NPS Form 10-900		RECEIVED 413 OMB No. 10024-0018		
(Oct. 1990) United States Department of the Interior				
National Park Service	Places	MAR 2 1 1823		
National Register of Historic Places Registration Form INTERAGENCY RESOURCES DIVISION				
National Register of Historic Places Registration Form by entering the information requested. If an item doe architectural classification, materials, and areas of sig	(National Register Bu s not apply to the pro inificance, enter only	NATIONAL DEPX SERVICE in How to Complete the all properties and districts. See ERVICE is in How to Complete the alletin 16A). Complete each term by morking "x" if the appropriate box or operty being documented, enter "N/A" for "not applicable." For functions, categories and subcategories from the instructions. Place additional se a typewriter, word processor, or computer, to complete all items.		
1. Name of Property	·			
historic name Benningt	on Fish Hat	chery		
other names/site numberBenningt	on Fish Cul	ture Station		
2. Location				
		N		
city or town Benningt				
state Vermont code _V	<u>r</u> county <u>B</u>	Sennington code <u>003</u> zip code <u>05201</u>		
3. State/Federal Agency Certification				
request for determination of eligibility meet Historic Places and meets the procedural and	s the documentation s professional requirem ister criteria. I recomm e continuation sheet for	3/11/94		
In my opinion, the property meets does comments.)	not meet the Nationa	al Register criteria. (\Box See continuation sheet for additional		
Signature of certifying official/Title	D	Pate		
State or Federal agency and bureau				
4. National Park Service Certification	lor			
I hereby/certify that the property is: entered in the National Register. See continuation sheet. determined eligible for the National Register See continuation sheet. determined not eligible for the National Register. removed from the National Register. other, (explain:)	USigna USAL	ature of the Keeper Entered in the Date of Action National Register; 4.21.94		

	and the second				
Bennington Fish Cu	Bennington County, Vermont County and State				
Bennington Fish Culture Station					
5. Classification					
Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count.)			
□ private □ public-local	☐ building(s)	Contribu 5	uting	Noncontributing 2	buildings
□ public-State □ 100000000000000000000000000000000000	☐ district ☐ site ☐ structure, ☐ object	1			sites
have to be a second	object	3		6	structures
					objects
		9		8	Total
Name of related multiple pr (Enter "N/A" if property is not part	roperty listing of a multiple property listing.)		r of contr National F	ibuting resources pro Register	eviously listed
Fish Culture in V	'ermont	0			
6. Function or Use					
Historic Functions (Enter categories from instructions)		Current F (Enter catego		structions)	
Agriculture/Fishi	ng Facility	Agriculture/Fishing Facility			
		Work i	n Prog	gress	
				· · · · · · · · · · · · · · · · · · ·	
		·`			
	······				
7. Description					
Architectural Classification (Enter categories from instructions)		Materials (Enter catego	ories from in	structions)	
<u>Colonial Revival</u>		foundation	<u>Conc</u>	rete	
		walls	Weat	herboard	
	·				
	-	roof	Asph	alt	
		other	Slat	e	
			Ston	e	

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

See Continuation Sheet

National Register of Historic Places Continuation Sheet

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INTERAC	TENCY RESOURCES		

Section number _____ Page _____

Bennington Fish Culture Station Bennington, Bennington County, VT

On a stretch of land following the fertile river basin of South Stream Brook, in the town of Bennington, Vermont, sits the Bennington Fish Culture Station, a complex of buildings and structures laid out along the banks of the north flowing brook. The Bennington Fish Culture Station, more informally called a fish hatchery, is directly east of and parallel to South Stream Road, approximately two miles south of Vermont Route 9. Owned by the State of Vermont and managed by the Vermont Department of Fish and Wildlife, the Bennington hatchery grew from a small experimental state hatchery in 1916 to a modern, model fish culture station by the 1930s. The fishing facility was first fed by spring water piped from the west side of South Stream Road; by 1937 additional water was piped from a section of South Stream Brook south of the Hatchery building. During the 1940s and 50s the land on the east side of the complex was acquired; two wells were dug and additional raceways, pools and buildings were constructed. The cohesive 118.53 acre complex contains a 1917 vernacular Colonial Revival Superintendent's House/Office, a 1917 Hatchery Building, a series of c.1919/c.1935 Raceways, four c. 1920/c.1980 Front Line Ponds, twelve c.1920/c.1980 Back Line Ponds, two 1937/c.1980 Intake Houses, a 1916/c. 1980 dam, a 1937/c.1980 dam, a 1940 Superintendent's House, a c. 1940 Garage, a 1946 Service Building/Garage, a 1946/c.1990 Settling Basin, c. 1946/c.1990 Aeration House, and a series of 1954 Raceways. Taken together, these buildings, structures, and landscape illustrate a significant part of Vermont's architectural and agricultural heritage from the early twentieth century to the present. The Bennington Fish Culture Station retains its integrity of location, design, setting, materials, workmanship, feeling and association.

A maximum of 2.4 million gallons of water flows through the ponds and raceways each day. A moisture problem, resulting in peeling paint on all the buildings, appears to be caused by interior and exterior dampness and a lack of insulation and vapor barriers in the walls. Current "work in progress" involves painting and siding of the buildings.

1. Original Superintendent's House/Office, 1917

<u>History</u>: This building was originally constructed and used as a residence and office for the hatchery superintendent. When the second (and current) superintendent's house was built in 1940, this structure no longer functioned as a residence but remained an office. Currently, the building is vacant. The Fish and Wildlife Department is considering using the building as a

National Register of Historic Places Continuation Sheet

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Bennington Fish Culture Station Bennington, Bennington County, VT

visitor's center, and reviving its function as an office in part of the space.

