phone (541) 389-6541
Fax (541)-389-6394
Email: chortingjones@usbr.gov

For the District:

Laura Wollam
Grant Specialist
Central Oregon Irrigation District
1055 SW Lake Ct.
Redmond, OR 97756
Phone (541) 504-7577
Fax (541) 548-0243
Email: laurew@coiid.org

For SHPO:

Jason Allen
Historic Preservation Specialist
State Historic Preservation Office
Oregon Parks and Recreation Department
725 Summer St. NE, Suite C
Salem, OR 97301-1266
Phone (503) 986-0579
Fax (503) 986-0793
Email: Jason.Allen@state.or.us

8. General Provisions

- a. Reclamation's responsibility for ensuring completion of consultation with SHPO for future undertakings identified in Section 3.B. is limited only to those that qualify as Federal undertakings. Projects identified in Section 3.B. that do not qualify as Federal undertakings are subject to review by the SHPO under ORS 358.653, and the responsibility for consultation and completion will rest with the District.
- b. Completion of the mitigation stipulations will be considered to satisfy the requirements for mitigation of adverse effects for a previous undertaking (Pilot Butte Canal Juniper Ridge Piping Project Phase 2 [SHPO Case# 10-1873]) that has not yet been mitigated as of the date of the final signature on this MOA.
- c. This MOA is neither a fiscal nor a funds-obligating document for Reclamation. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties of this MOA will be handled in accordance with applicable laws, regulations, and procedures including those for Government procurement and printing. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This MOA does not provide such authority.
- d. Nothing herein shall be construed to obligate Reclamation to expend or involve the United States of America in any contract or other obligation for the future payment of money in excess of the appropriations authorized by law and administratively allocated for the purposes and projects contemplated hereunder.
- e. No member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of the MOA or to any benefit that may arise out of it.
- f. Any information furnished to Reclamation, under this MOA, is subject to the Freedom of Information Act (5 U.S.C. 552).
- g. All parties to this MOA agree to comply with all Federal statutes relating to nondiscrimination, including but not limited to: Title VII of the Civil Rights Act of 1964, as amended, which prohibits discrimination on the basis of race, color, religion, sex, or national origin; Title IX of the Education amendments of 1972, as amended, which prohibits discrimination on the basis of sex; the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act of 1990, as amended, which prohibit discrimination on the basis of disability; the Age Discrimination in Employment Act of 1967, as amended, which prohibits discrimination based on age against those who are at least 40 years of age; and the Equal Pay Act of 1963.

9. Signatures

Reclamation, SHPO and the District will abide by the terms and provisions expressed or referenced herein.

BUREAU OF RECLAMATION

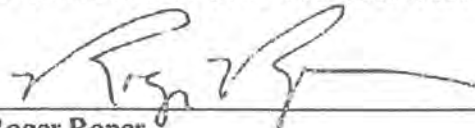
by:


Gerry Kelso, Manager
Columbia-Cascades Area Office

DATE:


2/12/14

OREGON STATE HISTORIC PRESERVATION OFFICE

BY: 
Roger Roper
Deputy State Historic Preservation Officer

DATE: 2-25-14

CENTRAL OREGON IRRIGATION DISTRICT

BY: 
Steven Johnson
Secretary-Manager

DATE: 14 Feb. 2014

~~ End of Document ~~

Vernon_EmailedComment

ALLEN Jason * OPRD

From: Greg Vernon <gregvernon65@gmail.com>
Sent: Wednesday, June 15, 2016 11:57 AM
To: ALLEN Jason * OPRD
Subject: Fwd: COID Request for Historic Designation

Follow Up Flag: Follow up
Flag Status: Flagged

Sent from my iPad

Begin forwarded message:

From: Greg Vernon <gregvernon65@gmail.com>
Date: June 14, 2016 at 7:01:39 AM PDT
To: jasonallen@oregon.gov
Subject: COID Request for Historic Designation

My name is Greg Vernon and I live at 63385 Old Deschutes Rd. Bend, Oregon. I live on the 1.5 miles of Pilot Butte canal that recently was designated historic. COID has made numerous efforts to be allowed to pipe this section of the canal without regard for the land owners who own title to the land. They have the authority to pipe the canal if they follow the conditional use cited in our zoning. COID and their advocates have repeatedly said it will not impact property values. This is absurd as I had a real estate broker give me an opinion and he concluded that I would lose \$150,000 in property value.

Now COID is trying another end run by submitting three sections for historic designation and including MOA's that would trump zoning and allow them to pipe our section of the canal. I am a reasonable person and know the difference between right and wrong. Please reject their requests and make them do what is right.

Sent from my iPad

Warren_2017.02 SACHP letter on MPD

To: State Advisory Committee of Historic Preservation

RE: Federal Irrigation Projects in Oregon , 1901-1978

Date: February 13 , 2017

Dear SACHP,

This MPD reads like an 8th grade school paper describing all aspects of irrigation systems. Volumes of writing on topics which are not important or relevant are totally unnecessary and distracting. This is a compilation of opinions from multiple sources, but includes only public relations from COID and not any original or self-generated information. It never identifies or describes each of the many districts it will apply to. But the errors and misinformation contained cause this MPD to not be acceptable for National Register review.

Title:

Let's start with the title—"Federal Irrigation Projects in Oregon, 1901-1978". This does not truthfully explain what this paper contains. This paper covers all irrigation projects anywhere (not just within Oregon) from all time periods. Central Oregon Irrigation District (COID) and Vale Irrigation are the only systems really described. Why isn't this MPD applicable only to COID and Vale Irrigation Districts? There are a few fleeting comments but very little information concerning other irrigation districts within Oregon. This MPD specifically states on Page E-4 *"Other possibilities historic contexts might address irrigation projects in less arid environments such as the Willamette Valley or the Rogue River and Klamath River basins. Consideration of these and other specific historic contexts are outside the scope of the current study."* How can this nomination apply to all of Oregon when it specifically states that it omits information on those other locations??

Why did COID use these dates in the title? The content of this paper includes information from the 1800 until today. 1978 is less than 50 years ago and would prohibit nomination to the National Register of these items. If this sliver of time is important, discuss it! Prove why it is important. The title should reflect the contents of the document, but at this time there is *no continuity between subject matter and title*. Either the title or the content needs to be altered.

Purpose of this MPD:

Now let's examine the purpose of this document. Exhibit G claims that this MPD "encompasses all of the state of Oregon" so COID intends to allow all irrigation districts in Oregon use this document. COID hides that this MPD is completed as part of the requirements for a 2014 MOA to allow COID to destroy all canals, laterals, sublaterals, and ditches without holding any public hearings on any future hydropower or piping projects. In fact actual landowners will not be informed of coming destruction until industrial equipment arrives in their backyard. Clearly this is not identified in the MPD, so how did it happen?

Let's look at the history involved with this MPD. (Please bear with me for this is directly applicable to the reason you have been presented this MPD. You should understand the COID hidden agenda.) In 2012 a Section 106 was prepared by COID, SHPO, and the Bureau of Reclamation for less than one mile on the I-lateral of the Central Oregon Canal in a privately owned undeveloped area of Alfalfa. The 2012 MOA based on this 2012 Section 106 allowed COID to pipe a less than one mile segment with the requirement that COID prepare a

MPD on their entire system and nominate a stretch from each of the 2 main canals for the National Register prior to submitting any more requests for piping. There had been no public Involvement on this 2012 MOA contrary to NHPA and NEPA laws. The MOA was approved by SHPO, BOR and COID in 2012 and piping was completed in 2013 even though it directly crossed natural wetlands. Did the 2012 Section 106 or the 2012 MOA discuss the destruction to the natural wetlands? Did they prepare an Environmental Impact Statement (EIS) for it? Or was that information conveniently “omitted” during preparing and approving the documents? Presently COID has constructed a dripping pipe into roughly half of what had been the wetlands. But since it is now “controlled filling” by an irrigation district is no longer can be identified as a natural wetlands by federal standards. And the actual wetlands have essentially been bisected by the COID pipe destroying over ½ of the area.

COID previously modified laws in Deschutes County in 2 steps. These changes were approved administratively without public hearings, and without notification of the property owners involved. The first step allowed hydropower projects to be constructed by the irrigation districts connecting to any dam or pipe. The second step gained permission to pipe any canal, lateral, sublateral, or ditch within the County (except in the SR 2.5 zone which was somehow omitted from the legislation). Neither change required that the irrigation district own the property, so actually the piping is a back handed approach for building hydropower on any land anywhere including on private property.

In 2013 COID received Water-smart funds from BOR to pipe part of the main Pilot Butte Canal in a residential area (the SR 2.5 zone) near Bend which they did not own. This section of the Pilot Butte Canal is over 15 miles from the I-lateral on the Central Oregon Canal. The water-smart application stated COID owned the canal and had all the permits necessary for the project—both claims were false. COID had sold the land to private parties as much as a century ago for profit at that time, and had simply retained an easement to maintain their above ground seasonal irrigation canal. This segment has the highest integrity on the Pilot Butte Canal, and so COID did not want any public hearings on the proposed destruction. Land Use Zoning codes required that conditional permit process be followed for hydropower in this residential zone (SR 2.5). Instead of making COID comply with the requirements of the 2012 MOA and compliance with current laws, SHPO approved combining all 700 miles of the COID system onto the 2012 MOA. In direct violations of NHPA and NEPA laws again the same three governmental agencies signed off the Section 106 and MOA in 2014 without notifying the actual deeded landholders or holding any public hearings. Yes, you are reading this correctly, the 2014 MOA was to cover the false information on the Water-smart application that was funded with taxpayer funds in 2013. Due to lack of room on this page, the title of the 2014 MOA is printed on the next page (wording, capitalizations and spacing taken from actual document). The deceptive title was used so that public would not be aware of the far reaching consequences of this document until after it was approved.

