



North Carolina Department of Cultural Resources
State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Pat McCrory
Secretary Susan Kluttz

Office of Archives and History
Deputy Secretary Kevin Cherry

May 23, 2014

Richard S. Kanaski, Regional Archaeologist
US Fish and Wildlife Service
694 Beech Hill Lane
Hardeeville, SC 29927

RE: Conveyance of McKinney Lake National Fish Hatchery, Richmond County, ER 14-0765

Dear Mr. Kanaski:

Thank you for your April 10, 2014, letter notifying us of the proposed conveyance of the McKinney Lake National Fish Hatchery and transmitting the Determination of Eligibility report. We have reviewed the report and provide the following comments that we understand are well beyond the thirty-day commenting period.

Having recently concurred with a determination of eligibility for a state fish hatchery that may be affected by a transportation project, we note that the McKinney Lake hatchery appears to have a greater degree of integrity, especially the water structures. Plus, the early buildings appear to be relatively intact. The comparison to other southeastern hatcheries did not convince us that this one was less intact. Nor, did its failure to adjust its mission to a more research-based fish culture negate its early importance to the Sandhills region of North Carolina. There is not much information to show significance, but there is also not much information to show that it is not significant. Thus, we are unable agree or disagree with the report's determination that the McKinney Lake National Fish Hatchery is not eligible for listing in the National Register of Historic Places.

We do, however, agree that the conditions placed on the conveyance are unlikely to affect the hatchery, but, rather provide for its continued operation, buildings/water structures and character in essentially the same or better condition.

The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.

Thank you for your cooperation and consideration. If you have questions concerning the above comment, contact Renee Gledhill-Earley, environmental review coordinator, at 919-807-6579 or renee.gledhill-earley@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

for Ramona M. Bartos

**McKinney Lake National Fish Hatchery,
Richmond County, North Carolina**

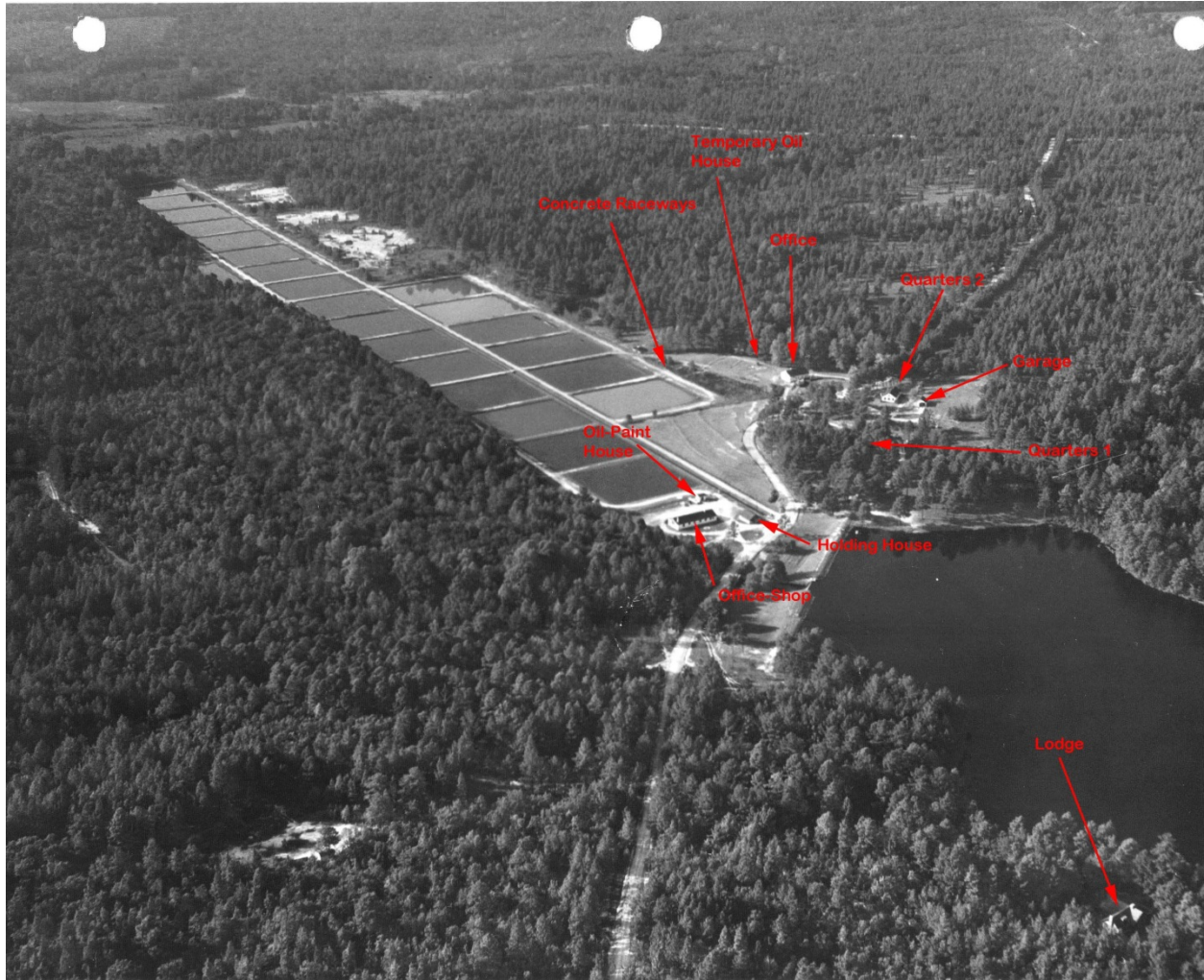
History and Determination of Eligibility



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April, 2014

McKinney Lake National Fish Hatchery, Richmond County, North Carolina History and Determination of Eligibility



McKinney Lake National Fish Hatchery, ca. 1959

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April, 2014

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Abstract

The 442-acre McKinney Lake National Fish Hatchery was conveyed by the U.S. Fish and Wildlife Service to North Carolina Wildlife Resources Commission following passage of *Public Law 112-237* in 2012. Since 1996, the Wildlife Resources Commission's Division of Inland Fisheries had operated the hatchery primarily to produce harvestable channel catfish for their Community Fishing Program. The National Historic Preservation Act and its implementing regulation, 36 CFR Part 800, consider federal divestiture of property as an adverse effect on historic properties. This report seeks to delineate the hatchery's history, describe the built environment, and identify an appropriate historical context in order to determine its eligibility for the National Register of Historic Places.

Two themes were identified under the "Conservation" rubric that applied to the hatchery. The first one related to conservation efforts begun by the Resettlement Administration in the mid-1930s and led to the creation of the Wildlife Resources Commission's Sandhills Game Lands. The second theme related to the emergence and evolution of the federal warm water fish hatchery system.

The "Sandhills Game Lands" or "Sandhills Land Utilization Project" theme needs additional research to delineate its history and to identify associated contributing properties and landscape features. Based upon the limited resources available, the author identified the hatchery, the Pine Forest (State) Game Farm, the Hoffman Nursery, and the Indian Camp Recreational Area as potential contributing properties.

The second theme related to the emergence and evolution of the federal warm water fish hatchery system as seen from McKinney Lake National Fish Hatchery. Despite its age, the hatchery was determined not to be eligible for the National Register of Historic Places.

Acknowledgements

A number of individuals provided photographs, maps, and other information used throughout this report. These include Richard Bradford, Manager of McKinney Lake State Hatchery, Randi Smith, Curator for FWS's Fishery Program at D.C. Booth Historic National Fish Hatchery, Allan Brown, Supervisor of the Region's Warmwater Fisheries, and Barbara West, Realty Specialist. Their willingness to share is greatly appreciated.



Hatchery Scenes, ca. 1971.

Entrance flanked by stone pillars.



Open flume.



Outlet box or drain.

McKinney Lake National Fish Hatchery, Richmond County, North Carolina History and Determination of Eligibility

Introduction

McKinney Lake National Fish Hatchery was legislatively transferred in 2013 from the U.S. Fish and Wildlife Service's Division of Fisheries (DOF) to North Carolina Wildlife Resources Commission's Fishery Management Program (FMP). The hatchery will be managed as part of the state's Sandhills Game Land that surrounds the current facility and lake (Fig. 1). Included in the transfer were the 100-

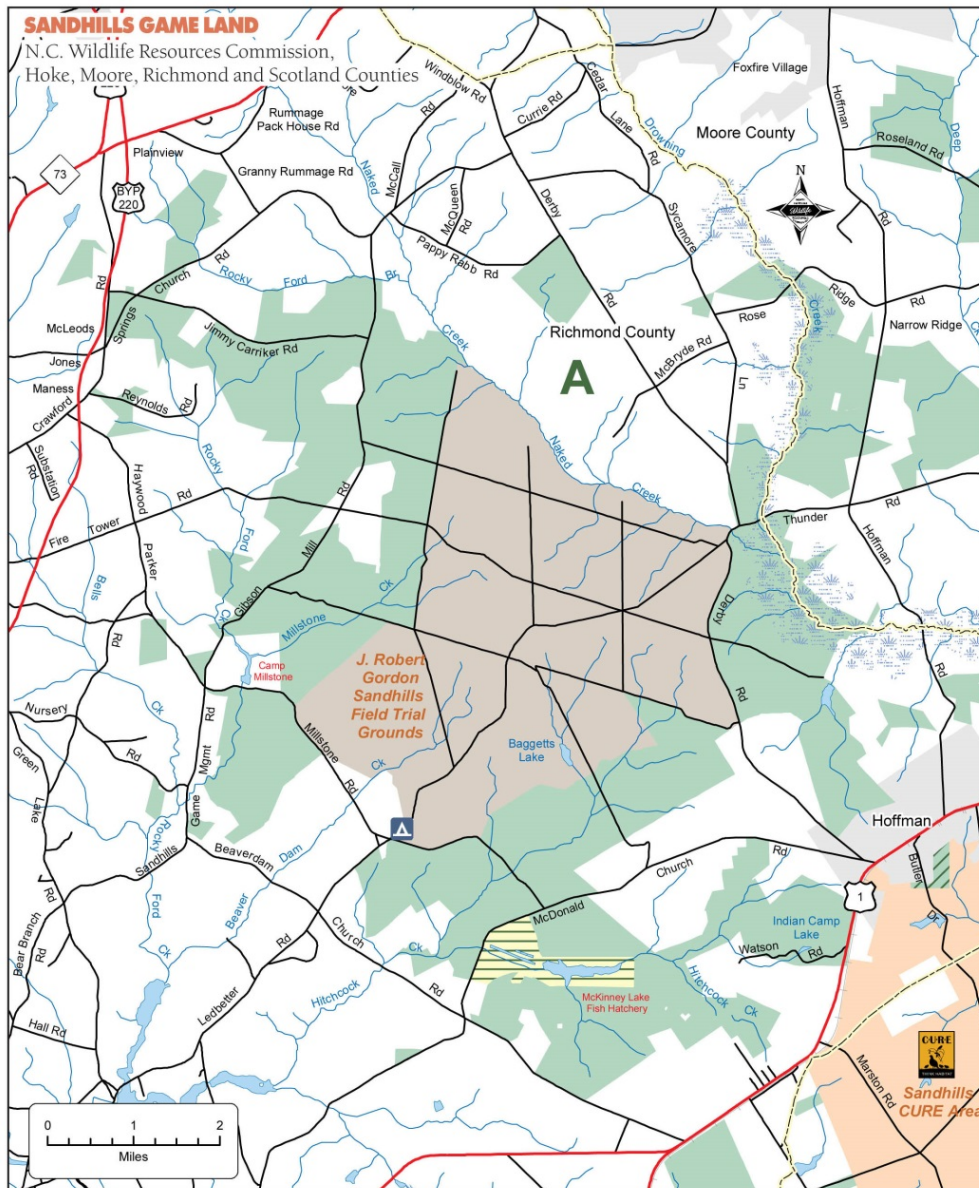


Figure 1. Sandhills Game Lands and McKinney Lake National Fish Hatchery [Source: North Carolina Wildlife Resources Commission].

acre warm water fish hatchery, the 70-acre McKinney Lake, and 272 acres of forested watershed. The hatchery's facilities included twelve buildings, 23 earthen ponds, and public use areas (Fig. 2 and Table 1).

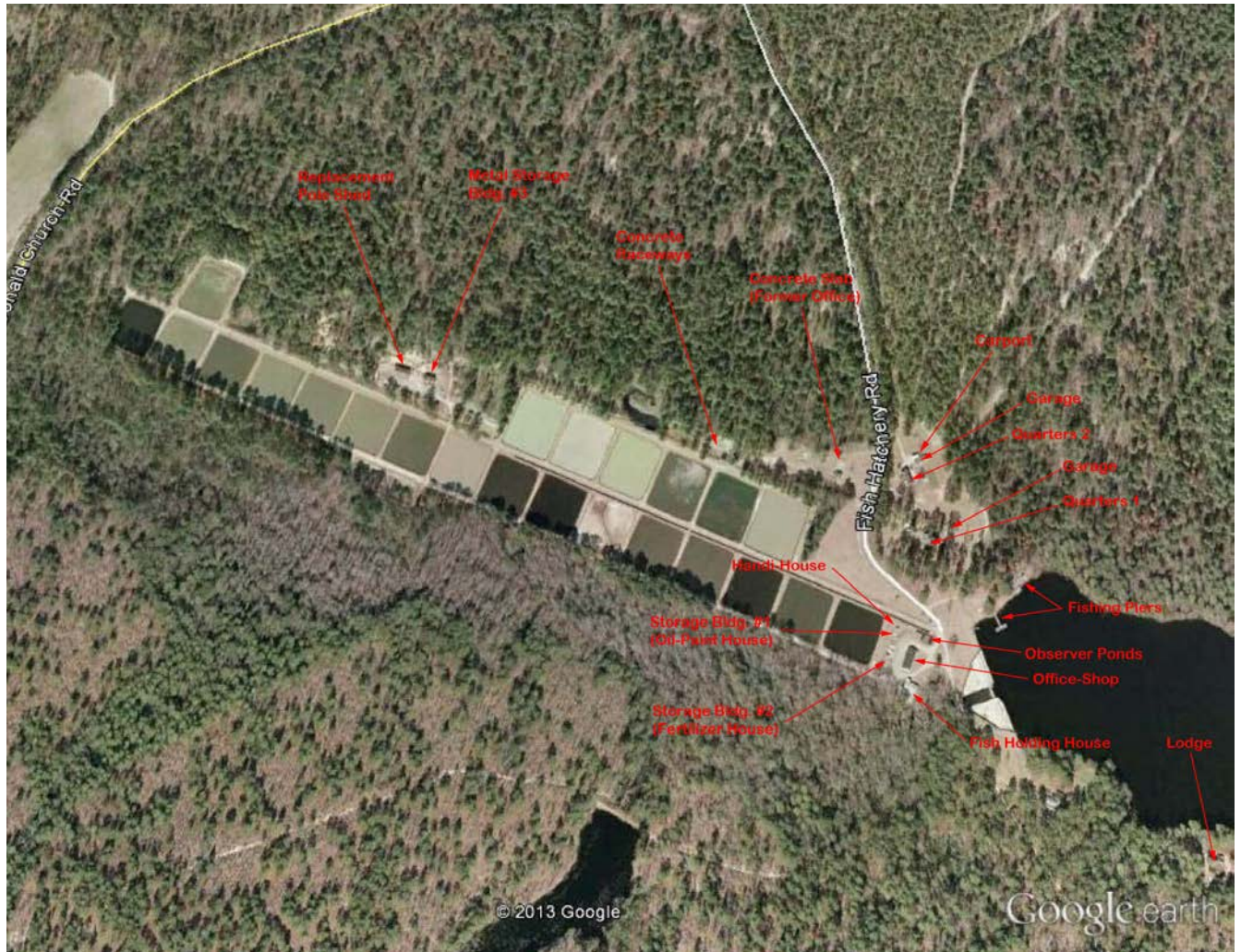


Figure 2. . McKinney Lake National Fish Hatchery, 2013. The standing buildings are identified [Source: Google Earth].