Exterior: This distinctive building is a vernacular Colonial Revival style, 1-story, wood frame, 3 x 2 bay, hip roof, approximately 28 feet x 28 feet structure with a raised, concrete slab foundation, clapboard siding, and asphalt shingle roofing. Exterior trim includes a box cornice at the eaves, vertical corner boards on the walls, and simple board surrounds around windows and doors. The three-bay front (west) facade has a left bay main entrance fronted by a hip roof, one-bay, c. 1930 entrance porch with square posts, a single, square board rail, and a concrete deck. The main entrance Colonial Revival style door features a large upper light above a centrally placed row of three small, square raised panels, and wide, horizontal lower panels. Two elongated two-over-two, double hung, sash windows are regularly spaced to the right of the entrance. The north facade has two similar regularly spaced windows. The east (rear) facade has a similar, centrally located, two-over-two window which shares a board surround with a pedestrian door to the right. The door has a large upper light and horizontal lower panels. A large, horizontal picture window, centered in the facade to the right of the door is a non-historic addition. Α large, concrete slab deck fronts the rear facade from the door to the northeast corner of the building. The south facade has two, square, single sash windows (for the interior bathrooms) regularly placed on the eastern half of the wall, which were probably added when the bathrooms were installed in 1952. On the western half of the south facade is the distinctive, massive, Colonial Revival style, cobblestone wall chimney with raised mortar joints and a concrete cap. A small brick chimney with a concrete cap rises from the east roof slope, near the apex of the roof.

<u>Interior</u>: The distinctive interior remains intact from the time it was remodeled in 1952. The recessed floor is approximately 8" below ground level. A large conference room spans the front half of the building and is dominated by a distinctive cobblestone fireplace and mantel on the south end. The rear of the building has an office in the northeast corner, and two public toilets in the southeast area. The interior is enhanced by natural pine paneled wainscoting. Mounted fish and stuffed wild animals decorate the walls and fireplace mantel.

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2. Hatchery Building, 1917

Exterior: The Hatchery building is a long, rectangular, vernacular style, one-story, wood frame, five-by-three bay, hip roof building, approximately 72 feet (west and east sides) by 28 feet (north and south ends). The hatchery has a slab concrete foundation (which extends to the window sills), clapboard siding, and asphalt shingle roofing. Exterior trim includes a box cornice, corner boards, and simple board surrounds around windows and doors. A c. 1935, small, one-story, one-by-one bay, shed roof ell, with a concrete foundation, clapboard siding, and asphalt shingle roofing, built and still used as an office, projects from the south end of the main block, west facade. A similar ell off the east facade of the main block, with a concrete block foundation, was added in 1946 when the Service Building was constructed. The long main block front facade faces west, although the entrance doors are on the south and north The south end, left bay main entrance features a simple, ends. paneled door. Two four-over-four, double hung, sash windows (with four-light wooden storm windows) are regularly spaced to The south facade of the historic west side ell has a the right. right bay paneled pedestrian door with upper glass insert, and a horizontal two light window, left. A similar horizontal window is located on the west and north walls of the ell, and a brick wall chimney projects above the north wall. Four six-over-six, double hung sash windows are regularly spaced along both the west and east walls of the main block of the Hatchery. The north facade, similar to the south, has a four-panel pedestrian door, right, and two six-over-six windows, left. The 1946 ell has a door on the south side, and a large horizontal window with a four-light wooden storm window on the east wall. Two metal ventilators, regularly spaced along the roof ridge, flank a central chimney.

<u>Interior</u>: The interior of the Hatchery reveals one large, long, hatch room, and a small single room in each of the two ell additions. Interior features in the hatch room, added during a 1952 remodeling, include the asbestos panel walls, a lowered asbestos panelled ceiling, and rewiring with florescent lighting. Fiberglass hatching trays are used for the incubation and hatching of about 100,000 eggs in the Hatch House. By 1966 the original wooden fish rearing troughs were replaced by six modern reinforced concrete troughs, currently used. These double troughs, about three feet above the floor on raised bases, are approximately 20 feet long, are arranged side by side, and nearly span the width of the hatch room, with enough space for walking between each trough and at the ends of the troughs. One historic

National Register of Historic Places Continuation Sheet

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wooden trough, about half the length of the concrete troughs, remains in the hatchery and is occasionally used in the hatch operation. Along the east wall three sets of intake pipes supply the Hatch House with water from each water source -- the spring across South Stream Road, wells up on the hill to the east, and South Stream brook. A furnace in the center of the room operates during cold months and distributes heat throughout the room and the office in the east side ell by means of metal registers which are slightly suspended from the ceiling.

3. Lower Raceways, c. 1919/c. 1935

<u>History</u>: Originally earthen raceways were dug in this location at the north end of the Hatchery Building. By 1920 the earthen raceways were replaced with four concrete raceways under the supervision of Engineer M. J. Burrington at a cost of \$3,200. The concrete raceways were modeled after a system in use at the time by the New Jersey Commission. The early concrete raceways were expanded and rebuilt around 1935.