Most photos in the 2014 MOA were from the I-lateral on the Central Oregon Canal and the 2012 MOA with only a brief few words added to cover the remainder of the COID system. The 2014 Section 106 states that COID owns the canal when they are merely easement holders in the section of the Pilot Butte Canal they had received funding to pipe. The faulty 2014 MOA issued on the 2014 Section 106 is the driving force behind this MPD. Hidden within the 2014 MOA was permission for COID to destroy all parts of their 700 mile irrigation system when they prepared the MPD and 2 nominations. Now through this MPD and its Section G wording (“This geographical area encompasses all of the state of Oregon.” on page G-64), COID desires to expand the

faulty 2014 MPD to allow all irrigation districts to obtain Water-smart funds from BOR to destroy the remaining state-wide canals without public hearings or even notification of private property owners who are directly affected and own yards which will be destroyed by the irrigation district plans

~~~~~  
*(Official title of 2014 MOA for COID--all wording, capitalization and spacing are from official document. This document included permission for COID to pipe and build hydropower plants in all 700 miles of their system, including within both Deschutes and Crook Counties. )*

MEMORANDIUM OF AGREEMENT

No. R14MA13733

AMONG

THE US BUREAU OF RECLEMATION,  
OREGON STATE HISTORIC PRESERVATION OFFICE.

AND

CENTRAL OREGON IRRIGATION DISTRICT

For

Piping of a Segment of the I-Lateral  
Alfalfa Vicinity, Deschutes County, Oregon

~~~~~  
Exhibit A contains further explanation about the conservation statements of COID and the impact of hydropower. COID’s “conservation” claims are false and hydropower is actually water wasteful. Irrigation districts should concentrate on delivering irrigation water to the farmers and ranchers, and not on earning profit for themselves alone. COID has systematically gone to City of Bend, Deschutes County, State of Oregon legislature, State of Oregon LCDC, and now SACHP to attempt to change laws administratively to allow them to “take” and destroy private property belonging to innocent citizens.

This MPD is written to exonerate the broken laws and false information that COID has used to acquire taxpayer funding to build hydropower for their own profit. (Less than 2 % of the residents of Central Oregon have water rights. COID pays no taxes at any level. Between 2014 and 2015 COID wages increased by 66% with no new facilities opened. Operating expenses in the same time increased by 43%. Over \$4 million additionally appeared in these 2 categories alone for their own use. Where did the money originate? It obviously ended in somebody’s pockets for a non-profit irrigation district cannot retain this amount of cash.)

Through underhanded agreements and legal maneuvers, COID wants you, the SACHP, to expanded permission to pipe less than a mile in an undeveloped section of Alfalfa on the 2012 MOA into carte blanche permission with this MPD and the faulty 2014 MOA to allow total destruction of all historical irrigations systems throughout Oregon. This 2014 MOA, like agreements COID achieved in Deschutes County, voids all laws, codes, land use regulations and easement restrictions applying to irrigation projects, including in residential developments. The permissions granted do not require that the irrigation districts actually own the land to have the unlimited authorities. Since they want this legal permission without public input or discussion, they have withheld this information from you in this nomination. Section H in this MPD refers briefly to the MOAs of both Vale and COID, so obviously this document is intended to fill the requirements for the 2014 COID MOA.) However COID has no intention to honor the 2014 MOA exclusion of historically significant sections. COID had Governor Brown present new Goal 5 standards to the Land Conservation and Development Commission (LCDC) to allow for the specific destruction of the National Register listed PBCHD (the direct lengthy e-mail link between COID and Governor Brown's office was submitted for public record to the LCDC.). It is illegal for COID to use eminent domain since LUBA declared that this piping is a for-profit project for the irrigation districts. COID's goal has been to legalize "taking" of private property. COID has continued to plan for destruction of the PBCHD while falsely stating that they have "shelved" the project.

Why is this background important?

Basically the 2014 Section 106 and 2014 MOA were both signed without following legal procedures. This MPD was written specifically to meet requirements of the 2014 MOA and has been expanded in order to allow demolition of all historic irrigations systems in all of Oregon. Yet this agenda was hidden in this document. SHPO was a party to the 2014 MOA and knows that this MPD would fulfill it and the consequences of your accepting it. Did they share that information with you? This MPD should not be approved blindly. SACHP should not exonerate broken laws by anyone or any governmental agency, especially those that adversely affect historical resources such as the hand-dug canals that led to the settlement of Oregon.

Does this MPD fill the requirements for a National Register document?

The 2014 MOA required COID to prepare an MPD of their own system only. Why was this expanded into something for all of Oregon? COID previously used "piping of a segment of the I-lateral Alfalfa Vicinity, Deschutes County" for a document applying to all 700 miles (within both Deschutes and Crook Counties) of their system in 2014. COID used faulty titles to hide their intentions from the public previously, and this appears to be more of the same. There is no indication that the people of Oregon are aware of the existence or intentions of this document. COID wishes to apply this to all Oregon irrigation districts when it primarily discusses COID and Vale Irrigation. This document's title lists from 1901 to 1978, with no documentation as to why those dates are in the title. This document states (on Page 66) that resources less than 50 years old were not recorded or analyzed, yet they would exist in the time period identified on the title. National Register nominations require non-contributing items to be listed and described. Why does COID have the freedom to not list or analyze features that don't happen to agree with their predetermined goal? No other nominee would be granted this privilege. Historical research is based on comprehensive facts, not on who you are, how much money you have, or if you are politically connected. The facts are missing in this document.

The analysis was “*reconnaissance level*” only. The MPD states that the author drove around with individuals from COID, SHPO, and BOR to collect information (this is identified in Exhibit H in his own words). They did not go wherever “no trespassing” signs existed, yet many of the no trespassing signs on the canals belong to COID. No trespassing signs appeared in 2013, and the “Central Oregon Irrigation District” is so small you would be unable to read it from a car. How can “reconnaissance level” viewing of limited parts of two districts be used to justify actions of all irrigation districts in Oregon?

Each irrigation system has unique characteristics, yet only parts of Vale and COID have been the basis for the whole MPD. The author acquired information on property types and subtypes from previously published sources (not from using the original documents) and (in his words on page H-65) “*analyzed, and extrapolated to other comparable irrigation projects in central and eastern Oregon.*” COID frequently has said all segments of canals are equal simply to convince others to allow them to destroy a section of their choosing. But like the Oregon Trail, each segment has its own characteristics, difficulty of construction, and difference in historical significance. This MPD cannot be a “one size fits all” especially when so much of the Oregon irrigation systems have been rejected in the collection of data. This MPD should reflect the uniqueness of the canal systems, not be stressing the conformity. This MPD further restricts future nominations by requiring that they must conform to this document or they are not historical and do not deserve listing or protection. There should be no limit on the number of nominations for each canal, however COID wants as few as possible listed so that they can destroy the rest for profit. This purposely blurs the differences between the various segments, canals, geologic settings, and irrigation systems, and eliminates any distinct or unique sections from listing. There are 2 National Register listed resources in the irrigation systems of Oregon presently and they only are listed by name on Page H- 67 on Table #3. Shouldn’t they be described and located on a map if this is to apply to all of Oregon? COID only listed them at the direct request from the SACHP to “include them” previously. Listing the name without describing the characteristics or locations is ludicrous. Are there any National Register listed irrigation resources anywhere else in Oregon?

No comprehensive map showing all canals and laterals by name of the various irrigation systems in Oregon (not even good maps of the COID and Vale Irrigation systems) is included. Names of resources have been changed. Actual location names have been scrambled (the North Canal and the North Unit Canal are 2 different canals belonging to 2 different irrigation districts). What are they hiding? Application of the faulty 2014 MOA to all of Oregon will considerably impact much residential and commercial property as well as agricultural land throughout the state. Canals, laterals and sublaterals spiderweb the state. COID wants to hide what percentage of Oregon will be affected by this MPD. Yet actual irrigation companies own less than 20% of the land of the canals. If they “take” private property and use taxpayer funding for construction to generate profit for themselves, isn’t that using public funding for private profit which is illegal? Irrigation districts have developed a very lucrative cash cow which harms the history and citizens of Oregon. SHPO stated MOA’s can never be revoked (when specifically asked within a week of the 2014 MOA approval), but is SACHP allowed to review and eliminate parts of that document? Perhaps SACHP could require that this MPD apply only to COID and Vale, and be rewritten to adequately analyze the actual topic. You should not approve the “one size fits all” you have been given.

Pictures and terms used should actually clarify the written text. Irrigation specific words should be clearly defined. When talking about the types and subtypes of structures, it would be beneficial to have actual

photographs of each and every one, not just a written paragraph. Terms add to confusion without sufficient descriptions including size and amount of water flow each feature uses. Features are not identified by location or use (river, canal, lateral or sublittoral). The width and depth and slope of the canals vary greatly with the amount of water carried. An MPD on irrigation should include a discussion on volume of water. Irrigation districts have that information, but they have restricted access to it by the public. Obviously locations closer to the diversion point carry much more water than those at the terminus of the system, but even that basic fact has not been identified in this MPD. *Geology* impacted irrigation construction, and yet seems sadly missing in this document. Geologic maps and discussion should be included.

This MPD should *emphasize facts and truth and not give credence to incorrect terminology.* Rip Rap is not the same as “dry-stack”. Don’t downgrade a National Register listing with rip rap by saying that it is nothing more than “dry stack”. Nobody will call a canal a “ditch” unless they are just calling it a familiar loving name or are oblivious to real irrigation system jargon (a canal is the main trunk of the system and carries considerably more water than any “ditch” which is a branch off a lateral or a sub-lateral). Don’t identify a canal with a sandy bottom as basalt. Basalt is hardened lava flow and considerably different from sand. COID even submitted an incomplete sentence on page f-50 at the end of item #2.

Part of what makes these canal systems so special, memorable, and important in history is the flow of water through them during the irrigation season. When the MPD says that it doesn’t have to be in current use, and it is not required to retain its original use (“e.g. irrigation water does not need to still be running through the nominated portion” (on page f-36, item #4)) it is obviously written to permit destruction of resources only leaving sites. COID’s goal is to convince the reader that sites (where something was) and resources (the actual thing) are identical so that the actual resources can be destroyed. COID would rather place a plaque somewhere so they can hide actual water consumption in a pipe rather than show what the original irrigation systems that made Oregon were really like. Water belongs to the people of Oregon, and should be left in the canals listed on the National Register so that the true historic feeling will remain. Don’t let COID snooker you into allowing removal the water from historic resources, or the nomination of “dead” sites instead of living canals. COID and all irrigation districts should be required to permanently protect the water flow in the canals listed on the National Register. COID has sufficient other canals, laterals, and sublaterals so that leaving a mile or 2 in various locations will not adversely affect delivery of irrigation water—their true purpose for existing.