The National Historic Preservation Act and its implementing regulation, 36 CFR Part 800, typically consider federal divestiture of land and/or real property as an adverse effect. The hatchery, despite its age, is not considered eligible for the National Register of Historic Places. The cultural landscape or built environment, like for most DOF's hatcheries, evolve over time. The production ponds, the earthen dam, and McKinney Lake represent the most stable or consistent features of the hatchery. The extant buildings, with the exception of Quarters No. 1 and Quarters No. 2, were constructed between 1955 and 1975. The two quarters, which are still used as residences for state hatchery personnel, do not appear to be excellent examples of a specific architectural style and/or architect. They are not representative of quarters built at contemporaneous hatcheries and National Wildlife Refuges.

This report is divided into the following sections. The first section describes the history of the hatchery. The second section provides a description of the built environment and buildings. The third section is a discussion of the criteria used to assess the eligibility of the hatchery and its infrastructure for inclusion

on the National Register of Historic Places, as well as the formal determination of eligibility. A bibliography is the final section.

Table 1. Extant Buildings at McKinney Lake National Fish Hatchery, 2013.

RPI Nos.	Building	Date of Construction
83	Lodge	1978*
76	Quarters No. 1	1937
-	Detached One-Car Garage	1965
77	Quarters No. 2	1938
-	Detached One-Car Garage	1970
-	Pump House [Between Quarters No. 1 and No. 2]	1957
-	Fish Holding House	1958
75	Display Ponds [Covered Observation Ponds]	1963-1964
80	Storage Building No. 2 [Fertilizer House]	1962
78	Storage Building No. 1 [Oil and Paint House]	1955
-	Handi-House	-
79	Service Building [Combination Office, Shop and 5-Stall Garage]	1957
81	Storage Building No. 3 [Metal Storage Building]	1975
-	Replacement Pole Shed	-
-	Daphnia Tanks/Holding Tanks	1939(?)

*The Lodge is located on the Pavlik Tract (Tr. 74) acquired by the FWS in 1978. The date of construction is unknown.

The Hatchery

McKinney Lake National Fish Hatchery is located in Richmond County east of the town of Hoffman, North Carolina (Fig. 3). At its height, the hatchery covered approximately 514 acres and produced over 2.6 million largemouth bass, white crappie, red ear sunfish, bluegill, and channel catfish (Fig. 4). Its history is entangled with that of the Sandhills Game Land.

The Sandhills Game Land, as well as the Hatchery, were the focus of a Resettlement Administration’s land use project in North Carolina. In the 1930s, the Resettlement Administration, which was part of the U.S. Department of Agriculture, purchased “substandard or so-called marginal land, for the most part unsuited to successful farm crops.” The Sandhills Project was initiated in 1934 and focused on marginal agricultural lands in Richmond, Moore, and Scotland Counties. By 1937, the Resettlement Administration had acquired 46,000 acres from willing sellers. The administration estimated that about 97 families would be impacted by the land utilization project. This project’s major objectives were the re-establishment or development of longleaf pine forest, recreational development, wildlife conservation, and general development. To achieve these objectives, the administration developed the 175-acre Hoffman Nursery, the Indian Camp Park and 15-acre lake, the McKinney Lake Dam and fish hatchery, the Pine Forest Game Farm with brooder houses for turkey and quail, and planted at least 200 food and cover plots (Fig. 5) [Department of Agriculture 1937].

The Department of Commerce’s Bureau of Fisheries, the forerunner of the U.S. Fish and Wildlife Service’s Division of Fisheries, assumed control of the fish hatchery in late 1936-1937 (Department of

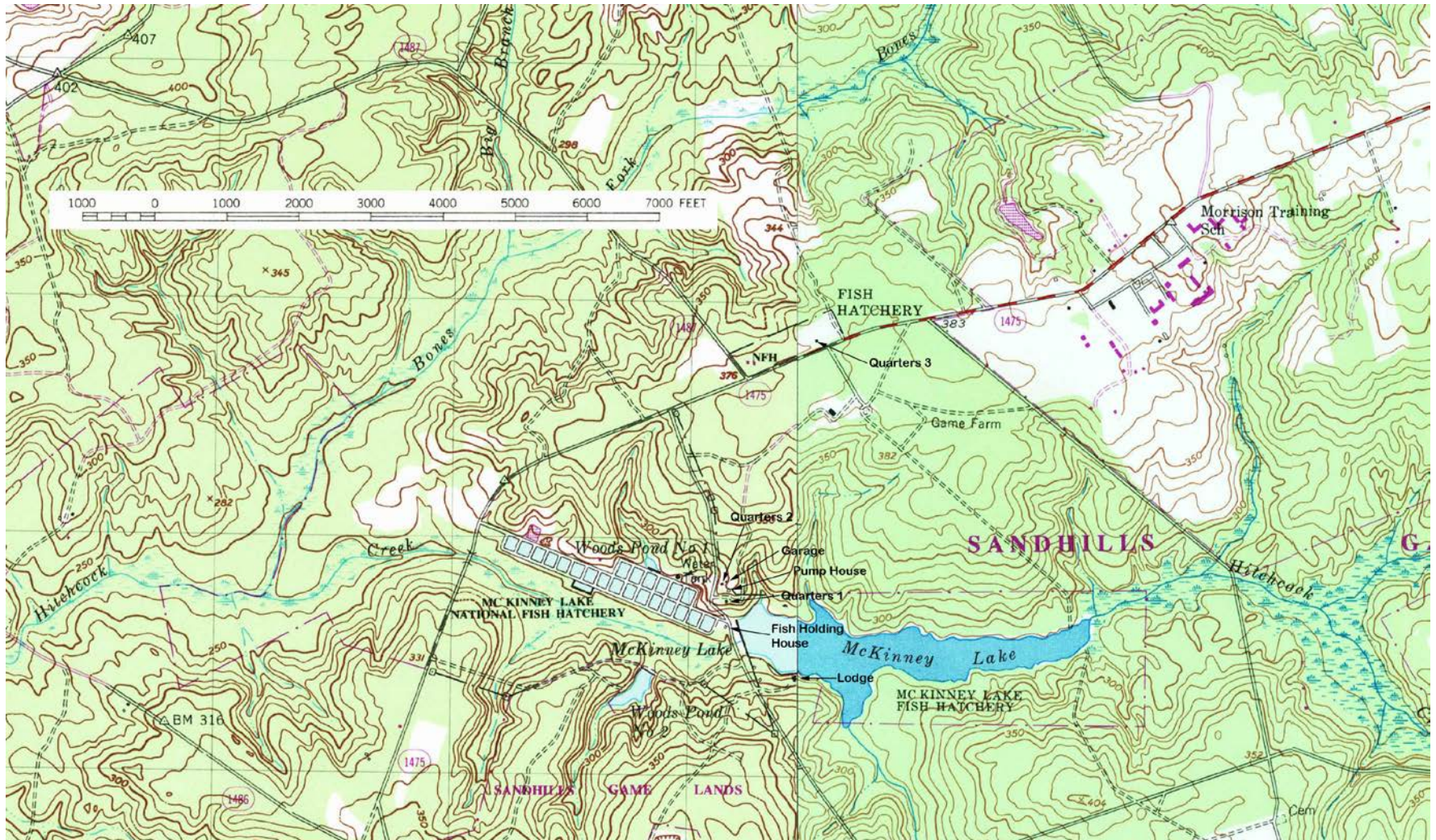


Figure 3. McKinney Lake National Fish Hatchery, ca. 1982-1984. The Game Farm, which is part of the Wildlife Resources Commission's Sandhills Game Lands, is located north of the lake and northeast of the hatchery. The Morrison School, once an educational and vocational training school for African American youth, is now the Morrison Correctional Institution operated by the Department of Corrections [Sources: Kaelber 2012; North Carolina State Historical Markers Program 1954; Pacific Telephone Company n.d.; U.S. Geological Survey 1982 & 1984].

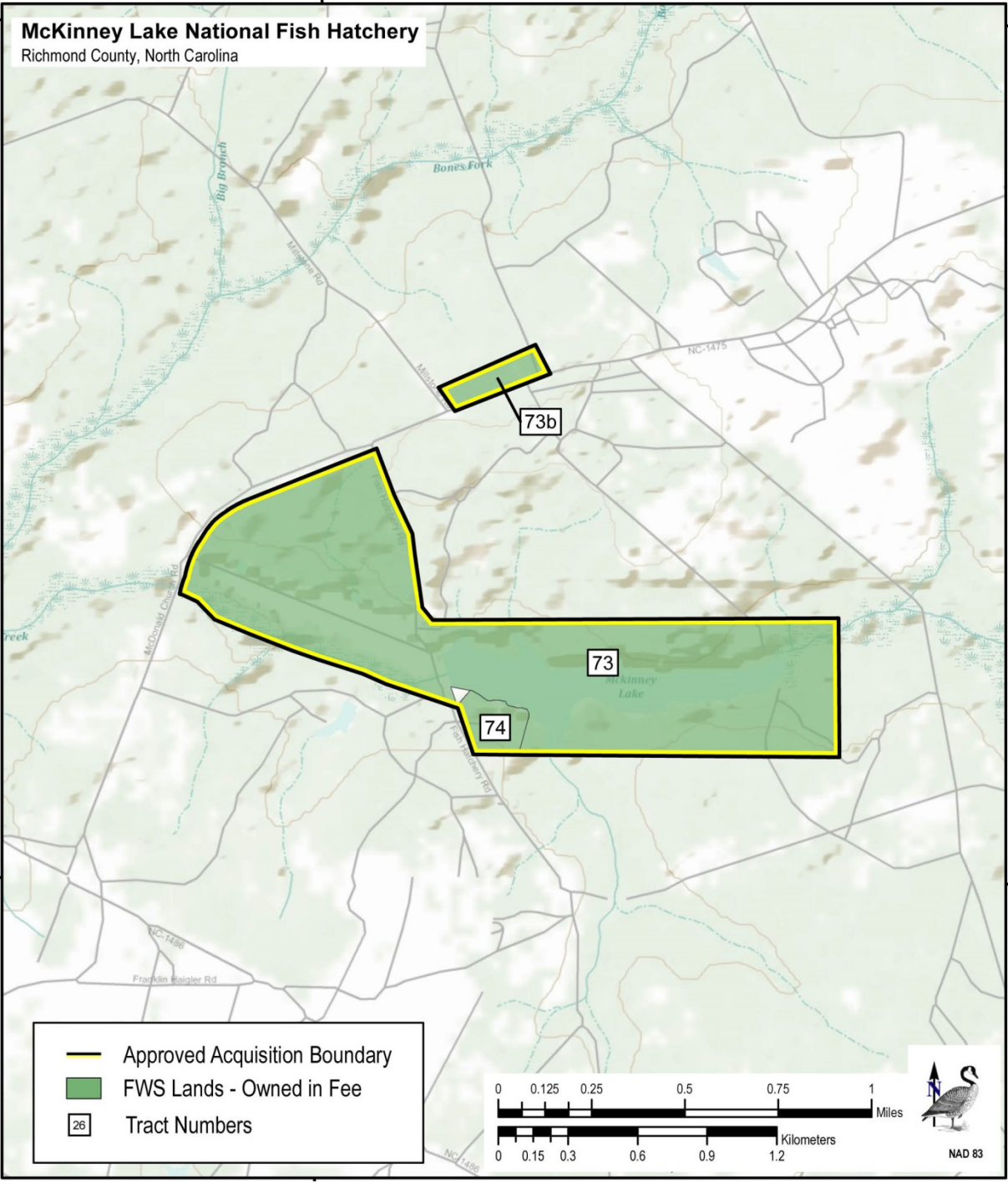
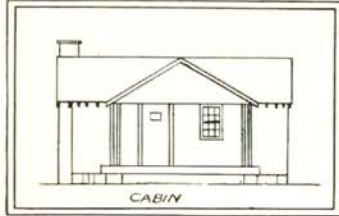


Figure 4. Tract Map [Source: FWS 2014].

SANDHILLS PROJECT

LAND UTILIZATION DIVISION



RESETTLEMENT
ADMINISTRATION
UNITED STATES
DEPARTMENT
OF AGRICULTURE

HOFFMAN, NORTH CAROLINA

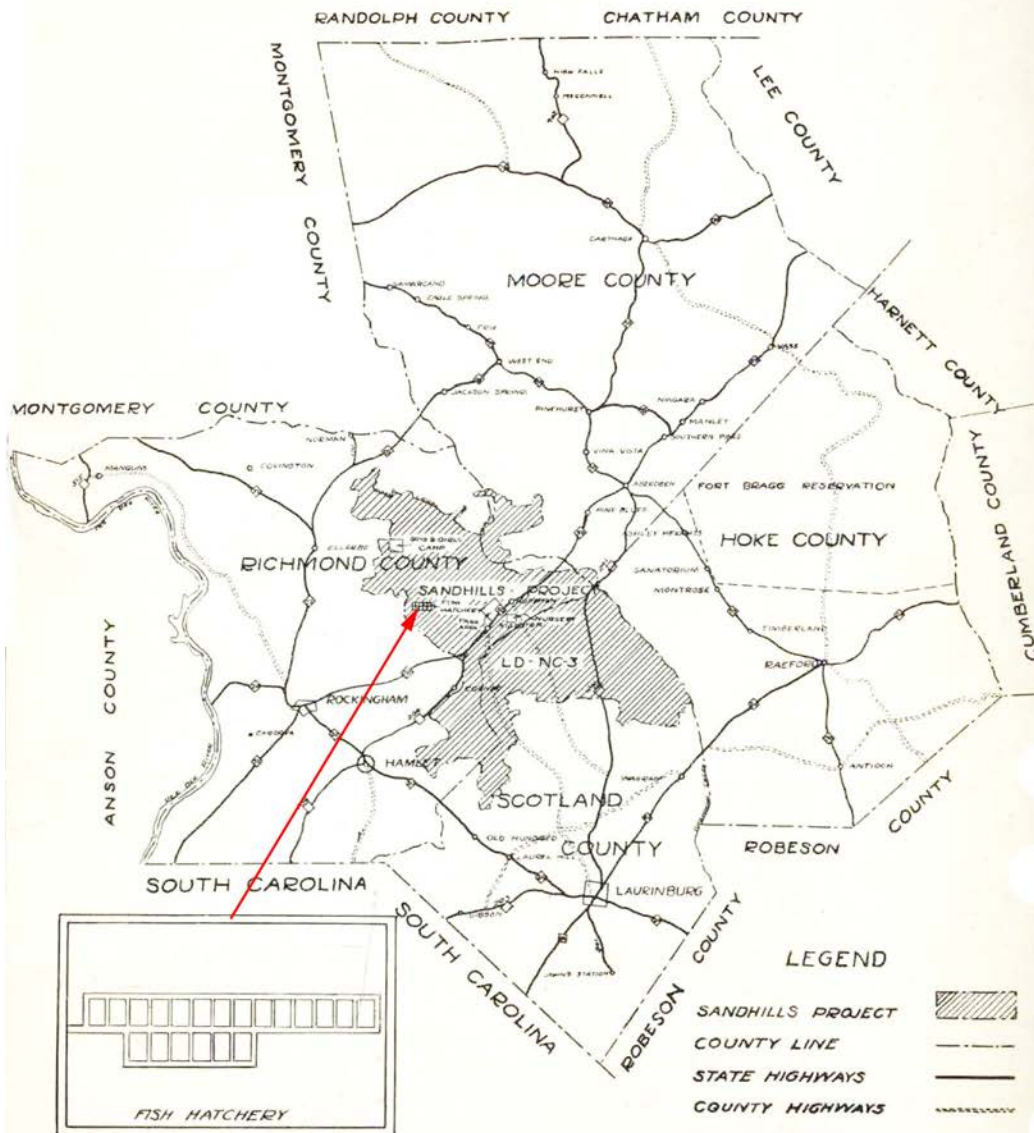
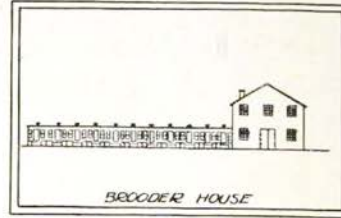


Figure 5. Resettlement Administration's Sandhills Land Utilization Project, 1937. The Hatchery, Game Farm, and Indian Lake Campground were developed by Resettlement Administration's crews as part of their wildlife conservation and recreational development programs [Source: Department of Agriculture 1937].