Description: This group of five, long, narrow, concrete raceways, are called the A,B,C,D,E & F Lines (from west to east). The raceways are arranged side by side and extend from south to north off the north end of the Hatch House. Lines A through E are comprised of two long, parallel sections with a lengthwise central concrete divider. Line C is only one-third the length of the others, as the northern end was filled in after this portion caved in. Lines A, B, D, and E are divided again in three equal parts from end to end by headers. The headers are the division areas between raceway sections that are constructed of wire mesh screen and/or vertical wooden slats to prevent fish from passing through to an adjacent section. The water from the various water sources is piped to the raceways and is mixed at two head boxes before it enters the raceways. The temperature of well and spring water remains guite constant year around at about 48-50 degrees, but brook water may rise to 70-80 degrees in warm summer months. The covered head boxes are constructed of concrete blocks with wooden roofs, and tar and paper roofing. The raceways are of various depths. The south ends of the raceways adjacent to the head boxes are deepest and easiest to keep cold with a depth of 6 about feet. The raceways become shallower, tapering to a depth of about 12 inches at the north end. Different size or types of fish are reared in different sections of the raceways, the youngest and smallest fish often in the freshest, cleanest water nearer the head boxes where the water first enters the The F Line, or eastern most raceway, raceways.

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is a single raceway with seven sections from south to north; it is the longest raceway of the Lower Raceways and is the shallowest, making it the most difficult to keep cold in the summer.

4. Front Line Ponds, c. 1920/c. 1980 <u>History</u>: The earliest ponds were dug about 1920. The most recent rebuilding of the front line ponds occurred around 1980.

Description: The four, interconnected Front Line Ponds are generally round in shape, and extend in a linear fashion from south to north between the Lower Raceways and the Settling Basin, parallel to South Stream Road. The southern most pond, Number 4, is the largest, having a diameter of about 80 feet; the other three ponds are smaller, with a diameter of about 40 feet. The depth of the ponds ranges from $1 \frac{1}{2}$ feet at the south end to 4 feet at the north end. The ponds have gravel bottoms, similar to river bottoms with very little mud. The ponds are drained and cleaned annually prior to restocking. The "pass through system" of the interconnected ponds allows water to flow between them through a narrow opening between the ponds; a wire mesh screen or vertical wooden slats at the narrow openings contains the fish within each pond. Approximately 25,000 rainbow trout in each of the 4 large ponds will reach a length of 9 inches during a $1 \frac{1}{2}$ year growth period.

5. Settling Basin, 1946 / c. 1990

Due to its recent age, the Settling Basin has been designated as non-contributing.

<u>Description</u>: The Settling Basin is located at the north ends of both the Front Line and Back Line Ponds. The 5 foot deep Settling Basin has concrete sidewalls and bottom. A metal pipe railing projects from the concrete sidewalls along the south and west sides. Waste water from some of the raceways and the two pond lines flows through an intake bypass into the Settling Basin where solids settle to the bottom and are later removed during cleaning. The Settling Basin is cleaned by draining, allowing the waste matter to dry for two weeks, and removing the waste with a bucket loader. The 1940s concrete was recently refaced.

6. Back Line Ponds, c. 1920/ c. 1980

Due to alteration, the Back Line ponds have been designated as non-contributing.

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<u>History</u>: The earliest ponds were dug about 1920. The current configuration of the Back Line Ponds probably dates from around 1946 when the Settling Basin was constructed. The most recent rebuilding and alteration of the Back Line ponds occurred around 1980.

<u>Description</u>: The 12 interconnected Back Line ponds are gravity fed by the surface springs and wells up on the hill east of the Hatchery building. The ponds extend in an L-shaped configuration west of the driveway for the current Superintendent's house to the east side of the Lower Raceways, flowing in a northerly direction parallel to the Front Line Ponds, and drain into the Settling Basin. The ponds are roughly oval in shape and vary in width from about 15 to 40 feet across, with a depth ranging from about 1 1/2 feet to 3 feet deep. The ponds, similar to those in the Front Line, are constructed with gravel bottoms. Concrete headers between the ponds have a wire mesh or wood slat screen to contain the fish in each pond. Brown trout are raised in these ponds, with approximately 3,000 trout in the smaller ponds to approximately 10,000 in the larger ponds.

7. Intake House, 1937/c. 1980

Exterior and Interior: This Intake House is a low, wood frame, gable roof, approximately 12' x 8' structure along the north bank of the South Stream brook with novelty siding, and a wooden roof with tar paper roofing. Exterior trim includes corner boards and a box cornice. The central roof section on the west roof slope is slightly raised above an opening in the wall to the interior. Inside, a large open space reveals the deep concrete foundation with a concrete floor. The intake house receives water for the Hatchery operation from an intake section on the upper side of the dam along South Stream brook. Although the structure was rebuilt in the last decade, the original features appear to have been retained.

8. Dam, 1916/ c.1980

The Dam has been designated as non-contributing due to alteration.

<u>History</u>: This dam was built in 1916. Although the location of the dam appears intact, the historic materials have been replaced with new concrete during the c. 1980 reconstruction.

<u>Description</u>: This reinforced concrete dam across the South Stream Brook spans a stretch of approximately 40 feet across the brook.

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The vertical concrete abutments on the banks of the stream are approximately 12 inches wide and up to 2 feet high. The abutment on the south bank is perpendicular to the brook. The abutment on the north side is angled in a northeasterly direction where it serves the added function of intake for diverting water through a pipe to the Intake House.

9. Intake House, 1937/c. 1980

Exterior and Interior: This Intake House is a low, wood frame, gable roof, approximately 10' x 7' structure along the north bank of the South Stream brook with novelty siding, and a wooden roof with tar paper roofing. Exterior trim includes corner boards and a box cornice. Two hatchways on the roof provide access to the interior. Inside, a large open space reveals the deep concrete foundation with a concrete floor. The intake house receives water for the Hatchery operation from an intake section on the upper side of the dam along South Stream brook. Although the structure was rebuilt in the last decade, the original features appear to have been retained.