This MPD was specifically written to cover up facts that presented individually that would require a single nomination to be rejected. If this MPD is approved, then the state of Oregon will no longer be following National Register standards. For example, the Brasada Ranch nomination clearly represents the COID philosophy of “a site is as good as a resource” since the actual canal has been piped and then relocated (both within the last 50 years). COID intentionally tries to deceive you by calling the “pipe” a “conduit” and also applying the same vague word to a canal in other parts of the document. (Although a “conduit” could be an open canal, the use of the term was so you will assume it is open canal, when they intend to use industrial pipe as much as 9 feet in diameter). Additionally, the old wood stave trestle nominated in Brasada Ranch was totally removed but eventually replaced with newly designed wooden structure in about 2006. Brasada Ranch wanted to use the “new” trestle for a public golf cart path and as a marketing tool and included a large opening for moving vans and delivery trucks on the resort access road. Needless to say, even if the historic trestle remained in original location (which it didn’t for it was removed when it was abandoned), the prior

trestle would not pass engineering standards today for public access, especially with a huge hole in it. It was re-engineered and re-built. Only a few scraps of wood from the original trestle remain in a junk pile in an area which was not included in the Basada Ranch nomination and is over ¼ of a mile from the current trestle. Brasada Ranch wanted it to “look old” and did an excellent job, but it is not officially historic. In other words, the trestle is too new (10 years old) to be considered “contributing” for National Register. The MPD states that piped portions of the irrigation systems are less than 50 years old and were not identified or analyzed (page h-66) and yet then nominated a piped area in Brasada Ranch. And then they claim that it is sufficient to represent all the Central Oregon Canal system of hundreds of miles. Do you see the inconsistencies in COID’s claims? COID eliminated all piping from consideration in the MPD, but then uses the MPD to verify the validity of piping in the Brasada Ranch nomination? Huh?? Additionally the MPD incorrectly states that COID owns all the downtown Redmond segment when eight out of the thirteen of the nominated parcels between Kingwood and Quince (and yes, the street names are in alphabetical order) are privately held. This fact was “hidden” by claiming the area is “owned or managed by” (Downtown Redmond Nomination, page 3 in Summary Paragraph). Can a utility nominate land that doesn’t belong to them? The irrigation districts are not fee-simple owners, and therefore their support or opposition should not be considered in National Register listings. Where are the actual fee-simple landowners in this process?? Do they really understand the significance of the listing their property or did COID only give them a slanted version if they even talked with them? Both the Brasada Ranch and Downtown Redmond segments have insufficient water flow for hydropower, and so by nominating these segments COID hopes to “fill” the 2014 MOA and begin demolition on all the rest of the system. If you pass this MPD you have legitimized faulty descriptions and definitions, as well as authorized “taking” of private property. Downtown Redmond and Brasada Ranch nominations meet the self-serving yet deceptive MPD requirements since all three documents were prepared by the same individual. If these 2 individual nominations should not be forwarded to the National Register as presented today, you should be sure that the MPD wouldn’t allow their approval either.

Conclusion:

SACHP should reject this MPD because it is not ready for submission to the National Register. There are multiple errors which need correcting. Questionable wordings and destructive intent should be eliminated. Comments discussed in this letter should be rectified. This MPD should apply only to COID as stipulated in the 2014 MOA. It should never be expanded to all of Oregon. Perhaps the SACHP should consider whether the 2014 MOA is legal, but that is another topic beyond evaluation for February 16, 2017. This question is presently in court. Perhaps the court decision should be considered before approving this MPD. Do not approve this MPD to give justifications for COID’s previous illegal activities. Do not exonerate COID with such a faulty document. Your previous instructions to COID were ignored, and this nomination is still not acceptable. The SACHP should refuse this MPD and demand that it be rewritten and resubmitted.

Thank you,

Aleta Warren

a.warren.bend@gmail.com

Exhibit A---Conservation and hydropower revealed

COID publically claims piping is for conservation, but in reality it is only in order to generate profit for themselves. After hearing considerable testimony the Oregon Land Use Board of Appeals (LUBA) in 2014 decision stated that COID piped only for hydropower and profit, and must abide by existing land use rules and laws. Per the 2014 MOA any segments which were eligible for the National Register would be omitted from the destruction clauses. The Pilot Butte Canal Historic District (Cooley Rd to Yeoman Rd. segment) (PBCHD) was listed on the National Register in 2016 (the whole process had taken over 3 years due to repeated attempts to blockade the process by COID and other non-deeded interests). The PBCHD is not only eligible, but is now listed on the National Register and should be excluded from this faulty 2014 MOA. COID had no desire to abide by this restriction and has continued to push for political administrative permission to destroy the PBCHD.

Serious conservation should start within the COID system itself. There is no discussion concerning how the various headgates function in this document—for all water allocations are based on a pull here, or a twist there, and there is no accurate measurement of water delivered to each user. Some users are actually allowed to access and operate headgates themselves. Since COID has all the “grandfather” rights to water based on the “first claimed, first filled” basis they claimed was justified in the Carey Act, they control all water allocation including that between the various districts. Residential and commercial development within the COID region has decreased the demands for irrigation water but they still get 100% of their allocation even if other districts are unable to fill their customer agricultural obligations. The entire water distribution system in Oregon is broken and should be re-examined. None of this was mentioned in the MPD.

Since COID is taking more water for hydropower profit than they need, the excess is dumped in undeveloped land in Deschutes and Crook County (for example extra water is dumped via the “wasteway” described in the Brasada Ranch nomination on page 5). It is not returned to the rivers for the fish and wildlife nor used to benefit the farmers or ranchers. Since the 2014 MOA gave COID no restrictions or requirements concerning the National Register nominated segments, they have chosen sections with insufficient water flow for hydropower profit rather than look for historical segments to nominate for the National Register. (If they were interested in history preservation they could have recommended the PBCHD as their “saved” segment). Hydropower and profits are more important than history or farmers to COID. COID has the lowest efficiency rate between Central Oregon irrigation districts since there is no need for them to improve their numbers. They get media support when they cite unsubstantiated amounts of leakage, even if it isn't true.

Hydropower is the opposite of conservation. More water produces more power and more income. The 2013 USGS report advised the irrigation companies of central Oregon to stop piping and sealing the canals, for it is adversely affecting the water table. Wells have run dry. The fish and wildlife are suffering as irrigation districts drain the rivers under the old “first in time, first in rights” method. The agreement with Oregon Fish and Wildlife Department (OFWD) to ramp up and ramp down the taking water from the Deschutes for the protection of the fish and wildlife has been ignored. The original agreement was for water to be drawn at 1/3 of the allocated amount for 3 weeks, increased to 2/3 amount for 3 weeks, 3 months at full allotment, then 3 weeks at 2/3 and end with 3 weeks at 1/3 of the flow. Irrigation season started April 15, and terminated

October 15. Now the water is taken from March 15 to November 10 at the maximum amount throughout that extended time—no ramp up or ramp down. Thousands of fish die as the water in the Deschutes is suddenly diverted in 24 hours. Water flows had previously been listed on the internet for all canals and rivers in Oregon, but now the irrigation districts have ended transparency and all flow information on canals has been removed. Residents adjacent to the canals know there is more water flowing now than previously because of the lack of public scrutiny. The Deschutes was to have at least 200 cubic feet a second of water all year long, but now it often runs with as little as 100 CFS when the irrigation season is open.

Destruction and demolition of historic resources and the remaining canal systems for hydropower and private profit should not be encouraged or allowed. These canals were built by hand with horse drawn carts. *Once canals are demolished they can never be rebuilt.* SACHP should be preserving history. Do not allow political and public relations pressure to destroy history. Our water allocation system in Oregon is badly broken. But this MPD will not solve anything, but rather contribute to the problems. It should not be approved.

Watering The Land Tuesday

McMENAMINS OLD ST. FRANCIS SCHOOL
HISTORY PUB NIGHT

WATERING THE DESCHUTES COUNTRY: A HISTORY OF THE PILOT BUTTE CANAL

TUESDAY, AUGUST 30, 2016

7 p.m. • Doors at 5:30 p.m. • Free • All ages welcome

Presented by historic preservation planner

PAT KLIEWER

*Sponsored by Oregon Encyclopedia,
Deschutes Historical Museum & Oregon Historical Society*

700 N.W. Bond St. • Bend • (541) 382-5174

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THE OREGON
HISTORICAL
SOCIETY
FOUNDED 1894



McMenamins History



WATERING THE DESCHUTES COUNTRY

A HISTORY OF THE PILOT BUTTE CANAL

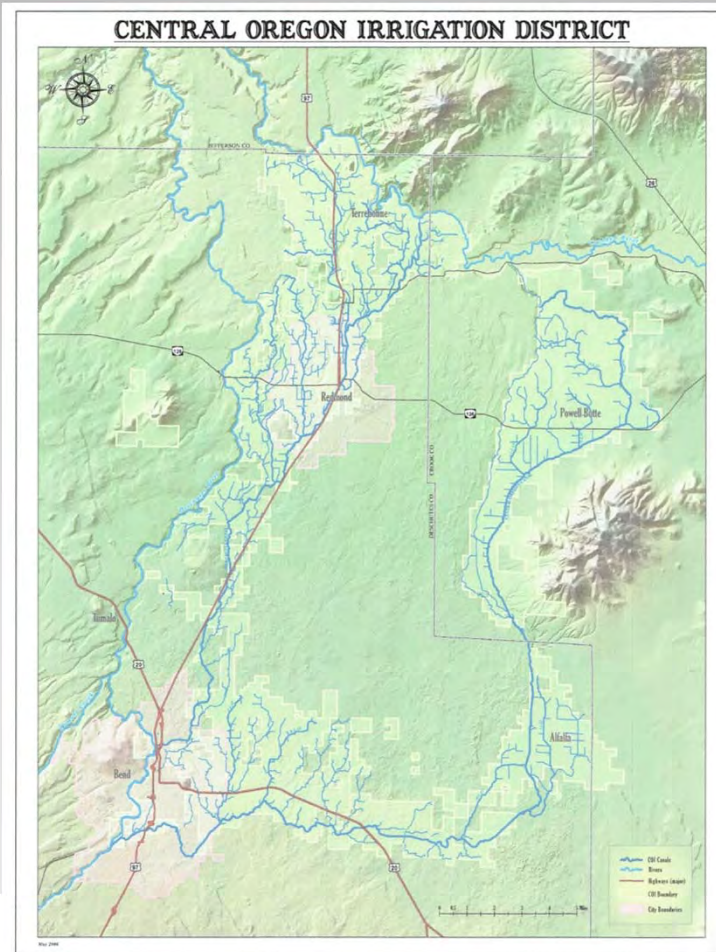
- Generate power and income at Juniper Ridge power plant.
- Water Terrebonne Cemetery
- Water Redmond Cemetery
- Water Redmond Schools and a golf course
- Water landscaping at mobile home parks
- Water residential yards in urban areas.
- Water residential landscaping and lawns in rural areas.
- Provide pasture and water for horses, cattle, llamas, alpacas, and other farm animals.