Agriculture 1937; Commissioner of Fisheries 1935: 405 & 1936: 354). To supply water for the new hatchery, Resettlement Administration crews had constructed the earthen and concrete dam (Figs. 6a & b).

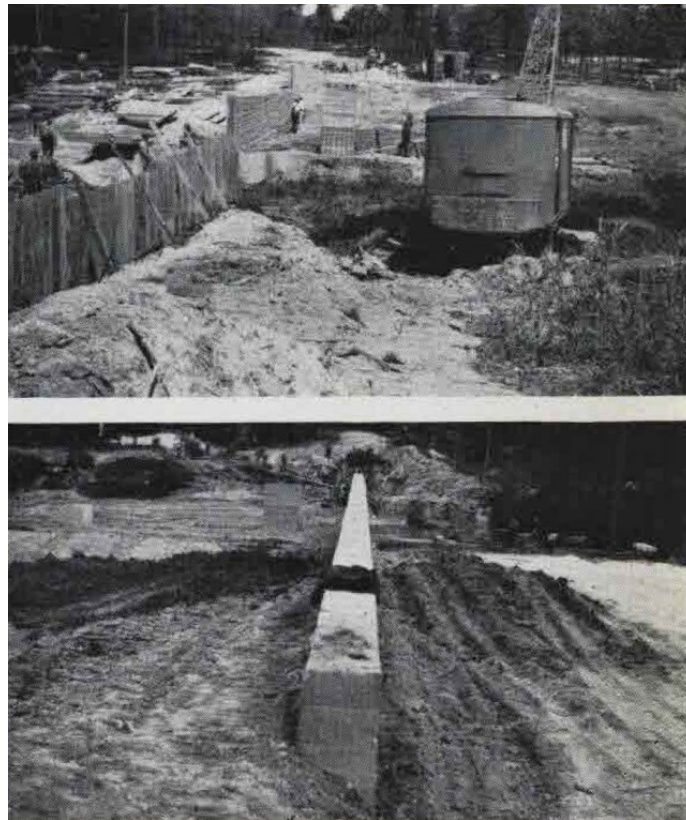


Figure 6a & b. Construction of the McKinney Lake Dam and Spillway by Resettlement Administration crews, 1937 [Source: Department of Agriculture 1937].

The resulting 70-80 acre McKinney Lake drowned a section of Hitchcock Creek and surrounding wetlands. These crews began work on 20 one-acre production ponds, as well as the construction of residences for the superintendent and assistant superintendent, and a combination office, garage, and storage building (Fig. 8 & 9).

McKinney Lake National Fish Hatchery officially opened in 1937. President Franklin D. Roosevelt's Executive Order 7775, dated December 27, 1937, formally transferred the hatchery from the Department of Agriculture to the Department of Commerce (Station Guide 1971). Although the hatchery was still under construction in 1937, six ponds yielded primarily bream fry and fingerlings (COF 1937: 488). By 1938, eleven ponds had been completed and now yielded black bass, warmouth, sunfish, and crappie fingerlings that were used to stock the ponds and lakes of the surrounding land utilization project (COF 1938: 489).

The number, size, and arrangement of the production ponds have varied since the hatchery's initial establishment. In 1939, 25 acres of water were available and three additional ponds were under construction. In 1940, 23 one-acre ponds were in use and four more ponds were under construction. By 1945, the hatchery had 22 0.719-acre ponds, one 0.416-acre pond, and 2 spring fed wood ponds [COF 1939: 590; COF 1940: 598; Station Narrative 1941 & 1945]. The 1945 pond configuration appears to resemble the current one, though one additional one-acre pond was added between 1975 and 1984 (Figs. 10-14).

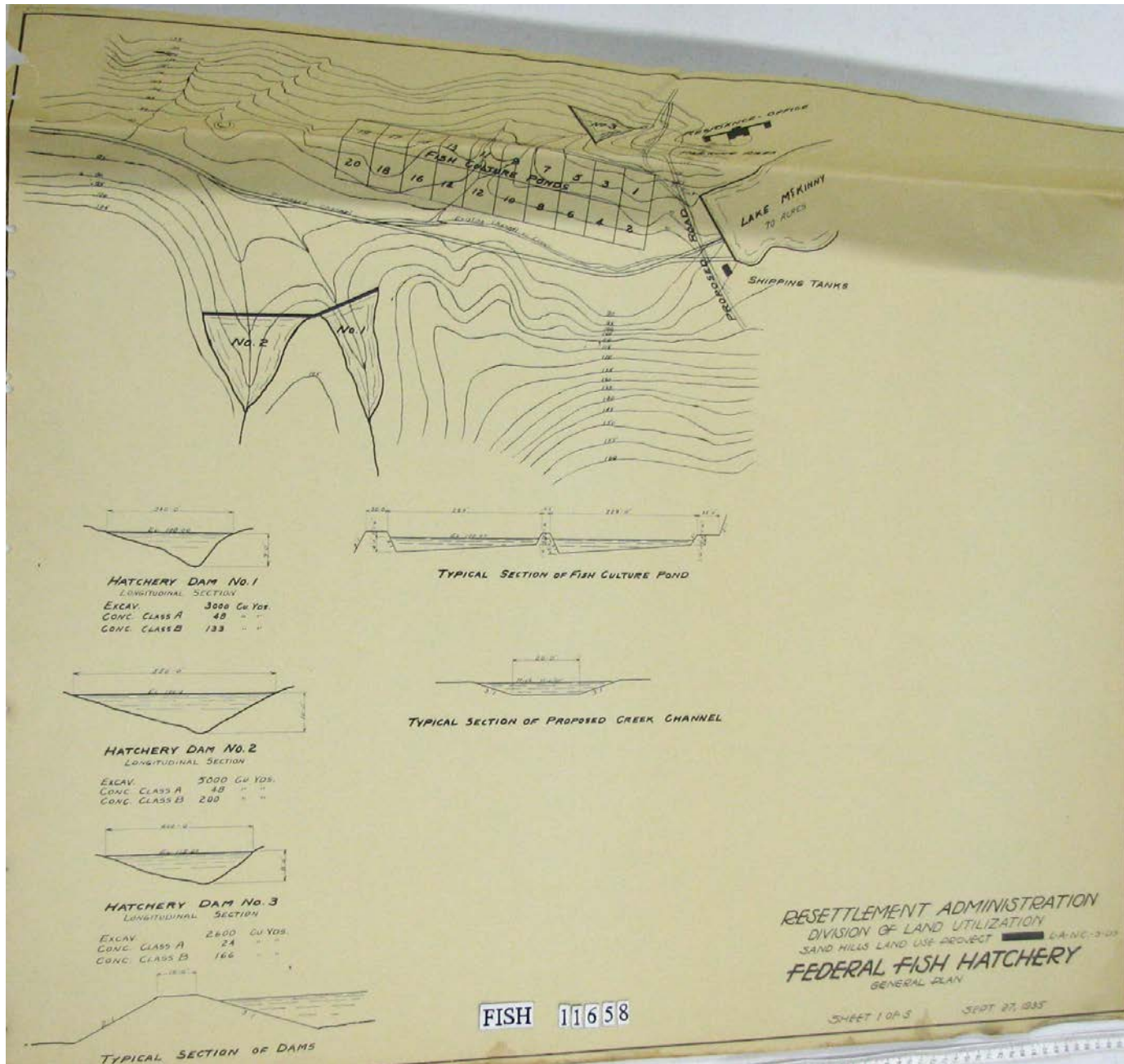


Figure 8. General plan or layout of McKinney Lake Hatchery, 1935 [Source: D.C. Booth Historic National Fish Hatchery and Archives].

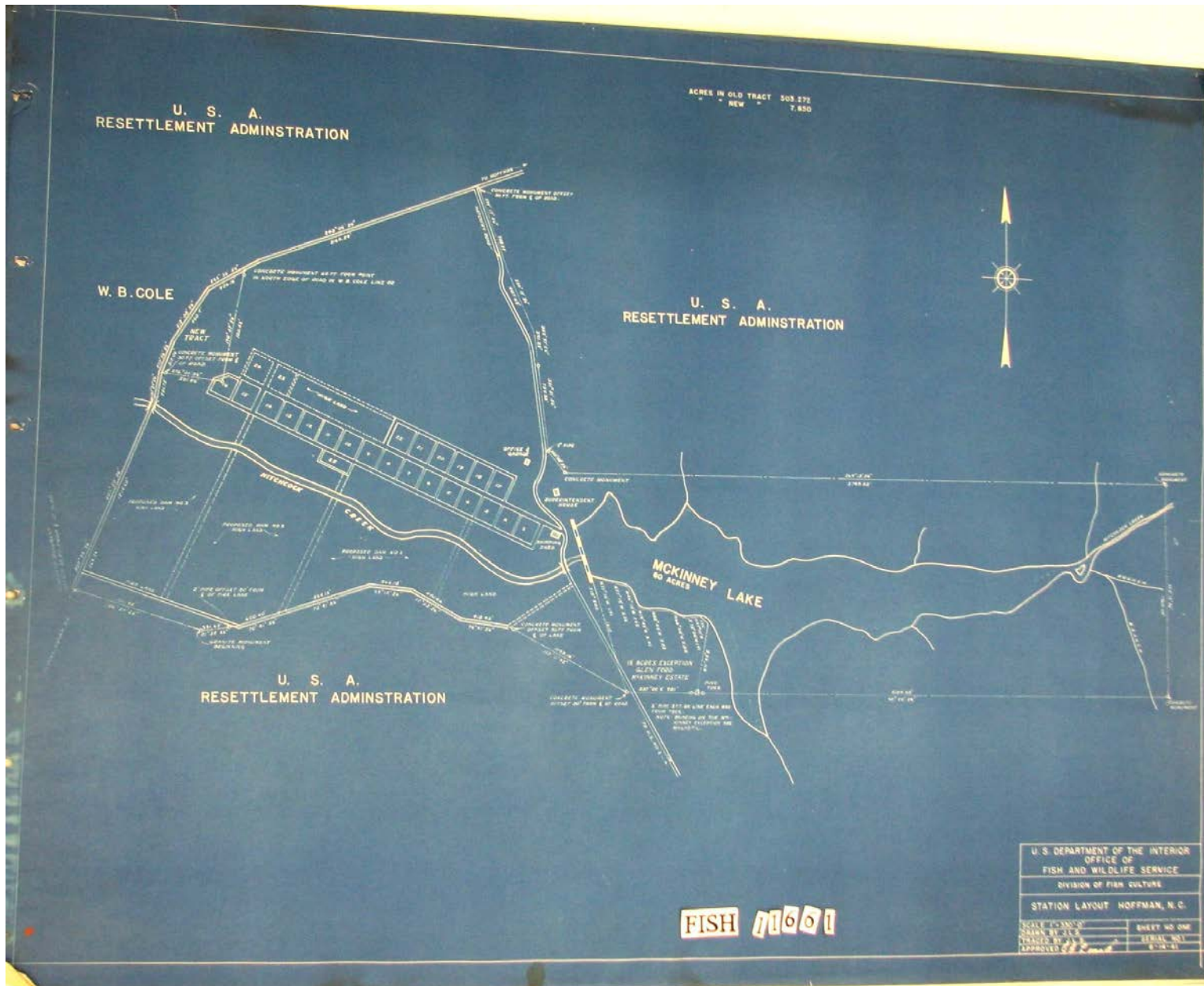


Figure 9. McKinney Lake National Fish Hatchery, ca. 1941 [Source: D.C. Booth Historic National Fish Hatchery and Archives].

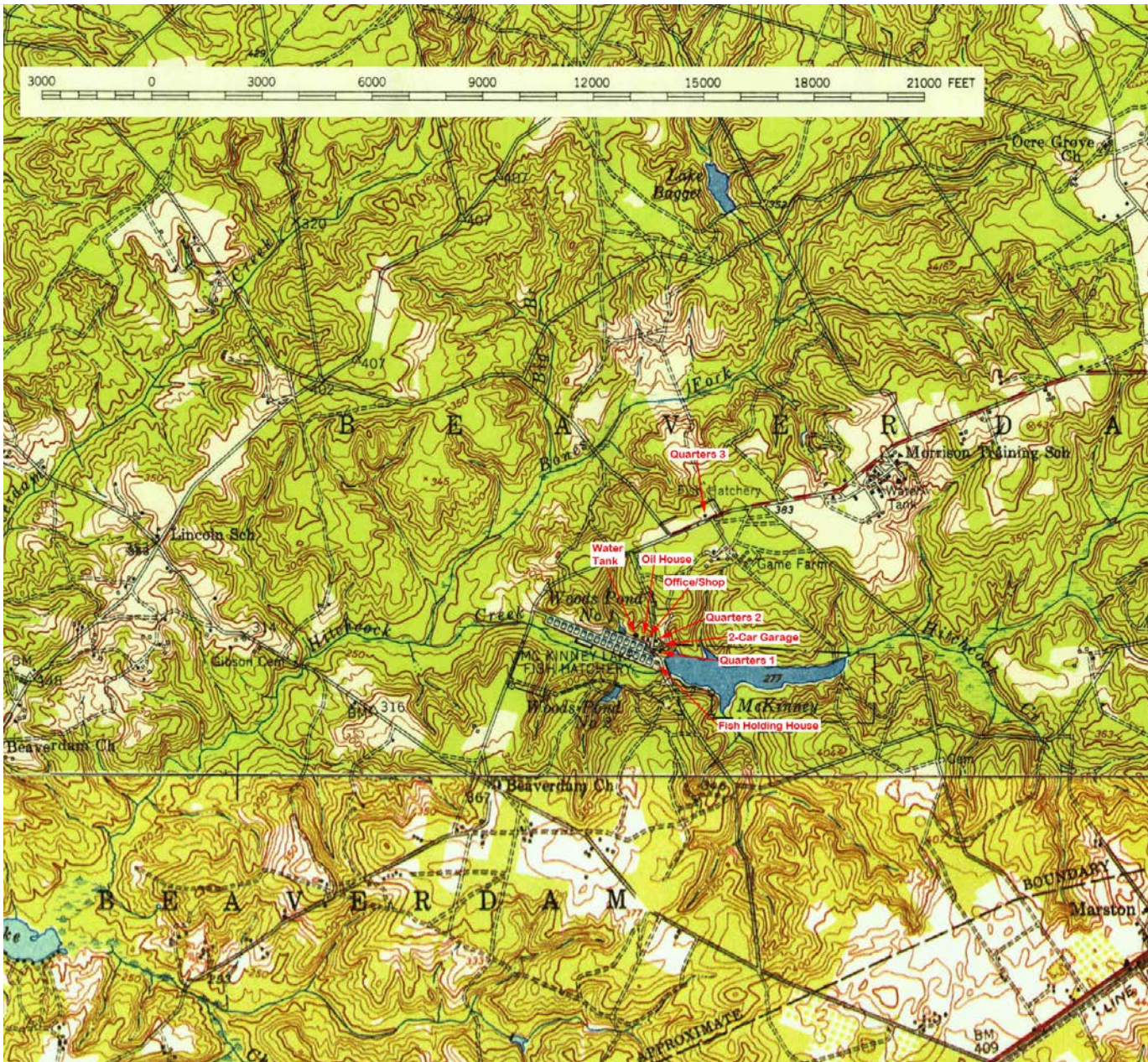


Figure 10. McKinney Lake National Fish Hatchery, ca. 1949 [Source: U.S. Geological Survey 1949a & b].