10. Dam, 1937/ c.1980 The Dam has been designated as non-contributing due to alteration.

<u>History</u>: This dam was built in 1937. Although the location of the dam appears intact, the historic materials have been replaced with new concrete during the c. 1980 reconstruction.

<u>Description</u>: This reinforced concrete dam across the South Stream Brook spans a stretch of approximately 40 feet across the brook. The vertical concrete abutments on the banks of the stream are approximately 12 inches wide and up to 2 feet high. The abutment on the southwest bank is perpendicular to the brook. The abutment on the northeast side is angled in an easterly direction where it serves the added function of intake for diverting water through a pipe to the Intake House.

11. Service Building/Garage, 1946

The Service Building/Garage has been designated as noncontributing due to age.

<u>History</u>: The Service Building/Garage, constructed to also include a large meat storage freezer, was built as a WPA (Work Progress Administration) project during the late 1940s period of expansion at the hatchery when new land was purchased for the fish culture

VT

United States Department of the Interior National Park Service

National Register of Historic Places Continuation Sheet

		Bennington	Fish	Culture	Statio	n
Section number7	Page <u>8</u>	Bennington,	Benr	nington	County,	V

station. The Service Building replaced a 1917 meat house/ icehouse located on the site of the current visitor's parking area. The freezer in the building was shut down in the early 1960s, after fish meal and meat meal pellets were introduced as a more economical and productive fish food in the late 1950s.

Exterior: The Service building is a large, vernacular style structure with a two-story, three by three bay, gable roof, approximately 27 feet (gable end) x 34 feet (eaves side) main block. A contemporaneous, attached 1 1/2 story, gable roof, three-bay garage ell projects from the south eaveside of the main Built into a bank on the east side of the building, the block. east facades have only a one-story elevation. The structure has a concrete foundation, clapboard siding, and asphalt shingle Exterior trim includes corner boards, a returning roofing. molded cornice, and simple board surrounds around windows and doors. The main entrance on the north eaves side of the main block is fronted by an elongated, gable roof entry porch sheltering a raised, concrete loading ramp. The second floor of the north facade features three regularly spaced six-over-six, double hung, sash windows directly below the roof eaves. Three similar windows are located on each level of the west end of the main block, and a round window in the west gable peak has been boarded over. The east end of the main block has a concrete block wall chimney and a second level double door opening. The ell has a three-bay garage with three overhead garage doors on the west side; a gable roof wall dormer is located on the east side of the ell.

<u>Interior</u>: A work room is located in the west end of the main block on the first floor. The large walk-in freezer with 12 inch walls and cork insulation is located in the eastern half of the first floor of the main block. The second level of the main block is used for storage. The three bays of the garage ell are used to house truck and other hatchery vehicles.

12. Superintendent's House, 1940

<u>History</u>: The house was built as a new modern residence for the hatchery manager. The materials and supervision were provided by the Fish and Game Service, the labor by the federal government

National Register of Historic Places Continuation Sheet

Section number _____ Page ____ Bennington Fish Culture Station Bennington, Bennington County, VT

under a WPA project.¹

Exterior: This vernacular Colonial Revival style, Cape Cod type, 1 1/2 story, 3 x 2 bay, gable roof house is approximately 40 feet (west and east) by 22 feet (north and south), and has a concrete foundation, weatherboard siding, and slate shingle roofing. Exterior trim includes corner boards which are unusually wide on the front facade, delicate returning molded cornice trim, simple board surrounds around windows, and a wide surround flanking the west facing centrally located front door. The Cape Cod form is created by the low front roof eaves that extends down to the tops of the windows and front door. The rear facade has a tall kneewall on the rear facade. The fenestration pattern appears relatively intact but the single and paired one-over-one, double hung sash windows with metal storms appear to be replacements. An important character defining features is the massive, Colonial Revival style fieldstone wall chimney on the left half of the south gable end. The rear (east) facade has a recently added gable roof, one-bay entrance porch with plywood walls and a door fronting the right bay, pedestrian door. A contemporaneous gable roof wall dormer is centrally located on the rear roof slope.

<u>Interior</u>: The interior of the house features four rooms on the first floor and bedrooms upstairs.

13. Two-Bay Garage, c. 1940

<u>Exterior</u>: This vernacular style, 1 story, 2 x 1 bay, gable roof, approximately 20 feet (front) by 30 feet (side) garage has a concrete foundation, weatherboard siding, and asphalt shingle roofing. Trim includes a box cornice, and simple board surrounds around windows and garage door openings. Two sets of vertical board, hinged double garage doors span the west facing gable front. A square window opening is centered on south eaveside. A concrete chimney with a concrete cap projects from the rear of the building.

<u>Interior</u>: The interior serves as garage and storage space for the superintendent of the hatchery.

¹ 1941 Biennial Report, p. 28

National Register of Historic Places Continuation Sheet

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14. Upper Raceways, 1954

The Upper Raceways have been designated as non-contributing due to age.

<u>Description</u>: This series of twenty raceways, built in 1954, is located on the hill east of the Back Line Ponds. These concrete raceways extend in an east-west direction, are approximately 50 feet long, with a depth of 20 inches at the lower end and 12 inches at the upper end. Use was recently discontinued due to predation at this site.