How is the water used?

Crops:

Hay
Grasses
Potatoes
Lavender
Peppermint
Horticulture plants
Pumpkins
Vegetables

The average parcel is about six acres in size.



The Pilot Butte Canal is 22 miles long. Water is diverted at the North Dam in downtown Bend and flows to the Crooked River at Smith Rock. It passes through Bend, Deschutes Junction and Redmond.



The 1912 North Dam replaced the 1904 diversion point and wooden flumes south of Bend that were shared with the Central Oregon Canal. Water diverted from the Deschutes River south of Bend for the Central Oregon Canal, Arnold Canal, the Pilot Butte Canal and the Arnold Canal resulted in a trickle of water flowing through the city of Bend during irrigation season. A power plant and a flour mill in Bend needed water flow. The new dam helped that situation somewhat.

- The Bend City Council pressed the for-profit Deschutes Irrigation and Power Company (1904-1910) and its successor, the Central Oregon Irrigation Company (formed in 1910), to create a new diversion point for the Pilot Butte Canal north of town.
- The North Dam was completed in 1912. It is mostly 15 feet wide and 9 feet deep. The North Canal is 1.4 miles long. Now, 2,204 feet are piped
- Water is diverted from the Deschutes River to the Swalley Canal, the North Canal and to the North Unit Canal on the east side of the dam.
- The North Canal was designed to be concrete lined in 1912, but it was hastily lined with stacked native rock, instead.
- The North Canal was originally used in 1913 and was nearly destroyed by the fast water flow and poor construction that did not follow the plans. The North Canal was rebuilt in 1915.



Water diverted from the Deschutes River flows east under Division Street near the Riverhouse convention Center.



Water enters a pipe at elevation 3,561. It is piped under the Bend Parkway and resurfaces at the railroad tracks. The system drops 631 feet from Bend to Smith Rock State Park.

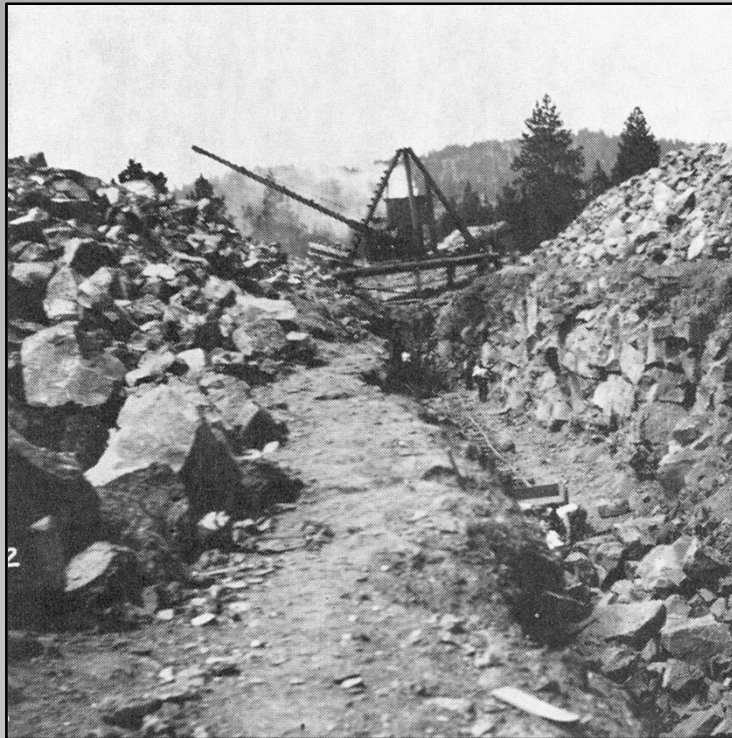


The water flows in the narrow, straight and U-shaped 1912/1913 North Canal along Jeld–Wen Windows and Doors building. Between the Burlington Northern Railroad tracks to the Boyd Acres Road, the elevation drops 1 foot in 1,613 feet.



The North Canal has many alterations.

**Photos from Bowman
Museum Collection**



Horse pulled cart



**Construction of the North Canal in 1912 between North Dam
and the Pilot Butte Canal.**



The North Unit Canal and the North Canal are side by side near Jeld-Wen Windows and Doors. Pedestrian bridges cross them both. The North Unit Canal is lined with mortar.



The North Canal flows east of Boyd Acres Road to Pattie's Drop. The regular trapezoidal-shaped North Unit Canal parallels it on the south side.



Pattie's Drop on the North Canal, named for Ellen and Archie Pattie who owned 260 acres in the area.



The North Unit Canal is on the south side. The North Canal is on the north side. It is mortared at Pattie's Drop.



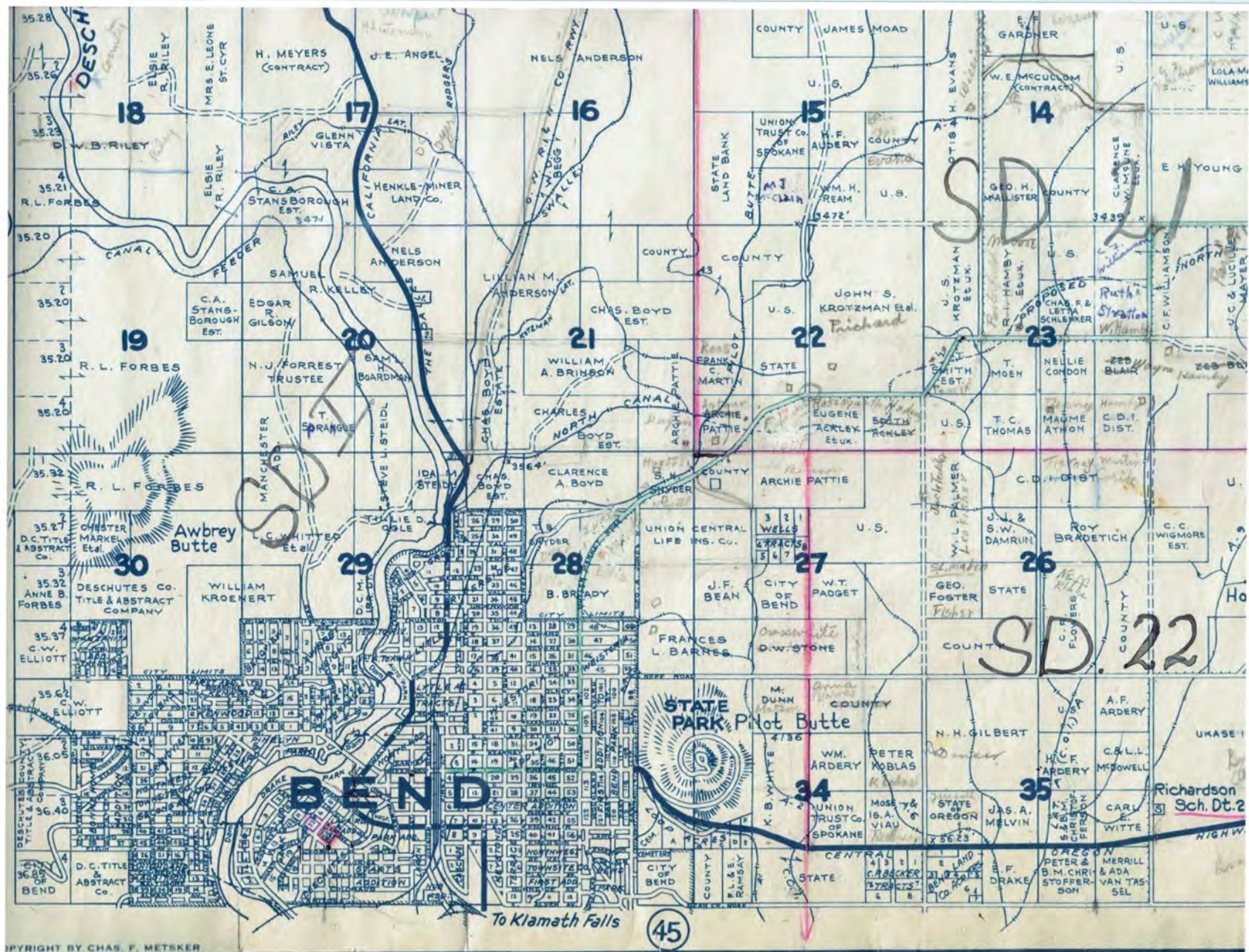
Between Boyd Acres Road and Brinson Blvd, the water drops 47 feet in 4,017 feet. The canal becomes an irregular width and depth. Rip rap is irregular. Houses, an industrial park and apartments line it.



A wider, shallower North Canal just before it meets the Pilot Butte Canal at Brinson Blvd.



1912 North Canal joins the 1904 Pilot Butte Canal at Brinson Blvd.



IRRIGATION SEASON: The irrigation season can begin in April and end in October. The length of the season and the amount of water delivered will depend on weather conditions and snow pack in the mountains. Also, Oregon law provides for the following deliveries of water:

April: About 1/3 of summer irrigation flows.

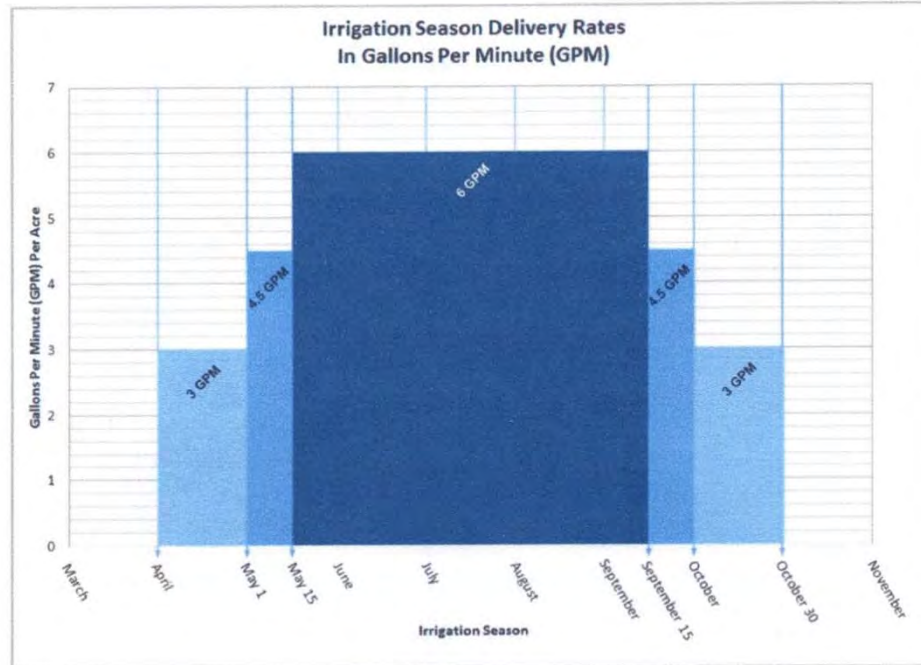
May 1-15: About 2/3 of summer irrigation flows.