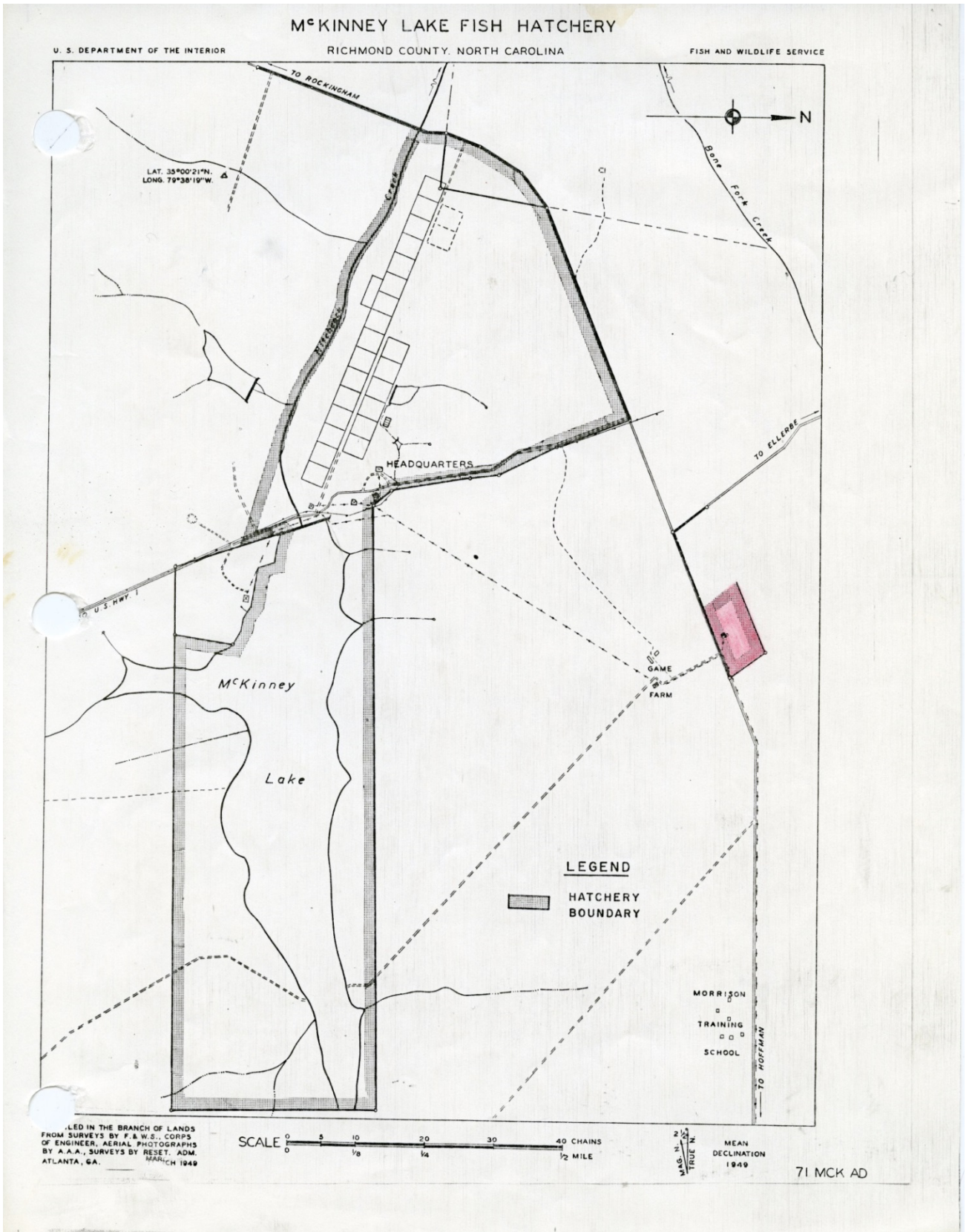


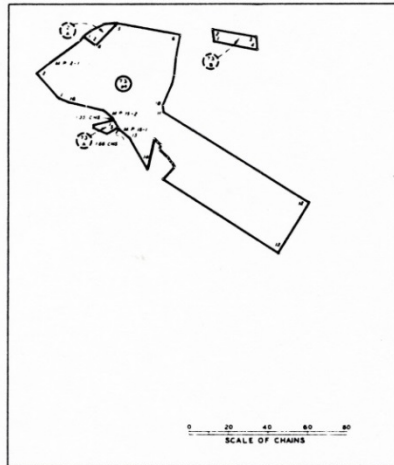
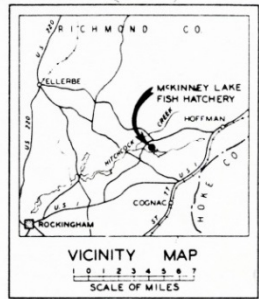
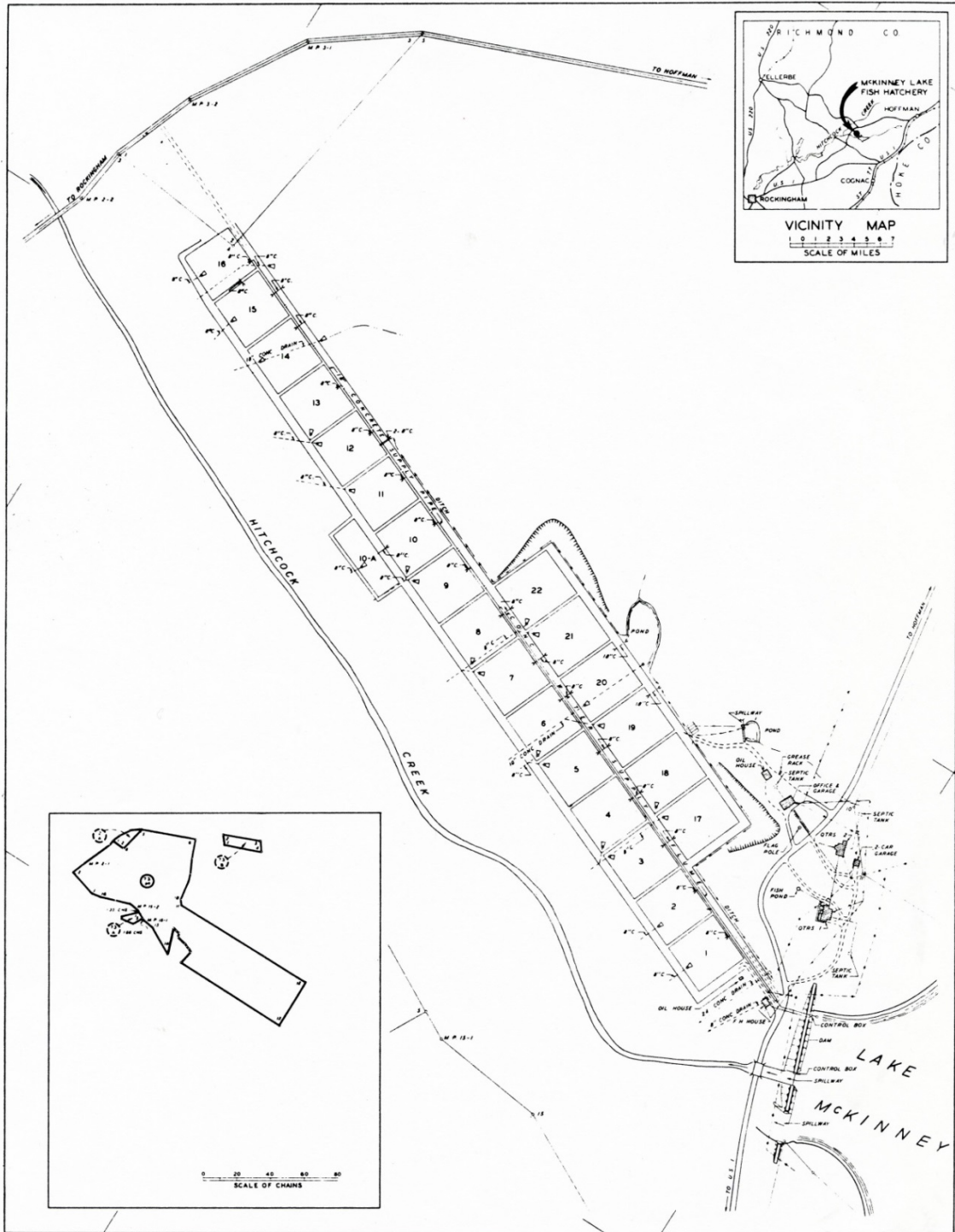
Figure 11. McKinney Lake National Fish Hatchery, 1949-1950. This sketch map shows the locations of Tract 73B and Quarters 3. The tract was purchased in 1949; the quarters moved to the tract ca. 1949-1950 and renovated in 1950 [Source: FWS, Division of Realty].

MCKINNEY LAKE FISH HATCHERY

RICHMOND COUNTY, NORTH CAROLINA

U S DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE



COMPILED IN THE BRANCH OF ENGINEERING FROM SURVEYS BY F. & W.S.

ATLANTA, GEORGIA

JULY, 1955



MEAN DECLINATION 1955

Figure 12. Station Layout, 1955 [Source: FWS, Division of Realty].

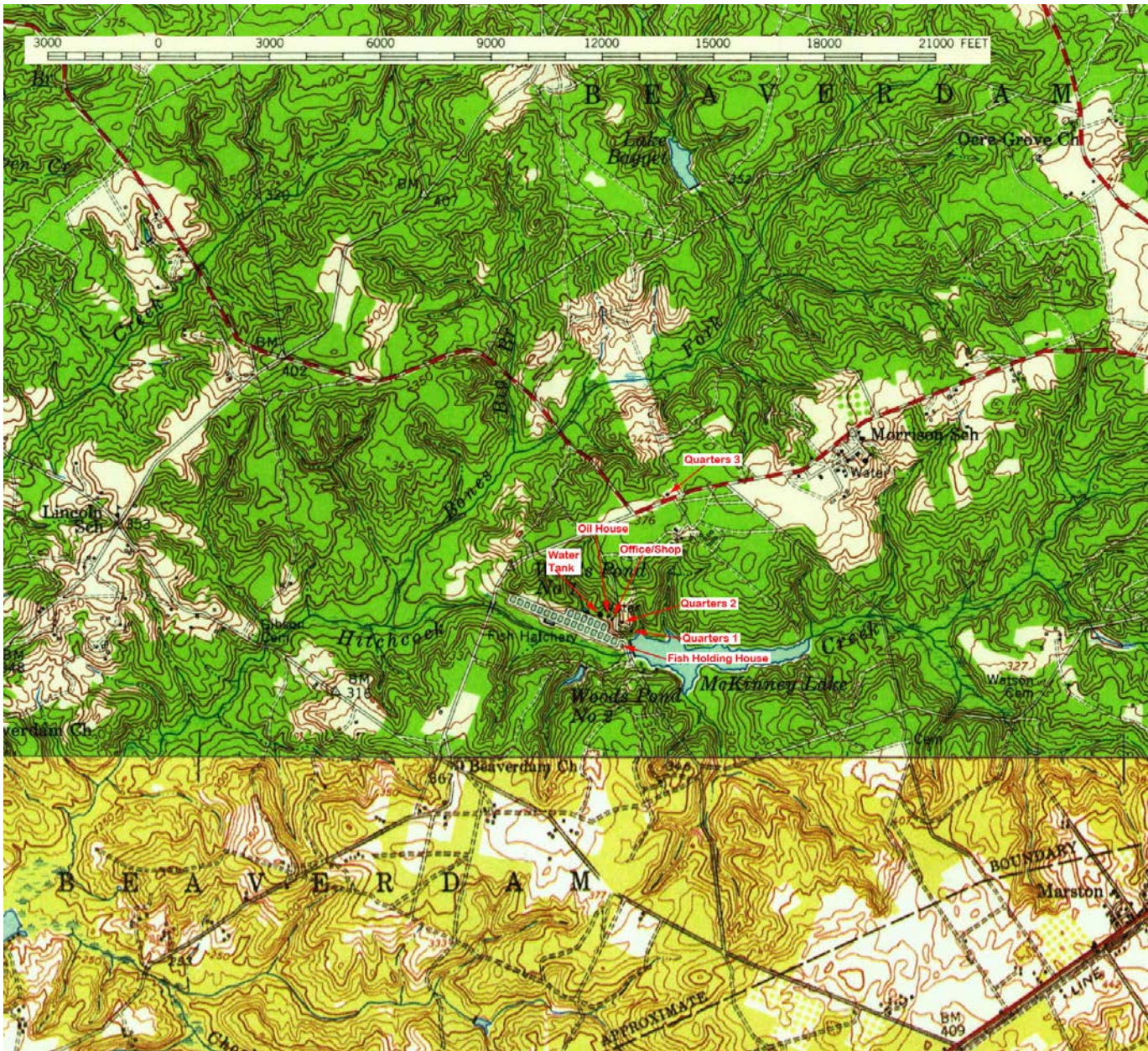


Figure 13. McKinney Lake National Fish Hatchery, 1957 [Source U.S. Geological Survey 1949a & 1957].

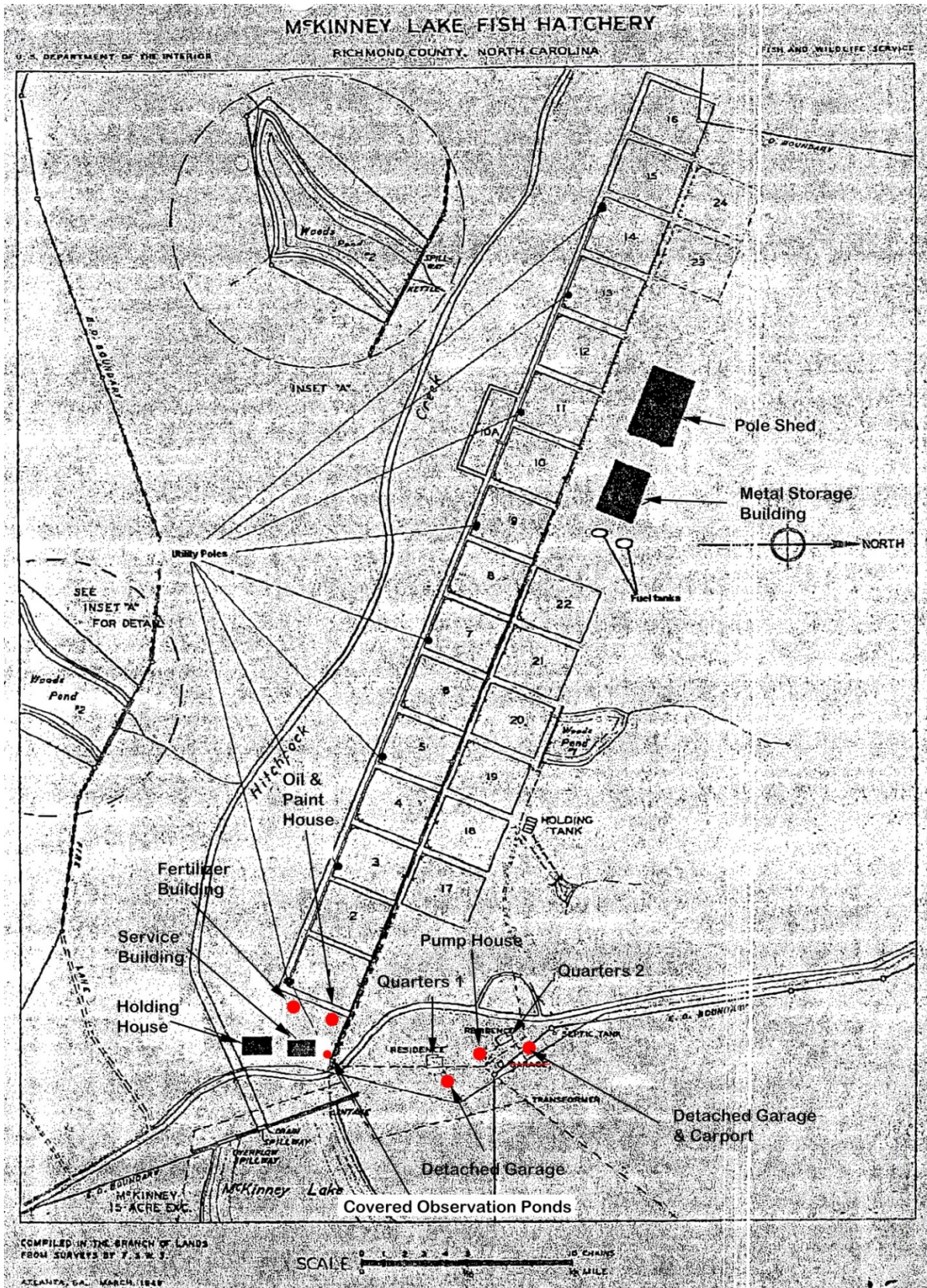


Figure 14. Station Layout, revised 2014 [Source: FWS, Division of Realty].