15. Aeration House, 1946 / c.1990 The aeration house has been designated as non-contributing due to age. The building was restored c. 1990.

Exterior: This vernacular style, one-story, gable roof, approximately 20 foot (east and west ends) by 30 foot (north and south sides) structure has a raised concrete block foundation, novelty siding and recently replaced asphalt shingle roofing. Two metal ventilators are regularly spaced along the roof ridge. Exposed rafter tails trim the eaves. A main entrance door, centrally located on the west gable end, is made of novelty siding. Basement level screen-covered openings are regularly spaced above ground level in the foundation on each side of the building. Top hinged sections of novelty siding, which may be raised and opened, are located on all facades of the building between the level of the eaves and the top of the foundation.

<u>Interior</u>: Inside, the large open space contains a deep basement with a gravel floor. Well water enters through an intake pipe on the east foundation wall; the water is sprayed out through several vertical pipes to add oxygen and remove nitrogen from the water before it passes out of the aeration house to the hatchery.

16. Informational Kiosk, c. 1990

The information kiosk has been designated non-contributing due to age.

Description:

This wood frame, two-sided display kiosk, located at the north end of the visitor's parking area, is approximately eight feet tall and four feet wide. The structure is supported by two wooden legs, the south side display area has two side-by-side panels, each 40 inches (height) by 28 inches (width), and a gable roof shelters the display panels.

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Bennington Fish Culture Station Bennington, Bennington County, VT

17. Landscape

<u>History and Description</u>: The Bennnington Fish Culture Station was built on open farmland. Soon after the earliest structures were built for the hatchery operation, the grounds were graded and walks and drives were graveled.² Early photographs tell us that the grounds have remained generally intact, although changes have been made as new raceways, ponds and buildings were constructed. The curved driveway from South Stream Road appears to be historic. The mature pine trees fronting the Hatchery and Lower Raceways are small seedlings in a c. 1935 photograph. The hill on the eastern portion of the property appears to have remained wooded from the 1920s. In 1969 the metal fence surrounding the property was installed to prevent theft and vandalism.

² 1920 Biennial Report, p. 17.

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- □ **B** Property is associated with the lives of persons significant in our past.
- C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- **D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- □ A owned by a religious institution or used for religious purposes.
- **B** removed from its original location.
- \Box **C** a birthplace or grave.
- \Box **D** a cemetery.
- □ E a reconstructed building, object, or structure.
- \Box **F** a commemorative property.
- **G** less than 50 years of age or achieved significance within the past 50 years.

Bennington County, Vermont County and State

Areas of Significance (Enter categories from instructions)

Agriculture

Architecture

Period of Significance

1916-1943

<u>1916</u> 1917

Significant Dates

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Lambert & Burrington, Contractors

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References Bibilography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- □ designated a National Historic Landmark
- $\hfill\square$ recorded by Historic American Buildings Survey
- recorded by Historic American Engineering Record # _____

Primary location of additional data:

- □ State Historic Preservation Office
- □ Other State agency
- Federal agency
- □ Local government
- University
- Other

Name of repository:

10. Geographical Data

Acreage of Property _____118.53

UTM References

(Place additional UTM references on a continuation sheet.)

1 <u>1</u> 8	64,9 18,0	4 7 46 06 0
Zone	Easting	Northing
$2 \ 1 \ 8$	64 9 68 0	4 7 46 04 0

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By	
name/titleElizabeth F. Pritchett	
organization Liz Pritchett Associates	dateOctober 1, 1993
street & number79 Main Street	telephone <u>802-229-1035</u>
city or townMontpelier	state <u>Vermont</u> zip code <u>05602</u>
Additional Documentation	

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

A Sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner				
(Complete this item at the request of SHPO or FPO.)				
name State of Vermont, Department of Fish	and Wildlife			
street & number <u>103 South Main Street</u>	telephone802-244-7331			
city or town Waterbury	state <u>Vermont</u> zip code <u>05671-0501</u>			

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. 470 et seq.).

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Bennington Fish Culture Station Bennington, Bennington County, VT

The Bennington Fish Culture Station, in Bennington, Vermont, is eligible for listing on the National Register of Historic Places under Criterion A for its contribution to the broad patterns of Vermont agricultural history. In 1916 the State of Vermont Fish and Game Commission purchased 7.8 acres of farmland on which it built an experimental fish culture station. After one year, the gravity fed water source proved to be excellent, and the facility became permanent, growing from a small-scale hatchery operation to a model fish culture station by the 1930s. The property also qualifies for statewide significance under National Register Criterion C for being a good example of a fish culture station, with numerous significant contributing subtypes characteristic of an early twentieth century fish culture station in Vermont. Included among the historic resources are the original vernacular Colonial Revival style Superintendent's House and Office, and the Hatchery Building, both built in 1917, the Lower Raceways and Front Line Ponds, both dating from around 1920, a Dam dating from 1916, a second dam dating from 1937, two Intake Houses dating from 1937, the 1940 vernacular Colonial Revival style Superintendent's House and the 1946 Service Building/Garage which were WPA projects, and the well-preserved surrounding grounds. The property is being nominated under the Multiple Property Documentation Form "Fish Culture in Vermont" and meets the registration requirements for the property type, fish culture station. The 118.53 acre property retains its integrity of workmanship, setting, location, feeling, and association.