May 16-September 15: Summer irrigation flows.

September 16-30: About 2/3 of summer irrigation flows.

October: About 1/3 of summer irrigation flows.

Irrigation season, April to October



Seasonal Flow Rates

This chart shows delivery flow rates throughout the season but does not reflect actual start and stop dates for the irrigation season.

The Board of Directors determines the irrigation season start and stop dates depending on weather and other conditions.

Irrigation Season Delivery Rates in Gallons Per Minute, COID.



March 1, 2015, water flows into the canal for a stock run. From Brinson Blvd. to Yeoman Road, the rocky Pilot Butte Canal drops 41 feet in elevation.



The Pilot Butte Canal is very irregular in width and depth for the next 2.5 miles. Some areas have basalt flows in the bed.



The 1904 Pilot Butte Canal at Brinson Blvd. Bridge. No abutments, two cuts on sides, rocky bed, scattered riprap, silt.



Looking south toward Pilot Butte. Houses on left. Loose rock in bed of undulating Pilot Butte Canal. Crude construction.



Between Brinson Blvd and Empire, rock and rock flows.



The wide and shallow canal just south of the Empire Ave. Bridge. Urban density single family housing stretches the entire length to Brinson Blvd. on the east side, while the East Empire Business Park stretches on the west side of the canal.



Urban industrial park and housing developments, a low head check, the A-4 Lateral Gate, suspended pipe, and concrete canal bed under bridge at Empire Avenue Bridge. The lateral is piped underground to the Old Deschutes Road where it flows above ground and heads northeast.



The A-4 Lateral comes out of pipe at gate at Old Deschutes Road near Ponderosa Elementary School, and heads northeast.



A-4 Lateral in T17S, R 12 E, Section 15.



Between Empire Ave. and Yeoman Road, the canal ranges from 32 to 40 feet wide and 2 to 5 feet deep. It flows between urban housing developments on both sides. Like the previous neighborhoods, some landscaping and rock walls encroach into the sides of the canal.



New retaining walls run into sides of canal.



As the canal gets closer to Yeoman Road, urban housing developments and personal fences are on both sides. People use the gravel pedestrian trail the east side



Yeoman Road Pedestrian Bridge

- The following color photos show the new historic district.
- The Historic District is 1.4 miles long.
- A small section on the west side is in single family residential subdivisions within the City of Bend. The remaining portions of the Historic District is in rural Deschutes County.
- Private property lines extend under the canal or end at the canal's centerline.
- The Historic District is entirely on private property and had 100% support of the owners.

Pilot Butte Canal Historic District



Entering the Historic District, looking north from the southern Section Line of Township 17 South, Range 12 East, Section 15, at the northern edge of Yeoman Road.



The water flows and roils for the next 1.4 miles in the wild canal bed in the new historic district. It has the highest rating on the seven aspects of integrity. It drops 35 feet in elevation. The width varies from 20 to 81 feet and the depth from 3 to 10 feet.



**Southern edge of the Pilot Butte Canal Historic District.
Listed on the National Register of Historic Places 2016**



**7,435 feet long historic district, 100 feet wide,
Yeoman Rd. to Cooley Rd.,
West of Overtree Road, East of 18th St. and Brightwater Dr.**

- **National Register of Historic Places Criteria**

- Is it more than 50 years old?
- Is it associated with events that have made a significant contribution to the broad patterns of our history? Local, regional, statewide or national events.
- Is it associated with the lives of persons significant in our past?
- Does the property embody the distinctive characteristics of a type, period or method of construction, design, engineering, work of a master?

The Canal in the Historic District-

- It retains the integrity of its design as a gravity-flow irrigation system.
- It retains its crude construction materials and techniques.
- It preserves the evidence of being constructed by laborers, steam drills, blasting, hand tools and horse teams.
- It retains its association with investors, land surveyors, engineers, field crews, settlers, homesteaders.
- It has few and unobtrusive alterations.
- It has not been moved, piped, or lined with concrete or mortar.
- It retains its interpretive value.
- It retains its connection to irrigated agriculture.
- It retains its rural setting with irrigation ponds and rural uses.

The Pilot Butte Canal HD was nominated for significant local events, exploration, settlement and agricultural development.

- The historic district runs across 20 residential tax lots in the city of Bend and 40 SR 2.5 acre zoned tax lots in the County.
- 101 individuals own the property in the historic district and every one of them, including those from Eugene, OR; Vancouver, WA; New Jersey and elsewhere, pro-actively signed a petition supporting the official designation as a historic resource. Not one objected to listing on the NRHP.
- The National Register of Historic Places Historic District covers a 50 to 100 feet wide portion of each tax lot and nothing else.

The narrow strip of land over the 60 tax lots in the linear historic district adds up to 17.01 acres.



On October 29, 2014, from south to north in the historic district, a team measured the depth and width and took photos of the canal bed every 180 feet. Toes were measured and side slopes were calculated.









Note carefully sloped riprapped sides of the canal. The west side is a cut while the right side was formed with an embankment. The lava flows form an impenetrable bed with standing water all winter.













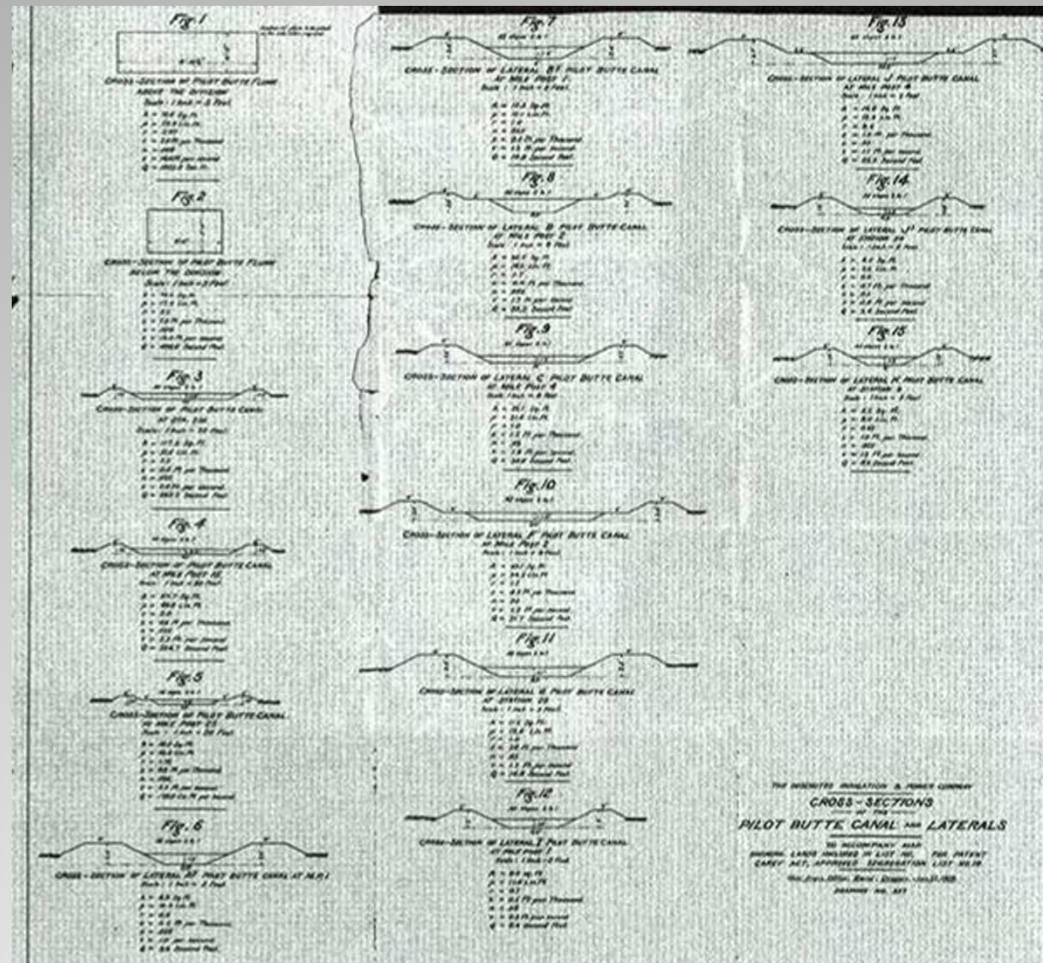
Let's Build a Canal, 1904 Style

- 1. Be a visionary with experience building towns and railroads and have exceptional financial and political connections for your for-profit venture. Hutchinson 1898 and Drake 1900.
- 2. Incorporate a company with your wife and wagon team driver, and call it the Pilot Butte Development Company, after the butte you stood on and saw the possibilities spread out below, use your finesse with the governor and elbow out the competition.
- 3. Place help-wanted ads in the Madras, Prineville and Oregonian Newspapers and hire several engineers with railroad and irrigation system experience to examine the land and to determine how and where to build the canal. Have them design the diversion structure, the main canal, flumes, laterals, ditches, and wooden pipes.

4. Post notices on the river and file for water rights in 1900.
5. Sign a ten-year contract with the state to reclaim the land in Federal Segregation list Number 6, consisting of 84,707.74 acres under the Federal Carey Act (1902).
6. Ask your engineers to design a sawmill, plat a town called Bend at the south end of the system, plat a town called Redmond at the north end of the system, design company offices and other buildings, design Bend's first domestic water system using river water, and design a power dam across the river to power the city.
7. Have your wagon driver drive you through sagebrush to Shaniko (82 miles) to catch the train to travel east again and again. Seek out your friends who are also visionaries and doers, capitalists, financiers, town builders, successful men who own banks and dine with politicians, build railroads and know all about rock and drill for oil and gas. Raise \$850,000 in capital to start.