Hatchery production continued to grow, though it was slightly hampered during World War II due to restrictions on materials and labor (Fig. 15). The main goal was to produce panfish, such as largemouth black bass, warmouth, bluegill, red ear sunfish, and white crappie, in order to stock farm ponds, as well as natural and artificial lakes scattered across the Sandhills Game Land and nearby National Wildlife Refuges. By 1960, the hatchery was also producing white catfish. 1960 marked a turning point for the Region's warm water hatcheries as the demand for harvestable catfish increased. Production switched over from white catfish to its larger cousin, channel catfish. At present, the state-operated hatchery primarily raises channel catfish for use in stocking 23 of the 30 lakes in the Wildlife Resources Commission's community fishing program. Spawning of this species, however, occurs at the Watha State Fish Hatchery in Pender County (WRC 2014). Table 2 provides a breakdown of the hatchery's fish production between 1937 and 1981 (Figs. 16-18).



Figure 15. The Hatchery's ponds, ca. 1971 [Source: D.C. Booth Historic National Fish Hatchery and Archives].

The hatchery's acreage has expanded and contracted since its establishment (see Fig. 4). In 1949-1950, it acquired a 14-acre tract north of McDonald-Church Road. A "cottage-type" five-room house was purchased from a "government agency" and moved to this tract in 1949. The structure was substantially renovated in 1950. An one-car garage and a pump house was constructed (see the description for Quarters 3 and associated outbuildings below).

In 1974, the DOF reported to the General Services Administration that 99.3 acres were excess property no longer needed for the hatchery operations. Two areas were identified; 93 acres in "Area II, excepting an area extending 1.5 chains south of Hitchcock Creek and a small area at the foot of the dam and spillway." The second area was a 6.45-acre parcel, except around Quarters 3. The buffer provided a safety zone during hunting season and aided in the maintenance of fire lanes. This acreage appears to have been transferred to the WRC and is now part of the Sandhills Game Land.



Figure 16. Hatchery truck with fish “cans”, ca. 1965 [Source: D.C. Booth Historic National Fish Hatchery and Archives].

The hatchery began acquisition of the 14.20-acre Pavlik Tract and its approximately 600 feet of shoreline along McKinney Lake in early 1978. The tract was developed as part of its environmental education and interpretive programs that focused on the lake’s management, the ecosystems or habitat types present in the watershed, and the hatchery’s contributions to the area’s fishery resources. The hatchery proposed to construct an access road, a 10-car parking area, a visitors’ orientation pavilion, an one-mile trail wandering through the woods and the wetlands flanking the lake, and a boardwalk that would extend over the lake and wetlands. A three-bedroom house stood on the tract. The house was to be used as quarters for the assistant manager, who then resided in Quarters 3. The hatchery acquired the tract for \$72,000 in December 20, 1978. The house became the Hatchery’s Lodge and Meeting Room.

Tract 73B and Quarters 3 was deemed as excess property in 1984. Prior to the FWS’s disposal of the tract, Jim Cobb, then the Regional Archaeologist, conducted a Phase I archaeological reconnaissance of the property. His methodology included a pedestrian walkover, observations of the road cuts and firebreaks, and shovel testing. He did not identify any historic properties and found no evidence of earlier structures and/or historical activities prior to the hatchery’s acquisition in 1949-1950. The tract, like the earlier excess property appears to have been transferred to the WRC for inclusion in the Sandhills Game Lands (Cobb 1984).

Beginning in 1982, the FWS began internal discussions on hatchery closures. McKinney Lake National Fish Hatchery was among those proposed for closure in Fiscal Year 1983. The hatchery did not meet the “criteria that 50% or more of its production went into high priority Federal purposes.” The warm water

hatchery primarily stocked lakes, ponds, and other water bodies of North Carolina with striped bass, bluegill, channel catfish, red ear sunfish, largemouth bass, and flathead catfish. Major rehabilitation work was needed to improve the water delivery and production infrastructure, roads, and existing buildings. North Carolina and the U.S. Department of the Army both expressed interest in acquiring the hatchery.



Figure 17. Unloading goldfish and tadpoles in one of the hatchery's broodstock ponds, ca. 1965 [Source: D.C. Booth Historic National Fish Hatchery and Archives].



Figure 18. Weighing fish, ca. 1965 [Source: D.C. Booth Historic National Fish Hatchery and Archives].

Table 2. Hatchery Production, 1937-1981.

Year	Largemouth Black Bass	Warmouth	Sunfish (Bluegill & Red ear)	White Crappie	White Catfish	Channel Catfish	Striped Bass	Total
1937	Fry: 53,000 Fingerlings: 5,000	-	143,000					201,000
1938	Fry: 56,000 Fingerlings: 19,000	53,000	402,755	18,000				548,755
1939	Fry: 25,000 Fingerlings: 193,000	36,000	534,365	54,050				842,415
1940	151,625		278,285	8,890	25			438,825
1941	123,350							123,350
1943	98,475		88,670	1,700				188,845
1945	9,724		124,477 [Bluegill]	2,762				136,963
1960			1,394,000 [Bluegill & Red ear Sunfish]	5,000				1,399,000
1963	576,000		201,000 [Bluegill & Red ear Sunfish)		254,050	196 [Yearlings to be used as broodstock]		1,031,246
1964	Unspecified number of bass fry and fingerlings transferred to Millen National Fish Hatchery; unspecified number of catfish transferred to other hatcheries and other applications; no surplus available for bluegill and red ear sunfish. Channel catfish broodstock two years old.							-
1965	251,000		Bluegill: 1,560,000 Red ear sunfish: 670,000		254,000			2,735,000
1975	143,000		Bluegill: 907,000 Red ear sunfish: 384,000			87,000	225,000	1,746,000
1979	Numbers not broken down by species							2,633,561
1980								1,914,247
1981								1,872,468

The FWS formally transferred its responsibility for the North Carolina pond stocking program to the WRC on January 15, 1986 [Station Inspection 1986]. In 1996, the FWS and North Carolina executed a memorandum of agreement that transferred operations of the hatchery to the WRC's Fishery Management Program. The state assumed responsibility for all costs and expenses related to the operation and maintenance of the hatchery, including preservation of the structures and operational integrity. Only the dam and spillway was exempted from the agreement. Changes to the facility required approval in writing by the FWS [MOA 1448-40181-97-K-003, 1996]. Since 1996, hatchery production has focused on channel catfish. The state-operated hatchery annually produces more than 130,000 harvestable (8 to 12 inches) channel catfish.

Representative Larry Kissell (D-NC) introduced H.R. 1160 – McKinney Lake NFH Conveyance in 2011. A similar bill was shepherded through the Senate's Environment and Public Works Committee by Senator Kay Hagan (D-NC) and Senator Richard Burr (R-NC). P.L. 112-237 was signed by President Obama December 28, 2012.

The law contained four provisions integral to the current assessment. These are:

- The hatchery was to be used by the state solely for fishery and wildlife resource management;
- The hatchery would revert to the federal government if used for any other purpose;
- The property was to be maintained in “substantially the same or better condition” as its condition as of the date of the conveyance; and
- The FWS, if the Secretary of the Interior so requests, can use the hatchery in cooperation with the WRC for the propagation of any critically important aquatic resources to address a species' recovery or restoration.

The Built Environment: Buildings

The Resettlement Administration and the FWS's Division of Fisheries have shaped the hatchery's landscape since 1935. The development of the production ponds and the water supply network necessitated substantial excavation. McKinney Lake Dam and spillway was constructed between 1935 and 1937. The resulting 70-acre reservoir impounded portions of Hitchcock Creek and flanking wetlands. The lake serves as the primary source of water for the production ponds. Water flows through an open flume to 14 of the 23 ponds. The eight end ponds are supplied by a 20-inch pipe. Pond 10A is supplied a cross drain from Pond 10. The production ponds are drained by 8-inch pipes that empty into Hitchcock Creek. Two additional ponds, 0.5-acre Woods Pond # 1 and 2-acre Woods Pond #2, are spring fed. Woods Pond # 1 provided water to the daphnia or holding tanks located north of Ponds 18 and 19. Kanaski found no information regarding the use of Woods Pond #2, though the various maps and the 1935 General Plan or Layout showed it draining directly into Hitchcock Creek (see Fig. 7 above). Between 1937 and 1957, the domestic water supply was provided by a deep well located in the basement of Quarters 1. A new well, located between Quarters 1 and Quarters 2, was drilled in 1957 and covered with a pump house. This well provided water to both quarters, the old office-shop, the new Service Building, the Holding House, and the picnic area.

The hatchery's buildings have been broken into five groups based upon proximity (Fig. 19 and Table 3). Each building is individually described. The accompanying photographs, when available, depict a building and the surrounding landscape in 1947, 1954, 1971, and 2013. With the exception of the dam, the ponds, and the two quarters, the majority of the buildings were constructed after 1955.

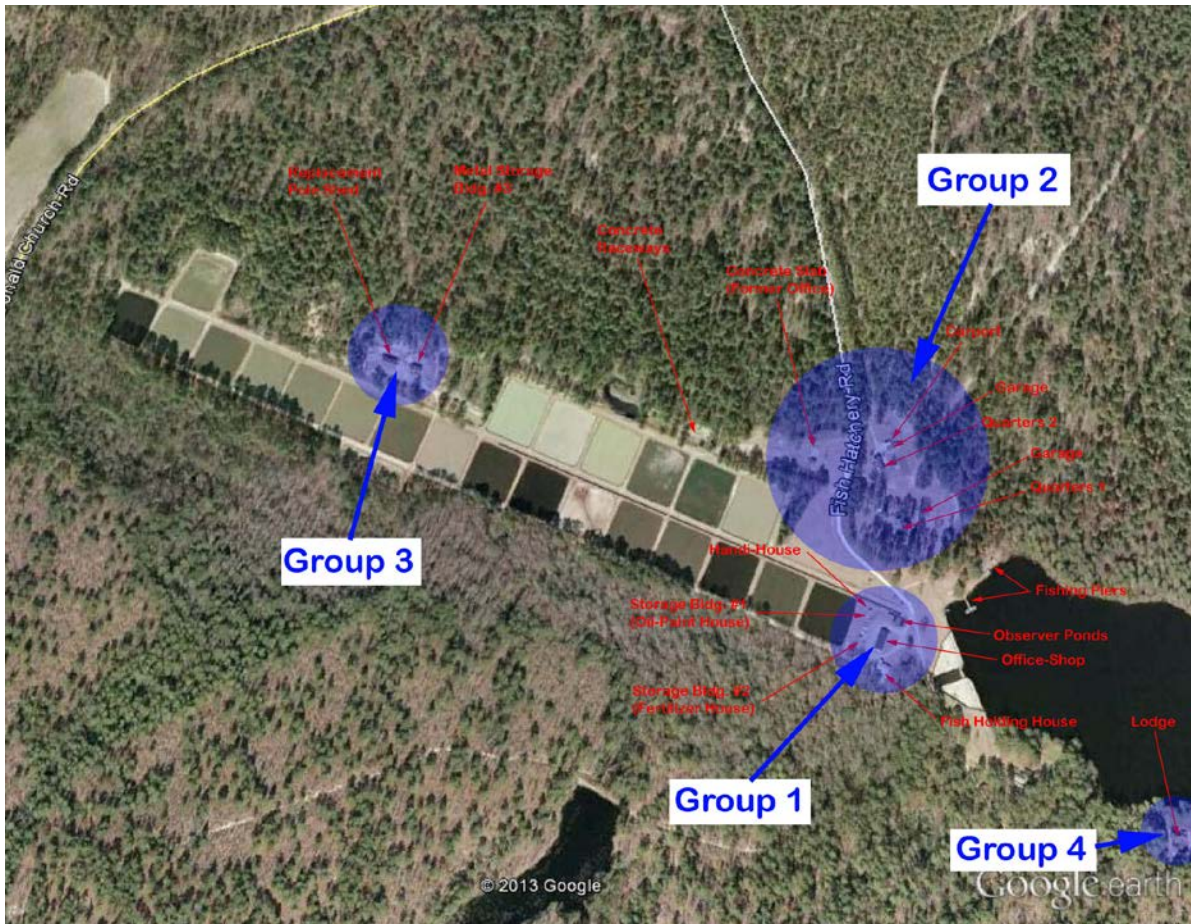


Figure 19. Building Groups 1 - 4. The fifth group is on Tract 73B, north of the Game Farm.

Table 3. Hatchery Buildings, 1935-2014.

Building	Date of Construction	Date of Alteration	Date Removed
Group 1			
Old Service Building [Garage & Storage]	1937		1940-1941
Service Building [Combination Office-Shop-5 Bay Garage]	1957		
Holding House	1958	Post-1971	
Fertilizer House	1962	Post-1971	
Oil & Paint House	1955		
Handi-House	-		
Old Fish Holding House	1939	1945	1960
Covered Observation Ponds	1963-1964		
Group 2			
Quarters 1	1937	1971	
Detached Brick One-Car Garage	1965		
Quarters 2	1938		
Detached Frame Two-Car Garage	1938		1970(?)
Detached Brick One-Car Garage	1970		
Pump House [Domestic Well for Quarters, Former Office]	1957		

Old Office/Shop	1938	1943-1944	Pre-2005
Temporary Oil House	1947		1959-1960(?)
Group 3			
Metal Storage Building	1975		
Replacement Pole Shed	Pre-2013		
Group 4			
Lodge	1978 [Date Acquired]		
Group 5			
Quarters 3	1949 [Date Acquired]	1950, 1954, & 1963	1984
Detached Frame One-Car Garage	1950		1984
Pump House	1950		1984