The town of Bennington, in the southwestern part of Bennington County, is bounded on the north by the town of Shaftsbury, on the east by the town of Woodford, on the south by the town of Pownal, and on the west by the town of Hoosick Falls, New York. The Walloomsac River, with numerous branches and tributaries, flows in a northwesterly direction through the town, historically providing water power for mills and industry since the late eighteenth century. Two early transportation corridors intersect in the nineteenth century village of Bennington -- the east-west road now called Vermont Route 9, connects Bennington with Troy, New York; and US Route 7, a north-south road between points south and Montreal, which has been important since prehistoric times.

The earliest settlement in Bennington was established in the 1760s in the western part of town, now called Old Bennington. A large battle monument, located in Old Bennington, was built in the late nineteenth century to commemorate Vermont's Green Mountain Boys' involvement in the American Revolution. Two more

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villages developed in the early nineteenth century in Bennington. Algiers, now known as North Bennington, grew up in the area north of Old Bennington. The other village, to the east, now called Bennington village, experienced the greatest growth throughout the nineteenth century, with numerous mills and small manufactories along the banks of the Walloomsac, and housing radiating outward from the commercial areas. By the end of the century, Bennington had become a leading commercial and industrial center in Vermont and New England.

Early Fish Culture in Vermont was part of a larger national trend that evolved as a result of exploitation of biological and natural resources of waterways. In 1856, Vermont naturalist, George Perkins Marsh, was commissioned by the Vermont Legislature to investigate the decline of native fish (other states commissioned similar studies). Marsh listed deforestation, erosion, chemical and agricultural waste and indiscriminate fishing practices as causes for this decline. During the 1850s attempts to rear fish, following European practices, began at several fish hatcheries in Ohio and New York state, and by the 1870s fish culture was practiced in 19 of 37 states, with Atlantic salmon and later rainbow trout eggs being incubated, hatched and the fry released in most states.

Starting in 1872 the Federal Government began to establish Federal Fish Culture Stations in all states. Soon after this, the states began to construct their own hatcheries.

Part of the appeal in building hatcheries was an economic one, as good fishing attracted tourists. In Vermont, as early as the 1890s, fishing was considered the second most profitable enterprise after the dairy industry.³ The first hatcheries in Vermont were private ones, and often the eggs were purchased from out of state. The first state-owned Vermont hatchery was built in the town of Roxbury in 1891.

In Bennington, the first fish hatchery was privately owned. As early as the 1880s, the R. Burgess and Sons Trout Fishery was located probably along the Barney Brook, on Burgess Road in the

³ Perry, <u>Progress Report of the Vermont Fish and Game Dept.</u>, p. 17.

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eastern part of town, just south of what is today VT Route 9.4 It is unknown when this facility ceased operation.

The Bennington State Fish Culture Station began as an experimental station in 1916. The hatchery site, consisting of 7.8 acres of farmland along South Stream brook, was purchased by the State of Vermont from D. Edward and Maud Bushnell at a cost of \$1,000.⁵ A dam was built and water rights were acquired. A temporary hatch house was constructed for experimental work. Some of the equipment and buildings came from the Arlington Field Station (which closed in 1916 due to an unsatisfactory water source). Piping from the springs and brook was laid. Water power was engaged for cutting the meat, usually liver, for fish food.⁶

A successful first season proved the water supply suitable for rearing brook trout, and in 1917 permanent construction started. The goal was to develop a "model brook trout hatchery". Construction began by the local contractors Lambert and Burrington, under the supervision of hatchery Superintendent S. B. Hawks (who also served part time as Bennington County Fish and Game Warden). A model 72' x 28' hatchery building was erected, with a concrete foundation, sewer system, and 26 double hatching troughs. A 28' x 28' office building and manager's residence, contained a reception room and a manager's office. A small work room/tool house and an ice house/ storage shed were also built but are gone today. The early structures, real estate and water system at the Bennington hatchery cost \$10,000.⁷

About 600,000 brook and lake trout were distributed in 1917. That year the Biennial Report of the Commissioners of Fish and Game states that some of the fish "were planted in exchange with the United States Bureau of Fisheries and delivery made on our applications from their hatcheries at distant points".⁸

⁴ Childs, p. 96-97.

- ⁵ Bennington Land Records, Book 0-7, Page 46.
- ⁶ 1916 Biennial Report, p. 7.
- ⁷ 1917 Biennial Report, p. 14.
- ⁸ 1918 Biennial Report, p. 15.

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The earliest rearing ponds in Bennington were gravel bottom structures, as they are today. The early raceways were earthen, sometimes with stone or wooden sidewalls, and often built in a rectangular shape, rather than the long narrow configuration in use today. In 1919, the raceways in Bennington were rebuilt in concrete at a cost of \$3,200, under the supervision of engineer M.J. Burrington, and modeled after a system in use by the New Jersey Commission. These "modern" raceways, were probably similar to the long, narrow configuration of today's raceways in Bennington.

By 1920 the Bennington fish culture station was considered "in the front rank as a brook trout rearing station". The Hatchery Building and Superintendent's Residence/Office were to serve as models for the Essex County hatchery.⁹

In the 1920s, the Vermont Department of Fish and Game was concerned with overcrowding of fingerlings and fry in the three state hatcheries operating in the towns of Bennington, Roxbury and Canaan. With the goals of growing larger fish before distribution, and the elimination of disease and overcrowding in the hatcheries, many trout fry were transferred to the South Vernon station which was operating as a rearing station during summer months. In addition, sportsmen's organizations were encouraged to construct rearing pools around the state, with later distribution of the fingerlings to nearby streams.¹⁰

The 1930s were years of growth and expansion of fish culture in Vermont. A stripping station for brown trout and landlocked salmon was built in the town of Newport, and an eyeing station was built in the town of Morgan. A fourth state hatchery was built in the town of Salisbury in 1931.