You are not done, yet.

- 8. Partner with the railroads to have a huge national advertising campaign to attract visitors and entice settlers to buy into your vision of the future cities. Sell fertile, productive land in the last frontier with unlimited possibilities at a profit. They will also buy irrigation rights and pay annual fees for the delivery of irrigation water. On the side, use your connections to plan a railroad to get them here and bring in supplies and send out vast quantities of lumber and livestock.
- 9. Give the Oregon Land Board specific goals and a timeline for your project.
- 10. Draw construction drawings for the various widths of a one-to-four-foot deep trapezoidal shaped canal bed and work with state engineer to get necessary approvals.
- 11. Hire survey crews to mark the canal's route (locate the canal) so that the water will flow entirely by gravity.
- 12. Spend months in Portland and Salem with legislators and the governor and get contracts with Oregon State for your project.



Levi Wiest's plans for the Pilot Butte Canal in State Archives

• Now, Let's Build the Canal

- 1. Buy thousands of acres of timberland, design and build the sawmill. Get equipment from Midwest for sawmill by railroad and horse drawn freighters from Shaniko. Hire lumbermen to cut the timber and millworkers to produce the lumber for flumes and structures. Rebuild the mill when it burns in Jan. 1904.
- 2. Buy the latest canal building tools, rock cutters, Fresno Scrapers and 2 custom made drills; one is 20HP and the other is 6 HP, powered by steam boilers.
- 3. When land thaws out in the spring, advertise and hire more than 450 men, accountants and managers: the equipment and camp supply procurement team, carpenters, time keepers, cooks, laborers, blasters, operators of steam powered drills and supervisors. Pay laborers \$2.00 per day.
- 4. Advertise to pay up to \$2.50 a day for 215 men with horse teams.

- 5. Clear the route of trees, shrubs and vegetation.
- 6. Have cowboys round up 100 wild horses and have them broken for harness. Advertise over and over again for horse teams.
- 7. Advertise again and again for laborers and increase daily pay.
- 8. With Fresno scrapers on runners drawn by two to four horses, pull loads of dirt and rock and systematically smooth the bed or remove spoils. Loosen rock and soil with hand shovels.
- Canal building north of Deschutes Junction goes quickly. The project gets hung up in the rock of the historic district.
- 9. Advertise to pay up to \$2.50 a day for 215 men with horse teams.



Shovel Crew

10. Use hand and steam powered drills to make holes for blasting. Blast rock and remove "spoils" to form embankments. Where the canal must be shallow due to solid rock flows, make canal wider.

11. Where there will not be any embankments, laboriously load and move spoils out of the area with horse teams pulling wagons. (71,000 cubic yards were removed in the Historic District with 215 horse teams.) Each cubic yard weighed 3,000 pounds.

12. Layer rock and soil to form an embankment in six-inch layers called "lifts". Compact each layer with horses and scrapers. Some miles will have embankments along both sides.

13. Hand place large broken rock as riprap on sides of canal as needed to prevent erosion.

14. Test system with water. Fill fissures with rock and concrete.

- Open sales offices in Portland, Prineville and Bend.
- Buy ads across the nation. Use influence to get front page news articles to drum up interest.
- Provide transportation to and from hotels in Shaniko and Prineville.
- Offer 40 acres for an average price of \$590, ranging from \$2.50 to \$14.75 per acre, depending on the rock outcroppings and amount of irrigable acres.

Make a Profit for the Investors

Use the latest town planning ideas.

Help churches locate to the towns.

Make your town presentable to the ladies.

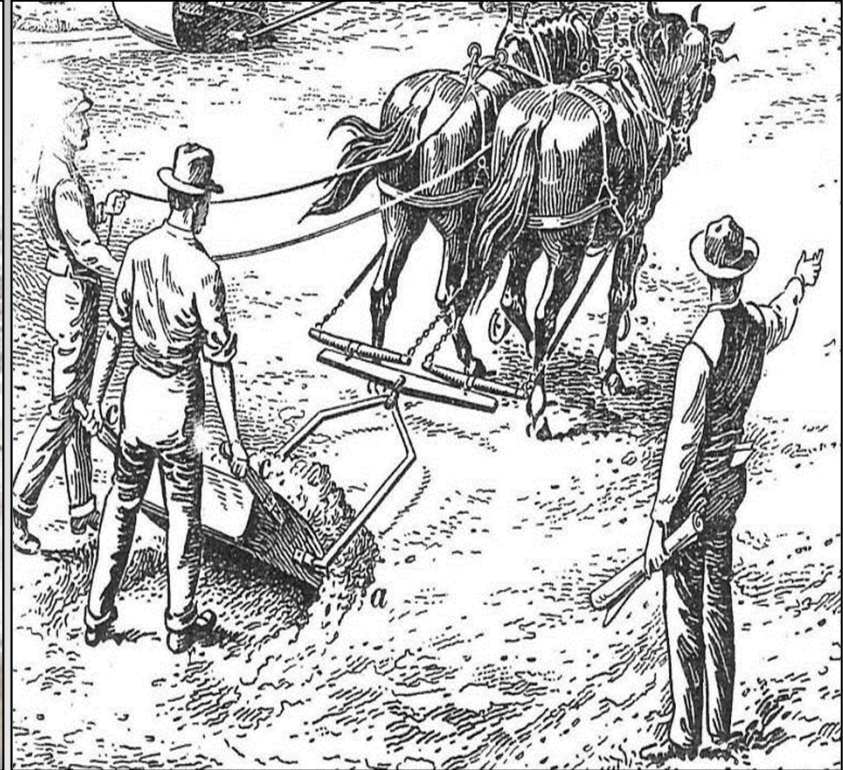
Give land for schools and parks.

Sell commercial and residential lots inexpensively.

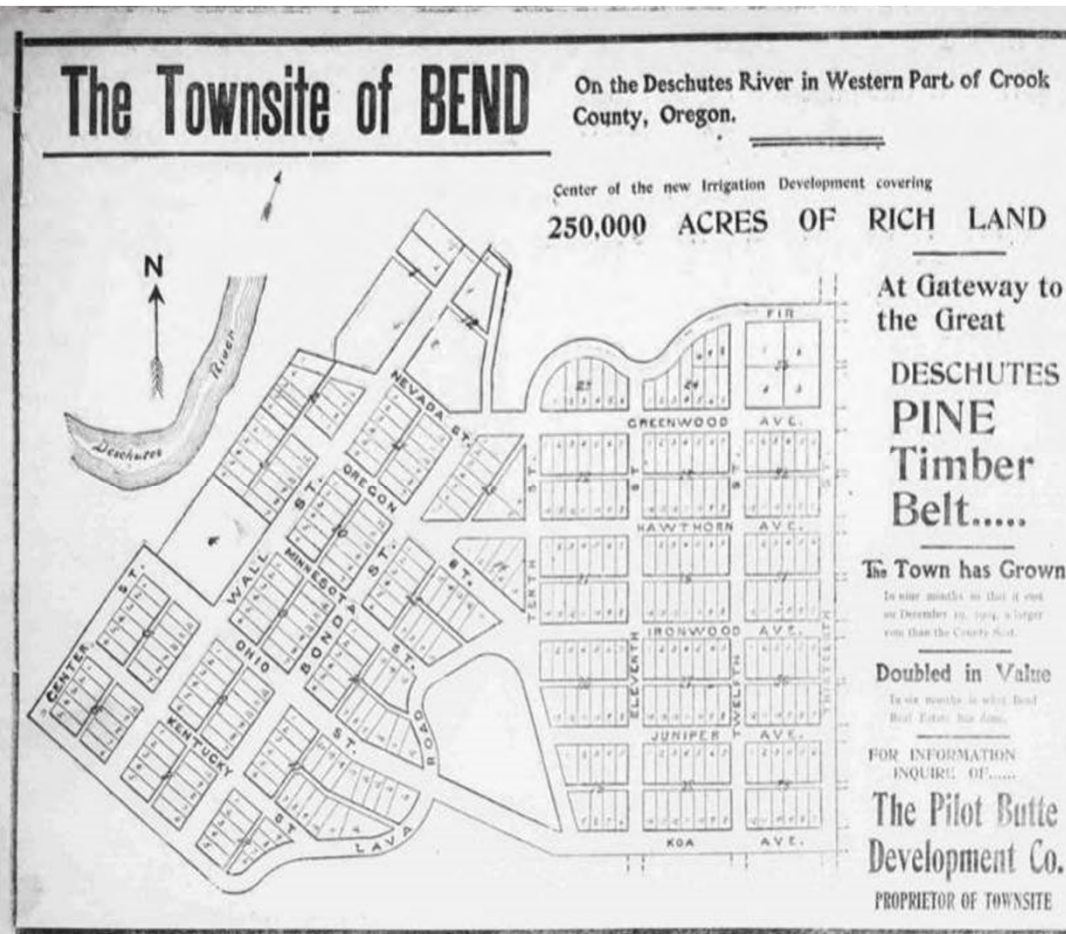
Get the railroad!