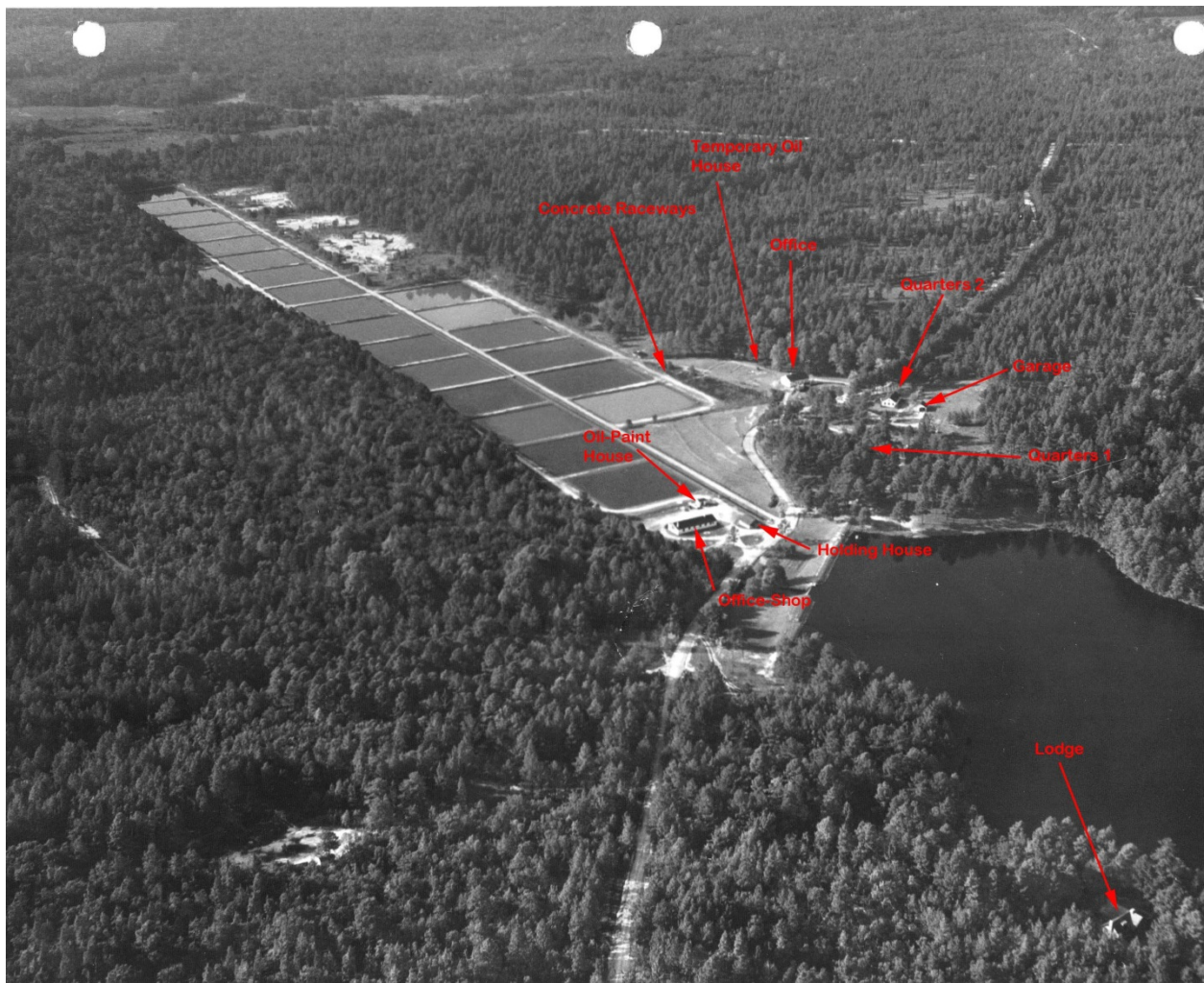


Figure 20. 1959 aerial photograph of the Hatchery [Source: D.C. Booth Historic National Fish Hatchery and Archives].



Figure 21. Group 1 [Source: Google Earth 2005].

Group 1 consists of six structures located between McKinney Lake Dam and Pond 1 (Fig. 21). The group includes the Service Building [Office/Shop], the Fish Holding House, the Covered Observation Ponds, the Fertilizer Building [Storage Building #2], the Oil and Paint House [Storage Building #1], and a Handi-House. Figures 20 and 22 show the hatchery's layout in 1959. The "old" fish holding house is still standing. This structure was removed and a "new" and larger holding house was built just south of the Service Building. The concrete tanks in the "old" fish holding house were converted into display or observation ponds. The fertilizer house was built south of the Oil and Paint House in 1962.

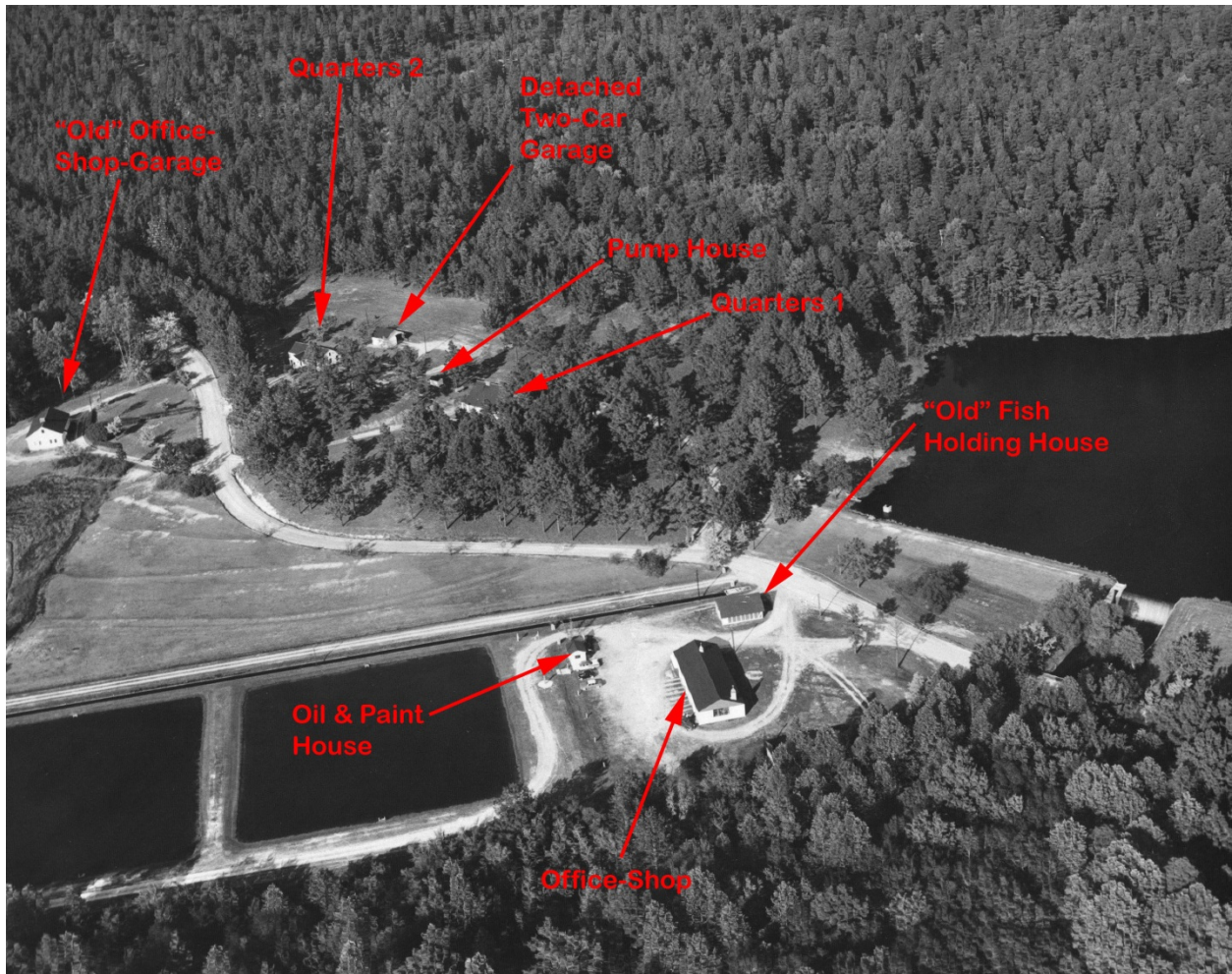


Figure 22. Aerial photograph of Groups 1 and 2, ca. 1959 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

“Old” Service Building

The Resettlement Administration constructed a two-bay garage and storage building ca. 1935 (Fig. 23). The building’s meat locker caught fire in April 1941 destroying it. No photographs of the structure exist. The “new” Service Building was built on its footprint in 1957.

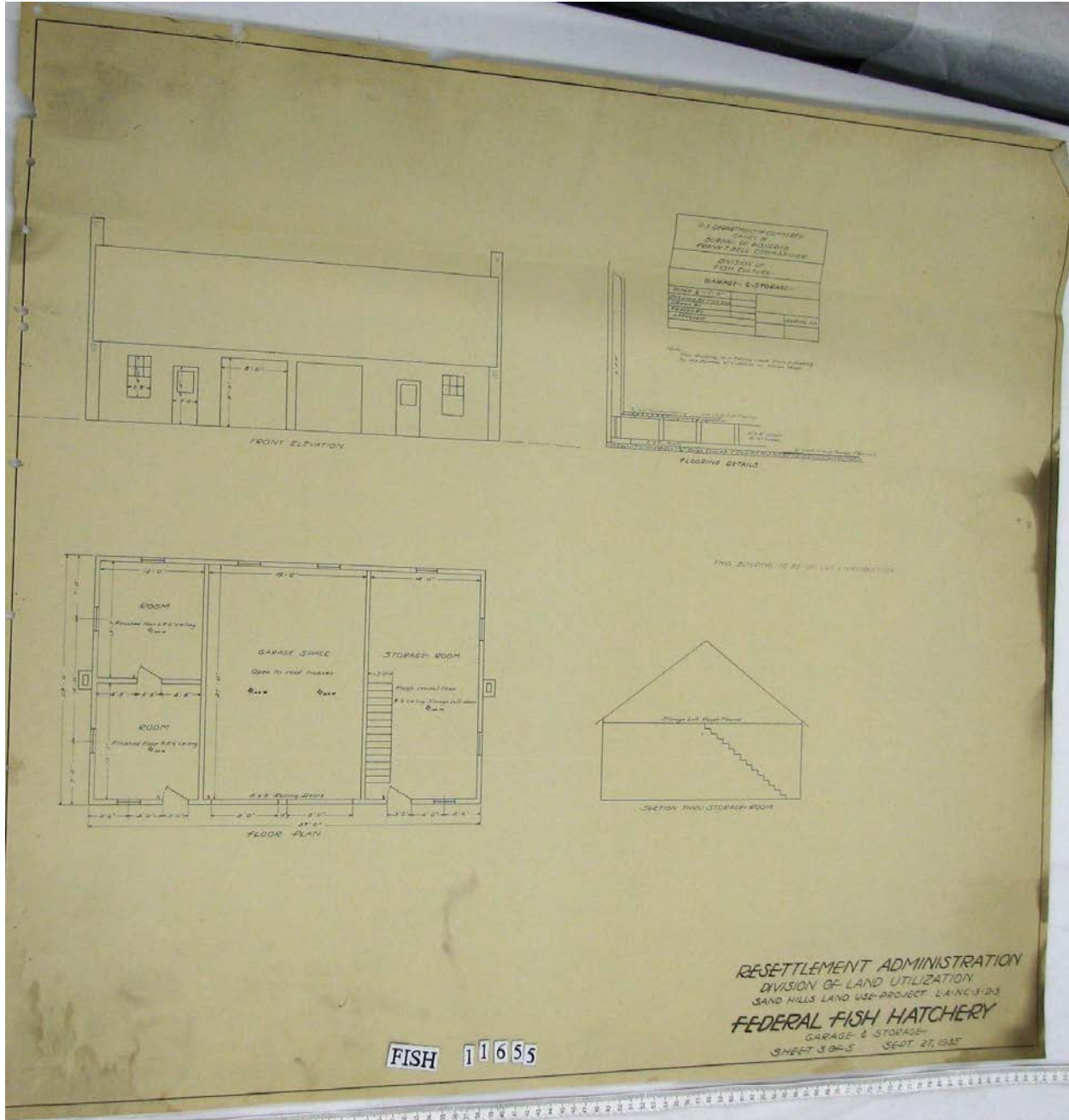


Figure 23. Service Building [Office, Shop, and Two-Bay Garage], 1935. This structure was destroyed by fire in 1940. The current Service or Combination Building was built on its footprint in 1957 [Source: D. C. Booth Historic National Fish Hatchery and Archive].

New Office/Shop (Service Building)

The “new” Service Building was constructed in 1957 for \$17, 357. The concrete block structure’s dimensions were 77 feet 10 inches x 30 feet. It had a wood frame roof initially sheathed with asphalt asbestos shingles. One the northern end of the structure was a 17-foot x 30-foot office, closet, and bathroom with showers. The shop was located on the southern end, but primarily served as storage space for hand tools. The shop’s dimensions were 27 feet, 5 inches x 16 feet, 1 inch. It had four bays for vehicles. The office space, bathroom, and the shop were heated by a forced air oil furnace. The four-bay garage was most likely unheated. An air conditioning unit was installed in 1958. An awning over the west end of the building and the door the office was added in 1960 (Figs. 24 & 25). The awnings have since been removed. The office’s fenestration has changed, as well. The first vehicular bay has been closed. The overhead garage doors have changed from wood to metal doors (Fig. 26).



Figure 24. “New” Service Building, northwest corner, ca. 1971. The awning over the office’s door was added in 1960 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 25. "New" Service Building, front elevation, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 26. "New" Service Building, northwest corner, 2013 [Bradford 2013].



Figure 27. “New” Service Building (rear elevation) and “New” Holding House, looking southwest, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

“New” Holding House

The “new” holding house is located south of the “new” Service Building (Fig. 27). It replaced the earlier and smaller holding house, which had been converted into display ponds in the 1960s. The 41-foot x 32 foot 8 inch concrete block structure was constructed in 1958-1959 for \$12,200. Inside the holding house were 16 concrete tanks feed by a 6-inch pipe running from McKinney Lake. Initially the structure had hardware cloth covering the openings between the concrete block walls and the roof. Glass windows were installed in 1962-1963 (Figs. 28-29). A concrete block ell with a shed roof was added between 1971 and 2013 (Fig. 30).



Figure 28. "New" Holding House, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 29. "New" Holding House, north side elevation, ca. 1971. The rear elevation of the "New" Service Building is visible on the right side of the photograph [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 30. “New” Holding House, 2013. Note the concrete block addition with shed roof [Bradford 2013].



Figure 31. The Yard, looking east from the ponds, ca. 1971. This view shows the “New” Service Building, the “New” Holding House, Oil and Paint Building, and the Fertilizer Building, but not the “Old” Holding House or Covered Observation Ponds [Source: D. C. Booth National Historic Fish Hatchery and Archives].

Fertilizer Building (Storage Building 2)

The Fertilizer Building (Storage Building #2) was constructed in 1962 (Figs. 31 & 32). The 10-foot x 20-foot concrete block building stored fertilizer and fish food. It was expanded between 1971 and 2013 (Fig. 33).



Figure 32. Fertilizer House, northeast corner, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 33. Fertilizer House, southeast corner, 2013 [Bradford 2013].

Oil and Paint House (Storage Building 1)

The Oil and Paint House (Storage Building #1) is a 140-square foot concrete block building constructed in 1955. The building has double doors on the front and windows in each gable end (Figs. 31 & 34).



Figure 34. Oil and Paint House, front elevation, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 35. Oil and Paint House and the Handi-House, looking northwest, 2013 [Bradford 2013].

The building has changed little since its original construction, except that a gutter with one downspout has been added. A metal handi-house stands adjacent to and north of the building (Fig. 35).

*“Old” Fish Holding House
[Covered Observation/Display Ponds]*

The “old” holding house covered four concrete tanks. The tanks, which were one of two such holding tanks on the hatchery, were 17 feet 9 inches long, 4 feet wide and 2 feet 9 inches deep. The other set of holding tanks were located north of Ponds 18 and 19. The frame holding house was erected ca. 1945 (Fig. 36). The sides were wire mesh. The loft provided storage space. Water was piped in from McKinney Lake by a 150-foot long galvanized pipe.



Figure 36. “Old” Fish Holding House, ca. 1959-1960 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

In 1960, the structure was supposedly remodeled in order to store fertilizer. The tanks were to be filled in with sand and a concrete floor poured. Between 1960 and 1963, the tanks were converted to display pools. The flat roofed structure, now covering the pools, was erected after 1971 (Figs. 37 & 38).



Figure 37. Covered Observation Ponds, southwest corner, 2014 [Bradford 2014].



Figure 38. Observation Ponds. These tanks were originally constructed in 1939 and subsequently enclosed or covered by the “Old” Fish Holding House. The tanks became “display ponds in 1960 [Bradford 2014].

Group 2

Group 2 is located in the northeast corner of the hatchery and includes two quarters or residences, two detached one-car garages, and the pump house. West of Fish Hatchery Road, the office-shop and temporary oil house once stood (Fig. 39).