Despite the construction of new fish culture stations in Vermont, disbursements and fish distribution were down in the early 1930s in some Vermont hatcheries, perhaps due to the sagging economy during the depression years. In Bennington, the disbursements for the Biennial period ending June 30, 1931 totaled \$9,136.74, but they fell to \$6,838.64 in 1933. In 1933 fish distribution costs and

⁹ 1920 Biennial Report, p. 17.

¹⁰ 1926 Biennial Report, p. 9.

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fishing license receipts were also down slightly.¹¹

By 1932, the Bennington station acquired its first trucks -- a 2 1/2-ton truck and two 1-ton trucks -- purchased to distribute fry and fingerlings, and electrification brought additional new modern features to the station. Electricity powered lights over each pond, and insects attracted by the lights lowered feed costs. A new refrigeration plant and a meat grinder were run by electricity. Other improvements included the construction of seven new ponds and more raceways, additional wooden rearing troughs were installed in the Hatchery Building, and all the buildings were painted.¹²

In 1937 the water rights were purchased for \$50 from Maud and D.E. Bushnell.¹³ The same year a second concrete dam constructed across the South Stream and 800' of new pipe to the hatchery, increased the water supply by 900 gallons per minute. Piping was installed to each trough with regulating valves, and to the raceways outside. Land acquired by the Bennington Rod and Gun Club, adjacent to the hatchery, was used for the development of new rearing pools to allow for increased production of yearling fish.¹⁴

Environmental issues have always been a concern for many Vermonters. As early as the 1920s, and into the 1940s and later, the Vermont Fish and Game Biennial reports state the importance of clean streams for healthy fish and the need for legislation to control pollution. At the Bennington hatchery, several improvements in the 1940s were geared toward improvement of water quality. In the early 1940s a larger settling area was built to eliminate silt and other deposits, and in 1946 a new Settling Basin was built to improve water purification as it passed from the facility, downstream.

Despite rationing and loss of manpower during the war, the Bennington facility made some major improvements between 1940 to 1946, most of which were done as WPA projects. The new 1940

- ¹² 1932 Biennial Report, p. 7-8.
- ¹³ Bennington Land Records, Book 0-64, Page 89.
- ¹⁴ 1936 Biennial Report, p. 4.

¹¹ 1934 Biennial Report, p. 9.

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Superintendent's Residence¹⁵ and the 1946 Service Building/Garage were constructed as WPA projects, and new ponds and raceways were built with the assistance of the WPA.

Additional improvements to the facility in the 1940s included 1,000 feet of new 8 inch diameter piping, and a new concrete intake to replace former spring water piping and spring intake. Five new rearing pools, each 80 feet long, were added on the Judy Brook with the aid of the WPA. In same area of the Judy Brook, the Manchester Rod and Gun Club built seven pools of the same type to greatly increase the rearing capacity of the hatchery. A service road from the pools to the hatchery was provided.

After 1945, rations were lifted, manpower was available again, and a sudden rise in fishing licenses occurred.¹⁶ Taking advantage of renewed resources and fishing interest, activity resumed at the state hatcheries. In Bennington, the goal of building the best facility possible continued. Alterations and additions to the pools, headers and raceways continued to improve fish care. New wells were drilled and a good supply of water was made available at a rate of over 500 gallons a minute.¹⁷

Additional purchases of land increased the total acreage of the Bennington Fish Culture Station. The land formerly owned by the sportsmen's clubs was purchased in 1947 (3 parcels from the Bennington Rod and Gun Club, Inc., and 2 parcels from the Manchester Rod and Gun Club, Inc.).¹⁸ In 1948 and 1949 approximately 91 acres were purchased from Lillian R. Hurlburt, and less than an acre from the Bushnell family.¹⁹

- ¹⁶ Perry, p. 27.
- ¹⁷ 1945-46 Biennial Report, p. 23.
- ¹⁸ Bennington Land Records, Book 0-104, Pages 29-30.

¹⁹ Ibid., Book 0-108, Page 69; Book 0-111, Page 64. The Bennington Assessor's Office lists the Fish Culture Station complex comprising 118.53 acres more or less. The acreage purchased in the 1940s comprise a separate parcel of land on which are small water reservoirs.

¹⁵ 1941 Biennial Report, p. 28.

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Fish distribution had declined somewhat during the war years, and after the war it was difficult to obtain food for the fish. In 1946 over 9 million fish were distributed in Vermont (mostly brook and brown trout and pike perch fry, with lower figures for rainbow and lake trout, and Atlantic and landlocked salmon). The next year 12 million fish were distributed, but by the 1950s the annual distribution figure fell to about 8 million fish. This decline in figures may be the result of efforts to distribute larger, older and healthier, but fewer fish, with the aim of reducing die-off rates once the fish were relocated in their new environment.

During the early 1950s the Bennington Hatchery maintained a program of general improvements. The buildings were painted, a new heating system was installed in the Superintendent's residence, the grounds were landscaped, and new trucks and distribution tanks were purchased. The current Bennington manager, Frank Snow, began working at the hatchery in 1951, and became manager in 1968.