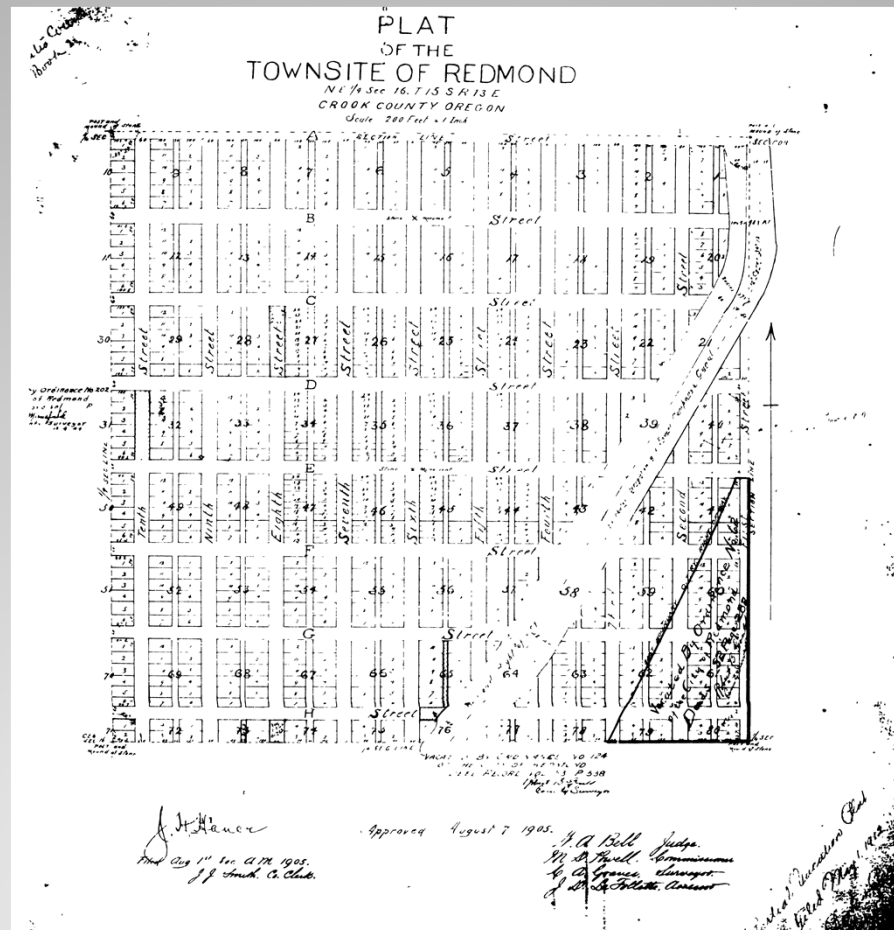
Alexander Drake and LD Wiest Family



Fresno Scraper



The May 28, 1904 Plat of the Townsite of Bend, surveyed and drawn by Levi Wiest, civil engineer of Bend.



The August 1, 1905 Plat of Townsite of Redmond, surveyed and drawn by D. F. Glover, Civil Engineer of Eugene, Oregon













A hole drilled for explosives from 1904 in the canal.











The canal in the middle of the Historic District passes beside Houston Pond, the original homesteader's irrigation pond. There are 11 irrigation ponds along the canal in the Historic District, some of which irrigate pasture for a variety of livestock, which adds to the historic district's integrity and its interpretive value.

SEGMENT 4, HISTORIC DISTRICT

This is a sample of the record the team made every 180 feet for a mile and half.

Description of Characteristics of Segment 4 in the Historic District:

Rough irregular canal bed makes turns to east and north.

Sudden drops in elevation. Boulders and lava flows in canal bed.

Ditch rider road ceases due to rough terrain.

Ponderosa pine trees, mature native vegetation, rock outcroppings into banks.

Latitude and Longitude at Southern Edge of Segment 4:

North Decimal: 44.102583

West Decimal: 121.268639

Length of Segment: 1330'

Elevation at southern end: 3425'

Drop in elevation this segment: 10'

Terrain: sudden drops, many turns, undulating terrain

Presence of Standing Water: No

Average Width of Canal: 51.21' wide

Range of Canal Widths: 39' to 60.5'

Average Depth of Canal: 5.56' deep

Range of Canal Depths: 4.2' to 7.25' deep

Width of Ditch Rider Road: 10', partial at south end

Range of Widths of East Embankment: none

Range of Widths of West Embankment: none

Range of widths of west toe: 1.5' to 14' wide

Range of depths of west toe: 2.5' to 5.25' deep

Range of Widths of east toe: 1' to 16' wide

Range of Depths at east toe: 2.5' to 5.25' feet deep

Structures: Water distribution slide gate, metal agricultural gate at end of ditch rider road.

Alterations: none















Hydrologist Jeff Perreault measures a recently-constructed concrete flow measuring weir in the historic district. It is non-contributing.



The northern boundary of the
Historic District.



Just north of the Historic District is the intake to the Juniper Ridge Hydroelectric Project 9-foot diameter pipe.



1904 waterfall and public picnic area near Cooley Rd.
This waterfall on the canal was replaced by the intake to the
Juniper Ridge Hydroelectric Project in 2009.



The canal is in a 9-foot diameter buried pipe for 2.6 miles across Juniper Ridge and other public lands. It drops 129 feet in elevation.



Juniper Ridge Hydroelectric Plant



Flow Measuring Weir at Deschutes Junction



Looking north to Farm Funny The at Deschutes Junction. For 2.23 miles the canal passes rural industrial and commercial land and is piped under Hwy. 97. It drops 62 feet in elevation.



The canal passes through 5.8 miles of irrigated farms between Deschutes Junction and Redmond, dropping 146 feet in elevation. The Swalley Canal is close by, between the Deschutes River and the Pilot Butte Canal. Looking west toward Cline Butte.



Looking northeast near Quarry Ave. in the agricultural area south of Redmond. Hay is the #1 crop on small acreages averaging 6 acres in size.



Swalley Irrigation District Hydropower Plant on Hwy 97 near Deschutes Junction and canal crossing Tumalo Road. Oct. 24, 2015. The hydroelectric plants need a steady full flow of water during the irrigation season to run profitably. The other canals are dry on this date.



The Pilot Butte Canal enters Redmond for 6 miles and irrigates a golf course, a cemetery, school yards and other urban properties.





The Pilot Butte Canal in Redmond. At Yew Avenue, it nearly touches the Comfort Suites, Redmond Airport.



On the left is the waterfall at the Comfort Suites at Yew/S. Hwy. 97 that is planned to power a hydropower plant and a piped section near Odem Medo Rd./S. Hwy 97.



Pipe along S. Hwy 97 for 1,100 feet resurfaces at Odem Medo Road, Redmond.



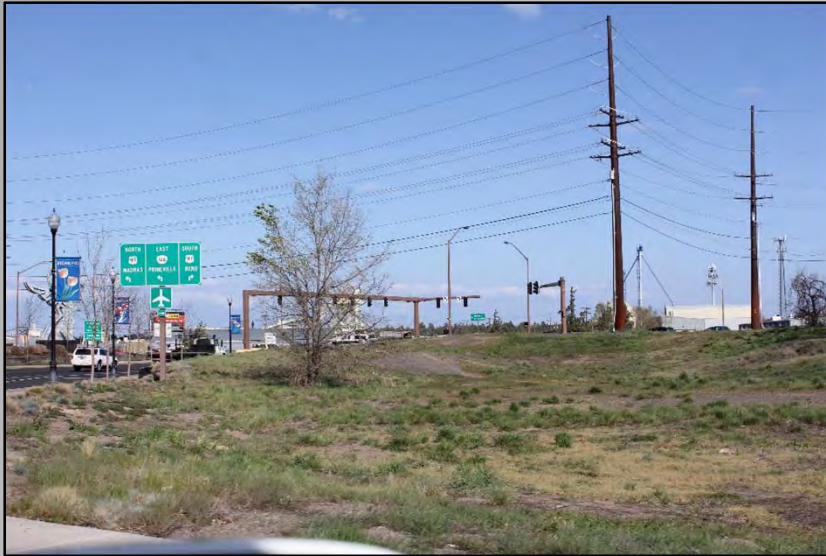
The canal along SW Canal Blvd., Redmond, near Safeway



The canal enters a pipe for 6,000 feet near Lowes Home Improvement store near Veteran's Way, Redmond.



The Pilot Butte Canal is in a pipe in most of Redmond.



The canal is underground in a pipe then resurfaces near St. Charles, Redmond Hospital on North Canal Blvd.



The canal is straight, shallow and narrow at the north end of Redmond near Home Depot. The canal is sandwiched between North Canal Blvd. and Hwy 97 and has dropped 169 feet in six miles in town. This is the nominated segment proposed for listing on the NRHP by COID. It lacks distinction, interpretive value and integrity.



Water puddles in front of a pipe that will take it under the new overpass at the north end of Redmond.



The Pilot Butte Canal comes out of small pipe on the east side of the new Redmond Bypass. The Redmond Home Depot is in the background.



The narrow, shallow canal has few rocks as it heads east of Redmond. Here, a flow measuring device is in the earthen bed. This was the fastest and easiest section to construct.



The open canal runs for 4.9 miles from Redmond to just south of Smith Rock State Park. The elevation drops 53 feet in a smooth, shallow canal bed, mostly lined with grasses.



End of the Pilot Butte Canal near Smith Rock State Park



At its end, the Pilot Butte Canal parallels the North Unit Canal again.



Smith Rock State park is in the background. North Unit Canal is on the right. The Pilot Butte Canal is 6 inches deep on left.



Unused tail water flows through the metal gate and then into a culvert.



Tailwater pours into the culvert which empties into the North Unit Canal. Some Pilot Butte Canal tailwater crosses over the North Unit Canal into Lone Pine Canal.



North Unit Canal passes on the left , flows across the Crooked River to Jefferson County. The canal on right drops into the Crooked River.



Jefferson County is on left of the Crooked River that flows west. North Unit Canal crosses river. Power lines. Irrigation water flows into a pipe that drops down to the power plant to power the generator and then is discharged into the Crooked River.

<u>Year</u>	<u>Population</u>	<u>Sources</u>
1900	21	Bend Precinct, Crook County, U.S. Census.
1903	250	Bend townsite, Sisemore, Deschutes and Lytle.
1904	^[1] 400-500	Estimate made in 1917.
1910	536	Bend, Crook County, U.S. Census.
1912	1,300	Bend Bulletin estimate.
1916	3,205	Count made by high school principal and students.
1917	5,193	Figure filed with City Recorder.
1920	5,415	Bend, Deschutes County, U.S. Census.

Results

In an April, 23, 1921, letter to Fred Henshaw of the Federal Power Commission Board of Engineers, from J.G. McGuffie, Secretary and Counsel for the Central Oregon Irrigation Company, a successor of the D. I. & P. Co., McGuffie observed "the thrifty town of Redmond with its banks and mercantile establishments is *wholly dependent upon the agricultural community surrounding it, which is the result of irrigation*" [emphasis added]

SUMMARY of the Pilot Butte Canal's Key Dates

1898, Charles C. Hutchinson forms Oregon Irrigation Company and hires engineers and surveyors to build a mighty canal.

1899, Hutchinson writes to Drake in Spokane, WA to interest him in investing. Drake visits Bend and is offered half the company and the position of president and manager, if he supplies needed capital. Drake agreed and paid for surveys. Two months later, he elbowed Hutchinson out. A competition began between them.