Figure 39. Group 2 [Source: Google Earth 2005].

Quarters 1

Quarters 1 was constructed in 1937 for the Hatchery Superintendent by the Resettlement Administration (Fig. 40). The five-room frame cottage sat on a stone and concrete foundation. The cottage is also described as a “square” house type. The 37 foot x 33-foot foundation housed an 18-foot x 25-foot basement, a coal bin, and a well. The well, as noted above, provided water for both quarters. On the first floor, there was a kitchen, two bedrooms, a bath, and a hall. The residence was initially heated by a coal burning stove located in a utility room on the first floor. A coal burning laundry type stove, located in the kitchen, provided hot water. The heating stove was replaced with a forced warm air oil heating system in 1971.

The garage was originally located under the front porch, but a detached one-car garage was constructed in 1965. Two additional rooms were added to the house by 1971 (Figs. 40-43). Since the early-mid

1990s, the house has been re-sided and the windows replaced (Bradford, personal communication: 2013) (Fig. 44).



Figure 40. Quarters 1, ca. 1937 [Source: Department of Agriculture 1937].



Figure 41. Quarters 1, south gable end, ca. 1947 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 42. Quarters 1, northwest corner, ca. 1954 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 43. Quarters 1, front elevation, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 44. Quarters 1, front elevation, and detached one-car garage 2013 [Bradford 2013].

Detached One-Car Garage

A detached one-car garage was built in 1965, replacing the one beneath Quarters 1's front porch (Figs. 45-46). The garage was constructed using graytone #401-v brick and cement block. Its dimensions are 13 feet x 26 feet. It is located behind the house (see Fig. 44). The brick exterior has been repainted white (Fig. 47).



Figure 45. Quarters 1's detached one-car garage, northwest corner, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 46. Another view of the detached garage, southwest corner, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 47. Quarters 1's detached one-car garage, southwest corner, 2013 [Bradford 2013].

Quarters 2

Quarters 2 was constructed in 1938 for the Hatchery's assistant superintendent by the Resettlement Administration. It is described as a 6-room frame cottage on a brick foundation. It had a wood shingled roof, which was replaced with 300 lb. sealed shingles in 1964. The foundation was 48 feet x 26 feet and housed a 23.5-foot x 10-foot 8 inch basement (Figs. 48-50). Like Quarters 1, it was initially heated by wood and coal. By 1967, it was heated by a forced warm air oil heating system. Since the early-mid 1990s, the house's wood shingles have been replaced with clapboard siding. The 6-over-6 sash windows were replaced with one-over-one sash ones at this time (Bradford, personal communication: 2013) (Fig. 51).



Figure 48. Quarters 2, southwest corner, ca. 1947. The frame two-car garage is visible on the right side of the photograph [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 49. Quarters 2, front elevation, ca. 1954. The two-car gar is visible on the right side of the photograph [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 50a & b. a: Quarters 2, southwest corner, 1971. b: South gable end, 1971. The detached one-car garage is visible in the background [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 51. Quarters 2, southwest corner, 2013 [Bradford 2013].

Detached Two-Car Garage

A detached two-car garage was located behind and east of Quarters 2 (Figs. 48 & 49). It was built in 1938; only one stall was assigned for use by Quarters 2. The wood frame structure was 20.5 feet x 20.5 feet. It had an “earth foundation and floor,” though an earlier description referenced a foundation of “brick pillows.” It had two 8-foot opening; each with double doors. Like the adjacent quarters, it was covered by wood shingles (Figs. 52 & 53). It appears to have been removed at or prior to the construction of a detached one-car garage in 1970.



Figure 52. Detached frame two-car garage, southwest corner, ca. 1947 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

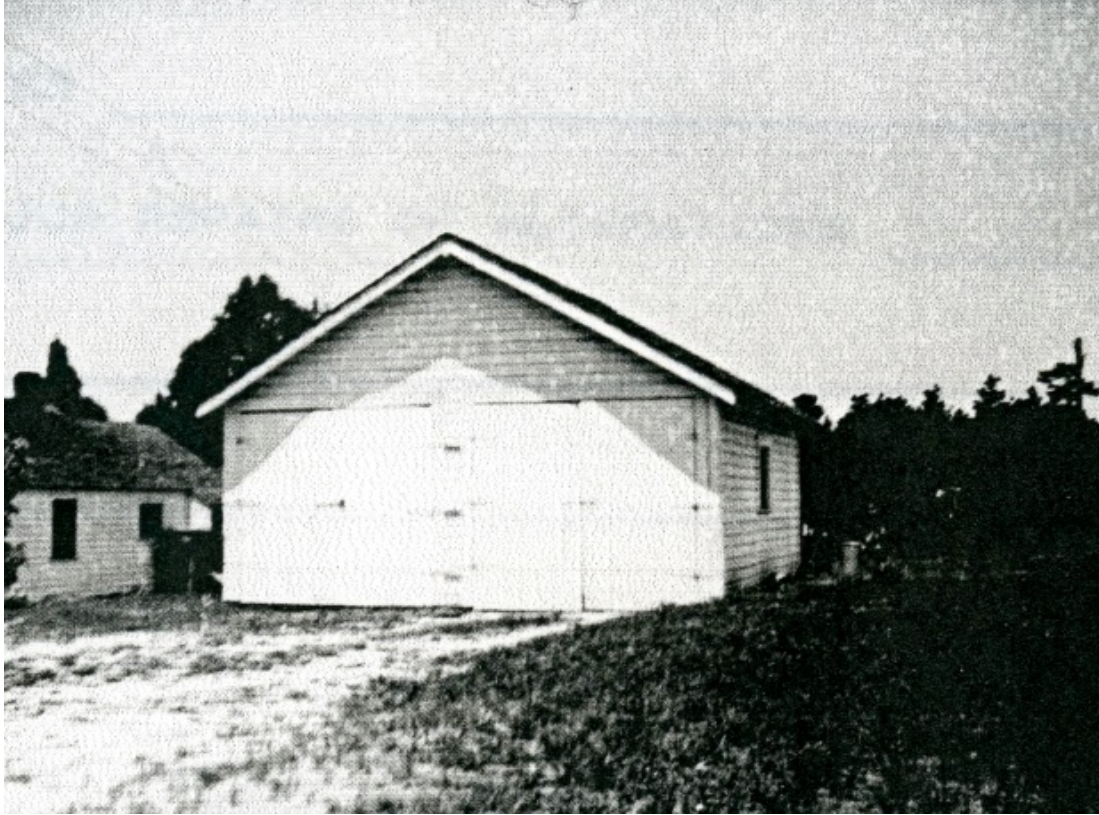


Figure 53. Detached frame two-car garage, front elevation, ca. 1947 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

Detached One-Car Garage

In 1979, a detached one-car garage was constructed, replacing the earlier detached two-car frame garage (Fig. 54). This structure is identical in appearance to Quarters 1's detached garage. However, the brick envelope has not been painted (Fig. 55).



Figure 54. Detached brick one-car garage, front elevation, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 55. Detached brick one-car garage, southwest corner, 2013. The metal carport belongs to one of the hatchery's employees [Bradford 2013].

Pump House

The concrete block pump house, which is situated by Quarters 1 and Quarters 2, was constructed in 1957 (Fig. 56). The structure covered the hatchery's new well that supplied water to both quarters, the old office-shop, the new Service Building, the Holding House, and the picnic area. The foundation and walls were 8-inch concrete blocks. The roof was sheathed with asbestos shingles. Vents were placed in each gable ends below the eaves.



Figure 56. Pump House, which located between Quarters 1 and Quarters 2, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

“Old” Office-Shop-Garage

The hatchery's former office was constructed in 1937 (Figs. 57-60). The frame combination building housed a two-room office, a workshop, and a two-bay garage. It was equipped with bathroom facilities and a meat room. The structure was 28 feet x 28.5 feet and had a brick foundation and a concrete floor. Today only the concrete floor or slab remains. The office was located on the north end of the building with an exterior entrance. It was equipped with a bathroom, a shower, and a meat room. Originally, the workshop was larger, but the dividing partition or wall was moved in 1943-1944 in order to create a two-stall garage. After this alteration, the shop's dimensions were 15.5 feet x 8.5 feet. By 1960, this structure was being used primarily for storage. The building apparently had 2 separate bathrooms at one time. The toilets were replaced in 1960 to accommodate the increased number of children that visited the hatchery during the summer. The structure still stood in 1972, but it was described as an “eyesore and ready to fall down.” The date of removal is unclear, though it seems to have been removed prior to 1995.



Figure 57. "Old" Office-Shop-Garage, front elevation, ca. 1947 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

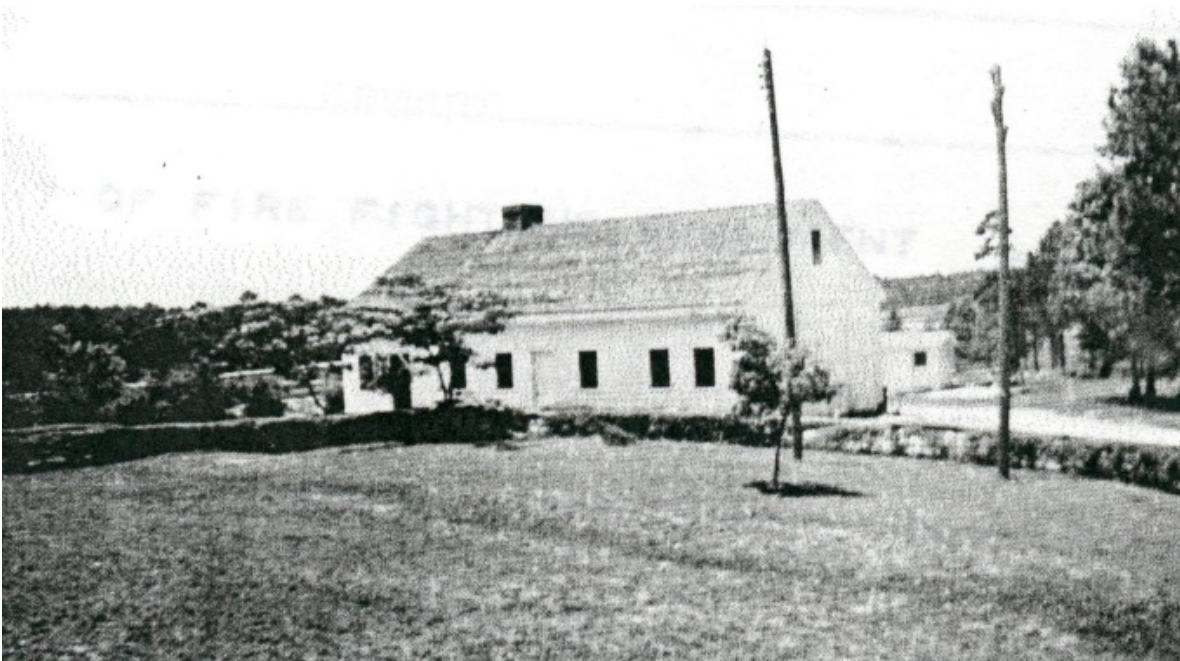


Figure 58. "Old" Office-Shop-Garage, northeast corner, ca. 1947. The temporary oil house is visible in the background on the right side of the photograph [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 59. "Old" Office-Shop-Garage, front elevation, ca. 1954. Note the shrubs that once flanked the sidewalk are gone [[Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 60. "Old" Office-Shop-Garage, rear elevation, ca. 1947. The doors lead into the shop and the rear office [Source: D. C. Booth Historic National Fish Hatchery and Archives].

Temporary Oil House

The hatchery built a frame “temporary” oil house in 1947 (Figs. 61 & 62). The structure was located west of the “Old” Office-Shop-Garage (see Fig. 58). The 8-foot x 16-foot frame building sat on a cement floor. The date of removal is unknown, though it was probably removed shortly after the construction of the new oil and paint house in 1955.



Figure 61. Temporary Oil House, northeast corner, ca. 1947 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 62. Temporary Oil House, southeast corner, ca. 1947 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

Daphnia Tanks

The daphnia tanks are four concrete tanks located north of Ponds 18 and 19. These were constructed by at least 1945. Each tank measures 25 feet 3 inches in length, 8 feet 2 inches in width, and 3 feet in depth. Their water supply is from nearby spring fed Woods Pond #1. The tanks held bass fry and fingerlings.

Group 3

Group 3 is located north of Ponds 10 and 11. The group includes a pole shed and a metal storage building (Fig. 63).



Figure 63. Group 3 [Google Earth 2005].

Replacement Pole Shed

The pole shed is a seven-bay equipment storage building. Five of the bays are open; the last two bays are closed. The structure replaced an earlier pole shed at this location and was constructed in the last decade (Bradford 2013).



Figure 64. Replacement Pole Shed, 2013 [Bradford 2013].

Metal Storage Building (Storage Building 3)

This structure was constructed in 1975 (Fig. 65). The 1975 Station Inspection described it as a 30-foot x 40-foot x 10-foot metal building with five skylights. It was set on a concrete slab. The roof and walls were 20 gauge galvanized steel.



Figure 65. Metal Storage Building, 2013 [Bradford 2013].



Figure 66. Group 4 [Google Earth 2005].

Lodge and Meeting Rooms

The Lodge is located on the Pavlik Tract [Tract 74], which was acquired in fee title by the FWS in 1978 (Fig. 66). Acquisition of the Pavlik Tract had three purposes: 1) reduce the threat of development along the lake and potential impacts to the hatchery’s water supply; 2) develop an educational and interpretive program that focused on the lake’s ecosystem and the on-going fishery program; and 3) use the existing L-shaped house as quarters for the Hatchery’s assistant manager. The Hatchery thought that the L-shaped house could be used as quarters for its assistant manager, who was then residing in Quarters 3. The residence was apparently never used as quarters, but converted for use as a lodge and conference space. Date of construction and any subsequent alterations are unknown, though the structure does appear on the 1959 aerial photograph (see Fig. 20).



Figure 67. Lodge and Meeting Rooms, 2013 [Bradford 2013].



Figure 68. Group 5 (Tract 73B) [Google Earth 2005].

Group 5 is a cluster of buildings located on the Hatchery's Tract 73B (Figs. 4 & 68). This tract is a non-contiguous parcel fronting McDonald Church Road. It was acquired in 1949-1950. A house was moved to the tract in 1949 and renovated for use as quarters for hatchery staff. This cluster also includes a detached one-car garage and pump house (Fig. 69). The tract was formally divested by the FWS in 1984.