By 1959 Bennington was the largest hatchery in the state. It was called a "four man station", with a 42-trough hatchery building, 48 concrete raceways, 24 rearing pools, 3 artesian wells, one spring and one brook, rearing about 24,000 pounds of fish annually of brook, rainbow and lake trout (an annual total of 717,000 fish).²⁰

In the 1960s, the renewed national awareness of environmental issues brought increased pressures on wildlife managers to preserve our natural resources. In 1961, the State of Vermont joined with the US Department of Fish and Wildlife, adopting a procedure for research and evaluation of fish habitat. This program became an extension of the watershed study begun in 1952 by state and federal biologists. This cooperative effort between biologists, hatchery superintendents and game wardens charted stream conditions and the amount of fish body of water could support. The result was a plan for fish distribution based on appropriate habitat (rather than the previous method by county) aimed to prevent die-off of fry and fingerlings.²¹

By the 1960s the study of fish culture became more specialized. In

²¹ 1961-62 Biennial Report, p. 17.

²⁰ 1959-60 Biennial Report, p. 15.

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Bennington, as at other Vermont stations, the managers now attended professional training sessions on fish culture, to augment the extensive knowledge they had acquired over the years as employees and managers of the Vermont hatcheries.

In the mid 1960s the Biennial reports state that water quality in Vermont's streams and ponds was steadily improving. To assist in these environmental efforts, the Vermont Department of Fish and Game hired at least eight new biologists. Water quality and lack of chemical pollutants was an increasing concern at all Vermont hatcheries, not only for incoming water but for the water released to the streams after being used in the hatchery operation.

Despite efforts for improved water quality at Bennington, the hatchery continued to be plagued with disease problems.²² The recommended plan, yet to be undertaken in full, to help solve this water quality problem, calls for the reduction or elimination of surface brook and spring water, and the increased use of pathogen free, more temperature-constant well water.

Today, the Bennington complex, the southernmost of Vermont's hatcheries, hatches and raises brook, brown and rainbow trout with an annual production range of 32,000 to 62,000 pounds of brook, brown and rainbow trout. The Bennington hatchery primarily stocks Vermont lakes and ponds, and does not transfer fish to other hatcheries, due to IPN (Infectious Pancreatic Necrosis) present in the fish at the Bennington hatchery.

The Bennington State Fish Culture Station remains as the largest historic fish culture station in Vermont, and retains the most diverse complex of related structures and buildings related to the history of fish culture in the state. The distinctive, intact buildings and structures dating from 1917 to the 1950s are an important record of a fishing facility in Bennington. Today the fish culture station, with a full-time manager living in the Superintendent's house and several employees, is testimony to the continued success of this complex which survives amidst much difficulty with water pollution and often outdated equipment.

²² 1965-66 Biennial Report, p. 22.

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The Bennington Fish Culture Station has grown to incorporate new fish culture methods and is a good example of Vermont's agricultural heritage as a fishing facility. The 1917 Hatchery Building and Superintendent's House/Office, series of c. 1919/c. 1935 Raceways, four c. 1920/c.1980 Front Line Ponds, twelve c. 1920/c.1980 Back Line Ponds, a 1916/c.1980 dam, a 1937/c.1980 dam, two 1937/c.1980 Intake Houses, a 1940 Superintendent's House with c.1940 garage, a 1946 Service Building/Garage, a 1946/c.1990 Settling Basin, c.1946/c.1990 Aeration House, and a series of 1954 Raceways tell the story of transition from an experimental hatchery to a model fish culture station. The 1940s Superintendent's House and the 1946 Service Building/garage are important examples of buildings constructed by the WPA. Taken together these buildings and structures represent the broad patterns of agriculture that have contributed significantly to Vermont's history and make the Bennington Fish Culture Station eligible for listing on the National Register for Historic Places under Criterion A.

The Bennington Fish Culture Station is also being nominated under Criterion C, because it is a good example of a fish culture station. The fishing facility embodies distinctive characteristics of an early twentieth century fish culture station. The large complex retains the historic Hatchery Building, Ponds and Raceways, a Dam and Intake House, two Superintendent's Houses, and one historic garage. The buildings are wood frame, vernacular style structures, although both Superintendents houses have distinctive Colonial Revival style features. In addition, the hatchery retains significant 1920 and 30s landscape features in its mowed areas, plantings, and roadways.

All of the existing historic buildings and most of the structures continue to function as significant contributing subtypes of a fish culture station. A number of the raceways and ponds have been altered in recent years, but the landscape of the facility has been maintained and not greatly altered since the 1930s and 40s.

Compared to other Vermont Fish Culture Stations, the Bennington State Fish Culture Station remains relatively intact. The facility retains its workmanship, setting, location, feeling and association. The period of significance is 1916-1943, under the historic context, "Fish Culture in Vermont 1850 - 1943".

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Interviews:

Snow, Frank. Bennington Fish Culture Station Superintendent (Manager). Bennington, VT, 4 January, 1993.

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UTM REFERENCES:

5)	18/	650300/	4745900
6)	18/	649820/	4745660

7) 18/ 649240/ 4745780

VERBAL BOUNDARY DESCRIPTION:

The Bennington Fish Culture Station is bounded on the west by South Stream Road, and on the southwest by the South Stream brook. The facility extends in a northeasterly direction on an irregularly shaped parcel of land. The boundaries of the Bennington Fish Culture Station are indicated on Bennington tax maps as Parcel 12B-11-1 (new map #66-50-8), and Parcel 12B-4-1 (new map #12-1-1) in the office of the Department of Assessment, Town of Bennington. A copy of these tax maps is included.

BOUNDARY JUSTIFICATION:

The boundary of this irregularly shaped parcel of land, includes all buildings, structures, and the surrounding landscape historically associated with the Bennington Fish Culture Station and that maintain historic integrity.