June 1900, the Drakes move to Farewell Bend by covered wagon and build a hunting lodge at Drake Park. William H. Staats sells the future Bend townsite for \$4,000 to Drake. His father, Elias Drake, built railroads in Ohio, Indiana and Minnesota, and was a banker. He founded St. James and Worthington, MN. He served in the Ohio House of Representatives and the Minnesota Senate.

Oct. 1900-1907, civil engineer Levi Wiest works for Drake in many capacities and other engineers and survey crews are hired.

Oct. 29, 1900, The Pilot Butte Development Co. was incorporated by Alexander McClurg Drake, his wife Florence and their driver and cook Charles J. Cottor. It was a commercial enterprise. (The DRIC or Swalley Canal was developed as a cooperative enterprise with a low budget and settlers doing much of the work themselves.)

February 28, 1901, Oregon implements the Carey Act. It becomes State policy that Oregon's arid land should be reclaimed and settled.

Drake clearly understood the opportunities before him, including irrigation development, settlement of cities, encouraging his family's railroad partners and associates to extend a railroad to the area and the buying, selling and development of land for business and agricultural purposes. (NRHP Page 38)

May 31, 1902, PBD Co contracts with State to reclaim Segregation List # 6, 84,707.74 acres, ten percent a year for ten years.

Oct. 31, 1902, Drake files for water rights.

- Feb. 1903. Headgate at Deschutes River are constructed. It was located 3 miles upstream from new townsite. It would be found to leak badly and be undersized. Six men clear 25' wide path for first 1.25 miles over rock for flume. Flume was to bring water to camp. Mill 700,000 board feet of lumber for flume and 25' tall trestles in river canyon. Drake is behind schedule to complete 10% a year.
- Feb. 1904, 1.5 miles of flume completed on trestles 8" apart.
- Feb. 1904. Deschutes Irrigation and Power Company is incorporated and buys out PBDC for \$70,000 and Charles Hutchinson's Oregon Irrigation Company for \$35,000. Capital is \$2,500,000. New York RR man W. E. Guerin Sr., builder of the Palmer Cutoff, W. E. Guerin Jr, J. O. Johnson who was general manager of Columbus Gas, Light and Heating Co., and H. D. Turney of Ohio are involved. Harvey Scott, editor of the Oregonian and J. Frank Watson, president of Merchant's Bank were investors from Portland. George Sinks, president of Dasher National Bank, and others from Oregon, Alabama, and Ohio finance and manage project. Hutchinson is on the board.

- April 1, 1904. DI & P Co. takes charge of all irrigation work. Joseph Kelley become chief engineer over a group of engineers, including Wiest. 3 men employed to break 78 wild horses. Bridges are built to bring in supplies, including the one at Deschutes Market Road. The company built an office, a club house, stables, a blacksmith shop, a granary, a warehouse, a powder house, a cook house, a mess hall, barns, an experimental farm and a manager's residence. Sewer system begun.
- Building the Pilot Butte Canal as a commercial enterprise under the Carey Act brought significant private capital and experience in town building, and in infrastructure and irrigation development to the high desert.
- It took higher wages and an extraordinary amount of expertise in the use of technology and man and horse-power to complete the listed stretch of the canal. Meeting the deadlines, unique characteristics were carved into the canal in the tough terrain, leaving it like a natural river channel.

- 1904 Plans are for a second canal (the Central Oregon Canal) to share the diversion and headgate, but irrigate Powell Butte and Alfalfa to the east.
- June 3, 1904, water flows to Wiest's house, east of Bend. Four camps of men working at once. North end of canal is complete.
- Oct 1904. New intake and major changes to flume to allow three times more water to be diverted. The historic district rock was holding up the canal. Work is focused on area in the historic district.
- Dec 19, 1904. Election is held to incorporate Bend as a City.
- Jan 10, 1905. First city council meeting held at PBD Co offices.
- Feb. 10. 1905. Work on nominated stretch is completed and water flows to end of system.
- March 5, 1905 water is let into the canal for the first time. At a total cost of \$500,000 or around 12 million dollars in today's money.

1910. D I & P Co reorganized as the Central Oregon Company.

1911. The Drakes retire to Pasadena, California and sell all real estate and business holdings.

October 1911. Oregon Trunk Railroad arrives in Redmond and Bend.

1912. North Dam and North Canal built.

1913. 25,000 acres are served by the Pilot Butte Canal, with 16,800 acres in crop.

1915. Proposal of settlers to form a not-for-profit district to manage and operate the Pilot Butte and Central Oregon Canals.

July 9, 1921 Dietrich Decree (Dietrich vs. COIC) turns over ownership to settlers.

THANK YOU

- My sincere thanks to:
- The late Bruce White for initiating the idea of the historic district and for his encouragement when things got tough,
- Michael Hall for co-authoring the nomination for hours and hours,
- Don Kliever for civil engineering expertise, and who thought this project would never get done,
- Jeff Perreault for hydrology expertise and canal research,
- Vanessa Ivey of the Des Chutes Historical Center and Rob Rector for research and historic photos.
- Leslie Pugmire Hole, editor of the Spokesman (now editor of the West Linn Tidings) and historian for research,
- Steve Lent at the Bowman Museum for research,
- Architect Tim Casey and journalist Gene Storm for a day outdoors performing the survey,
- My client Aleta Warren, who was the reason this project was completed.

WEIDcomment



West Extension Irrigation District

P. O. Box 100; Irrigon, OR 97844-0100
541-922-3814 (ph) 541-922-9775 (fax)
bbridge@oregontrail.net

February 15, 2017

Oregon Parks and Recreation Dept.
State Historical Preservation Office
725 Summer St. NE, Ste C
Salem, OR 97301-1266

Subj: Proposed Listing "Federal Irrigation Projects of Oregon, 1901-1978"

The West Extension Irrigation District (District) is a federally owned project located in northeastern Oregon. We are part of the Umatilla Project authorized in 1905. The District operates and manages the facilities owned by the Bureau of Reclamation (BOR) under a 1926 contract. Our project features the Three Mile Falls Diversion Dam located on the Umatilla River and the 27-mile long West Extension Main Canal. Over 140 individual turnouts from the main canal are used for on-farm delivery. These consist of open concrete-lined ditches, pipelines and pump stations that are controlled at the main canal for the purpose of carrying water to the landowners and irrigators.

Recently, during a fairly standard procedure (at least in the past) of conducting and submitting a Cultural Resource Inventory for a lateral turnout piping project that we are doing in Boardman, Oregon, we became aware of the your office's review of the Multiple Property Documentation for list of federal irrigation projects of Oregon (the MPD).

I have reviewed that document and have following questions and comments.

- 1) I have to ask how a non-federal irrigation district, Central Oregon Irrigation District (COID), was tasked with creating a document that would be used to nominate federal irrigation districts to the National Register of Historic Places? As stated above, the COID is a non-federal district. Their history and evolution are not the same as a federal district. Nor are the interests of the patrons equally matched with those in a federally-owned irrigation district. The biggest difference is the ownership of the assets.
- 2) Even if this were an appropriate procedure, why were other federal districts not involved with this process? Contributions from those parties would seem to have yielded a more applicable document.
- 3) The District agrees with the BOR letter of February 14 and their comments on the MPD. This includes postponing the approval of the MPD for state-wide use until facilitated discussions with Reclamation, irrigation districts and other stakeholders can take place.



Oregon

Kate Brown, Governor

Parks and Recreation Department

State Historic Preservation Office



May 19, 2017

J. Paul Loether, Deputy Keeper
National Park Service
National Register of Historic Places
1849 C St. NW, Mail Stop 7228
Washington, D.C. 20240

Re: National Register Nomination

Dear Mr. Loether:

At the recommendation of the Oregon State Advisory Committee on Historic Preservation, I hereby submit the following Multiple Property Document to the National Register of Historic Places:

FEDERAL IRRIGATION PROJECTS IN OREGON, 1901-1978
STATEWIDE MULTIPLE PROPERTY DOCUMENT
MULTIPLE CITIES, MULTIPLE CO COUNTY

The enclosed disk contains the true and correct copy of the submission listed above to the National Register of Historic Places.

We appreciate your consideration of this document. If questions arise, please contact Jason Allen, Survey Program Coordinator, at (503) 986-0579.

Sincerely,

Christine Curran
Deputy State Historic Preservation Officer

Encl.

SHPO

February 15, 2017

Page 2

4) The District is concerned that the integrity of an irrigation system and its ability to deliver water in a cost effective and efficient manner will be impacted by an unruly and incorrect document. While certainly there are a few items of historic significance within our District, we are a utility at the same time; formed for the sole purpose of delivering irrigation water. We retain that primary purpose to this day.

5) Our farmers use the most current technologies in the operation of their irrigation systems. It is important to their economic viability that the District is able to operate in a way that conserves the water resource, is reliable for delivery, and can use the most current technologies.

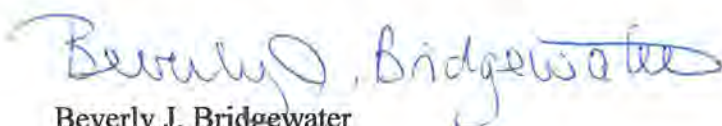
6) The safety factor of any irrigation canal is a concern. We all see big stories about failing infrastructure on the news and in local papers. It is not just about lack of maintenance, but about a gopher who got too close to a lined canal or a car that went into a ditch, breaking a liner. We are in a very sandy area. Canals wash away very quickly, putting life and property at risk. In this region, there is a drowning every few years. In the District's opinion, the best way to address these issues is to work towards piping of these open ditches.

7) Concrete-lined canals have leaks and seepage. That is the nature of such a canal. We, in fact, lost a lawsuit on this issue in our Boardman area. As land becomes developed and groundwater table remain high, these landowners look to our canal as the cause of their water problems. We cannot separate ourselves from this liability without piping the open laterals and eventually looking at our main canal for a PVC type liner. For our District, the liability of an open ditch is very real.

8) Irrigation districts across Oregon are facing water supply challenges. They look to piping open laterals as a key water savings component to their overall water strategy. Certainly these endeavors are supported by water conservation loans and grants offered by Oregon DEQ, Oregon Water Resources Department, US Department of AG, and the Bureau of Reclamation.

We urge you to delay your consideration of the "MPD for Federal Irrigation Projects" and instead, to enter into discussion with Reclamation and the federal irrigation districts in Oregon about how to properly preserve and protect the history of these great projects and their significant historical contributions while allowing the District to meet today's demands for its water conveyance system.

Thank you for your consideration.



Beverly J. Bridgewater
District Manager