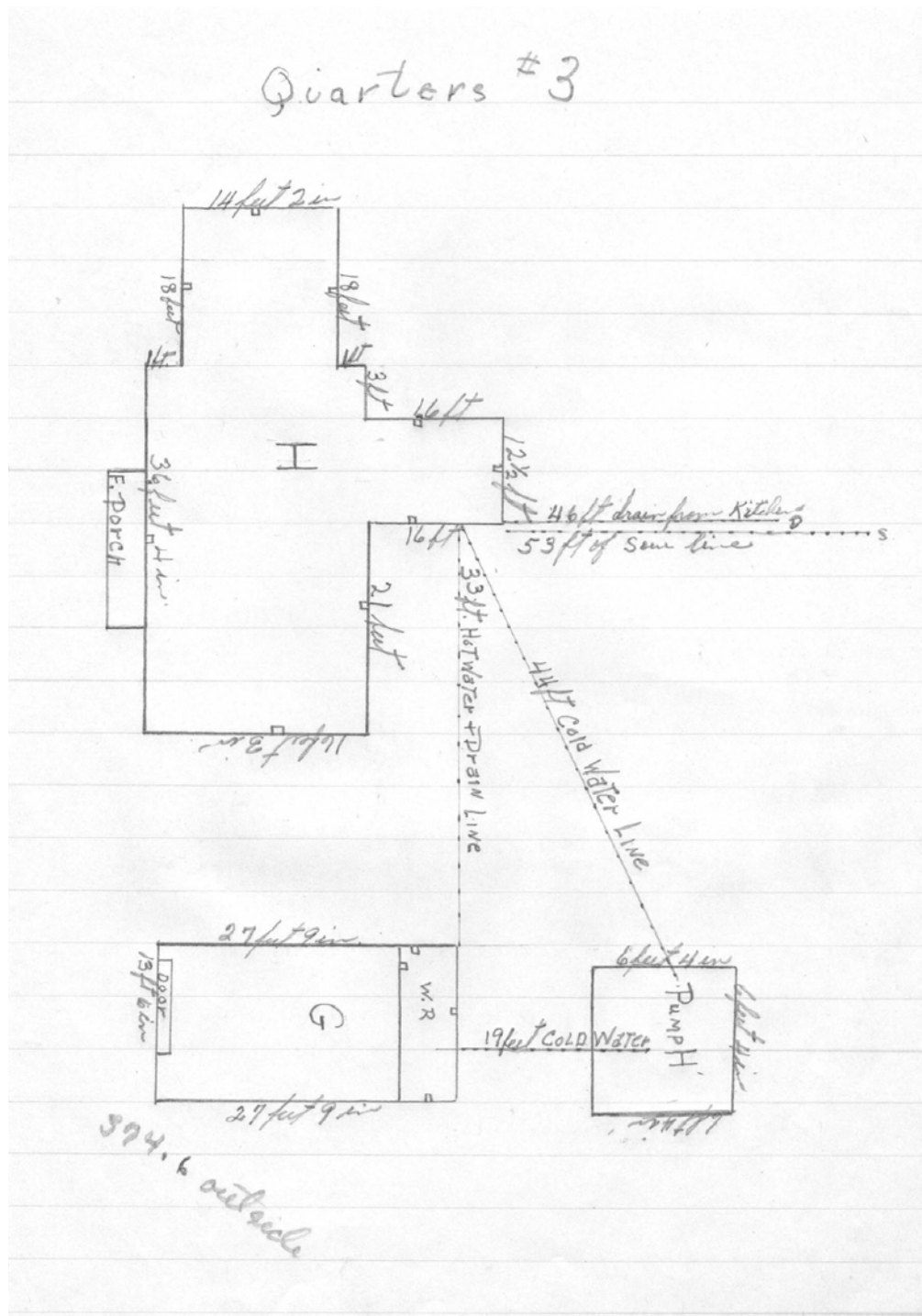


Figure 69. Hand-drawn site plan showing Quarters 3, detached one-car garage, and pump house ca. 1950-1955 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

Quarters 3

Quarters 3 was “acquired from other government properties in 1949” and relocated to Tract 73B (Fig. 70). The 1949 annotated Station Guide described the house described as a three-room cottage with a bath. In 1950, the structure was leveled and underpinned with cement blocks. White clapboard siding replaced

the earlier wood clapboards. Two rooms were added, one in 1954 and the second one in 1963. Heating was initially provided by two fireplaces, but were upgraded to a central oil heating system by 1970. Associated with the house were a detached one-car garage and a pump house (Figs. 71 & 72).



Figure 70. The original look of Quarters 3, ca. 1949 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 71. Quarters 3 and Detached One-Car Garage, ca. 1954 [Source: D. C. Booth Historic National Fish Hatchery and Archives].



Figure 72. Quarters 3, front elevation, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

Detached One-Car Garage

A detached one-car garage was located on east side of Quarters 3 (Fig. 73). The 27-foot x 27-foot frame structure was constructed in 1950. It has a cement block foundation. The exterior envelope was covered with white asbestos shingles.



Figure 73. Detached One-Car Garage, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

Pump House

The pump house, also constructed in 1950, is located behind Quarters 3 (Fig. 74). It is a wood frame building with white asbestos siding, set on an eight-inch concrete block and cement foundation.



Figure 74. Pump House, ca. 1971 [Source: D. C. Booth Historic National Fish Hatchery and Archives].

National Register Eligibility

Determining whether a historic property is eligible for inclusion on the National Register of Historic Places is a multiple step process.

- Identify the type of property under consideration. The National Register staff established five broad classes: a district, an archaeological site, a building, a structure, and an object.
- Identify the historic context(s) the property represents within a relevant geographic area. Historic contexts fall into five very categories: American history, architecture, archaeology, engineering, and culture.
- Apply the National Register criteria to determine whether the property is significance. These criteria include: A) Event; B) Person; C) Design/Construction; and D) Information Potential.
- Determine whether the property retains integrity by examining seven aspects: location, design, setting, materials, workmanship, feeling, and association (National Register of Historic Places Staff 1997).

McKinney Lake National Fish Hatchery falls within the broad contexts of conservation efforts in the North Carolina Sandhills beginning in the mid-1930s, as well as the emergence of the federal warm water fish hatchery system. Two other potential broad contexts were identified, but rejected due to issues relating to integrity. The first such context was Native American history and archaeology; the second

context dealt with late 19th – early 20th century agriculture. There are no currently no identified Native American archaeological and/or historic sites located on the hatchery. While the lack of such sites may be a reflection of the paucity of systematic archaeological investigations, several other critical variables come into play – landform, slope, soils, wetlands, and land use. The hatchery is set within the rolling sandhills that are dissected by varying sized rivers, creeks, and streams. McKinney Lake drowned a section of Hitchcock Creek’s narrow floodplain and associated wetlands. The National Wetlands Inventory identified the current complex of wetlands as palustrine deciduous broad-leaved forested wetlands that are seasonally flooded (PFO1C); palustrine needle-leaved evergreen forested wetlands that are saturated (PFO4B); palustrine broad-leaved scrub-shrub semipermanently flooded wetlands that are diked and/or impounded (PSSIFh); and palustrine emergent and persistent wetlands that are semipermanently flooded (PEM1F).

The Natural Resources Conservation Service mapped the soils on and around the hatchery as well drained Ailey loamy sand, 8-15% slopes (AcC); somewhat excessively drained Candor and Wakulla soils, 8-15% slopes; very poorly drained Johnston mucky loam, 0-2% slopes, frequently flooded (JmA); moderately well drained Pelion loam sand, 0-2% slopes (PoA); somewhat excessively drained Wakulla and Candor soils, 0-8% slopes (WcB); and water (W) [Fig. 75]. Slope and drainage capability are the relevant parameters for determining archaeological potential. Slopes range from 0 to 15%; the wetter or more saturated soils being present or dominating the flatter areas. The archaeological potential for the hatchery, including the adjacent forested area appears to be very low to non-existent. Areas mapped as Wakulla and Candor soils, 0-8% slopes (WcB) possess higher archaeological potential, but very little of this soil type is present on the Hatchery. Much of this specific area has been impacted by the construction of the two quarters, detached garages, and associated infrastructure.



Figure 75. Soils.

Legend

- AcC = Ailey loamy sand, 8-15% slopes
- CaC = Candor and Wakulla soils, 8-15% slopes

JmA = Johnston mucky loam, 0-2% slopes, frequently flooded
PoA = Pelion loamy sand, 0-2% slopes
WcB = Wakulla and Candor soils, 0-8% slopes
W = Water

The late 19th–early 20th century agricultural landscape of this area was once dotted with small tenant, sharecropper and/or owner-operated farms. The Resettlement Administration (1937: 2) targeted this part of the state as it was considered to be “substandard or so-called submarginal land.” By 1937, the administration had purchased approximately 46,000 acres in Richmond, Moore, and Scotland Counties affecting 97 families. They “obliterated” the now abandoned-homesteads as part of the on-going conservation and general development aspects of the land utilization project (Resettlement Administration 1937: 3 & 5). The hatchery’s initial tract was purchased in 1935 from John R. MacKinney and Guaranty Trust Company of New York, trustees of the Glenn Ford McKinney estate. McKinney, who died testate on February 15, 1934, resided in Clove Valley, Town of Union Vale, New York. Exempted from the sale was a 15-acre parcel adjacent to the lake on which stood a club house or cabin and outbuildings. The parcel was located near the southern terminus of the dam and the northwest corner of the Pavlik Tract [Tract 74]. The deed references adjoining property owners, such as the Morrison Training School, Henry C. Wall, W. B. Cole, Luke Gibson, Robert Wallace, Summit Orchard, J. R. Page, and J. K. Watson. Two churches were also identified. Silver Run Church’s 2-acre lot, was located near the southeast corner of Robert Wallace’s tract. The Hussaw Colored Church’s 0.5-acre lot was north of the Hoffman-Rockingham Road [McDonald Church Road] near tracts owned by Henry C. Wall and Leak Everette. The church’s trustees had acquired this lot from the Richmond County Board of Education September 3, 1926. This context is potentially relevant for the larger Sandhills Game Lands, but not for the hatchery.

As noted above, the hatchery falls under the broad historical theme of conservation. Two specific contexts are relevant: conservation efforts in the North Carolina Sandhills beginning in the mid-1930s and the emergence of the federal warm water fish hatchery system. The hatchery is surrounded by the North Carolina Wildlife Resources Commission’s Sandhills Game Land (see Fig. 1). The game lands were acquired as part of the Resettlement Administration’s 1934 Sandhills Land Utilization Project. This project had four objectives: forest development, recreational development, wildlife conservation, and general development. To achieve these objectives, the Resettlement Administration oversaw the construction or development of Hoffman Nursery, the Indian Camp Recreational Area, the McKinney Lake Dam and Hatchery, and the Pine Forest Game Farm. They also proposed to construct the Millstone Camp at “The Rocks” to provide camping and recreational opportunities for groups, such as 4-H clubs, Boy and Girl Scout troops, and church groups.

The forestry program was multi-faceted and involved scientific timber stand management, reforestation of cut-over lands, and the use of prescribed burning or fire. The Hoffman Nursery produced 15 to 25 million seedlings and ornamental shrubs annually for use on the Sandhills Land Utilization Project. Excess seedlings were provided in 1936-1937 to projects in 20 states.

By 1937, Resettlement Administration crews had constructed 10 furnished cabins, a caretaker’s dwelling, a recreational pavilion, a lake, camp grounds, a trailer camp, shelters, and a waste treatment system at the Indian Camp Recreational Area (Indian Camp Park and Lake). The administration intended to transfer the park over to the North Carolina Department of Conservation and Development’s State Park Division. Today, the campground is managed by the Wildlife Resources Commission as part of the Sandhills Game Lands.

The Pine Forest Game Farm raised quails and turkeys for eventual release on selected areas. The game farm had a brooder house, an incubator house, and coops. Scattered across the Sandhills Land Utilization Project were 200 food and cover plots.

The hatchery, whose history is the subject of this report, was transferred in 1936-1937 to the Bureau of Fisheries, the precursor of the U.S. Fish and Wildlife Service's Division of Fisheries. The main objective of the hatchery, which continues today, was to produce panfish in order to stock the many natural and man-made lakes of the Sandhills area, nearby National Wildlife Refuges, and farm ponds (Resettlement Administration 1937). This function continues today.

The Sandhills Land Utilization Project has transformed into the Sandhills Game Land now owned and managed by the North Carolina Wildlife Resources Commission. The game lands, which span over 90,000 acres in Hoke, Moore, Richmond, and Scotland Counties, include the Sandhills CURE Area and the J. Robert Gordon Sandhills Field Trial Grounds. The CURE Area focuses on the intensive management of bobwhite quail and songbirds. The field trial grounds provide a venue for the American Kennel Club's shooting dog championship events, as well as opportunities to hunt using shooting or game dogs.

This specific conservation theme requires further research before definitive determinations of significance and eligibility can be made. As noted above, potential contributing features include the Pine Forest Game Farm, the Indian Camp Park and Lake, the Hoffman Nursery, McKinney Lake Hatchery and Dam, the Sandhills CURE Area, and the J. Robert Gordon Sandhills Field Trial Grounds. Other potential features of note include the many man-made lakes of the Sandhills Game Land, such as Broadacres and Kenny Cameron, the road and fire protection networks, and campgrounds. Additional research should be performed by the Wildlife Resources Commission in coordination with the North Carolina State Historic Preservation Office. The Morrison Training School, now managed by the Department of Corrections as the Morrison Correctional Institution, does not appear to be a contributing feature. The school is a significant and potentially eligible African American historic property.

McKinney Lake National Fish Hatchery became part of the U.S. Fish and Wildlife Service national warm water hatchery system in the late 1930s. It was classified as a pond fish-cultural station producing panfish primarily for the stocking of interior waters and farm ponds. This type of station was located in the Southeast United States. Other examples include Mammoth Springs National Fish Hatchery in Arkansas, Private John Allen National Fish Hatchery in Mississippi, Orangeburg National Fish Hatchery in South Carolina, Warm Springs and Bo Ginn National Fish Hatcheries in Georgia, Welaka National Fish Hatchery in Florida, and Natchitoches National Fish Hatchery in Louisiana (Figs 76 & 77). Many, but not all, of these hatcheries continue to focus on game and non-game fish production, but now also focus on threatened and endangered species, such as pallid sturgeon, robust redhorse, Ozark hellbender salamander, and freshwater mussels, and conducting scientific investigations to improve fisheries conservation practices and fishery restoration efforts. Despite this regional and national trend, McKinney Lake National Fish Hatchery continued to focus on the panfish production, such as largemouth bass and channel catfish. The U.S. Fish and Wildlife Service transferred hatchery operations to the Wildlife Resources Commission in 1996, but retained fee title to the hatchery and the lake. The 442-acre property was legislatively transferred to the state of North Carolina in 2013.

The ponds, raceways, and the water supply and delivery system are this hatchery's and other pond fish-cultural stations most consistent features. The pond layout rarely changes, though new ponds may be added. The support buildings, such as holding houses, fertilizer houses, and Service Buildings, were replaced periodically (Fig. 78). Few structures and/or buildings that date to a hatchery's establishment remain standing, including McKinney Lake National Fish Hatchery.

Quarters or houses for Hatchery staff often fall into this last category. The McKinney Lake's houses were constructed in 1937-1938 as part of the hatchery development by the Resettlement Administration. Neither of them matches the 1935 engineering drawing provided to the Resettlement Administration by

the Bureau of Fisheries (Fig. 79). Quarters 1 or the Superintendent's Residence is dissimilar in design from those seen on other hatcheries. Houses built for a hatchery's superintendent or manager tended to be larger and of a more elaborate architectural design than those built for other staff (Figs. 80 & 81). Quarters 2, which is described as a cottage, is similar to contemporary and more modest examples built at Private John Allen and Welaka National Fish Hatcheries (Figs. 82 & 83).

McKinney Lake National Fish Hatchery does not meet either Criterion A: Event or Criterion C: Design/Construction. It is not one of the earliest hatcheries in the National Fish Hatchery System nor is it the first federally-operated hatcheries in North Carolina. This hatchery is an atypical example of such a facility as it continued to focus on panfish production rather than altering its production capacity to include threatened and endangered aquatic species. It does not appear to have engaged in any groundbreaking scientific investigations leading to improved fisheries conservation practices or fisheries restoration efforts. These three factors lead to the initial discussions regarding its closure in 1984 and the transfer of hatchery operations to the Wildlife Resources Commission in 1996.

The standing structures, with the exception of the two quarters, were constructed after 1955. Several have been substantially altered, such as the "New" Holding House and the Fertilizer House. The two quarters, although built in the late 1930s, have been altered or renovated as well. These alterations changed both the interior layout and the exterior look. Better examples of these building types exist on other National Fish Hatcheries in the Southeast, such as Mammoth Springs National Fish Hatchery, Erwin National Fish Hatchery, and Private John Allan National Fish Hatchery.

McKinney Lake Fish Hatchery is one of six hatcheries currently operated by the Wildlife Resources Commission's Division of Inland Fisheries. These hatcheries are classified as warmwater, coolwater, or coldwater hatcheries depending upon the fish species that they raise or produce for stocking the state's public waters. McKinney Lake State Fish Hatchery is a warmwater hatchery; the other state warmwater hatchery is Watha State Fish Hatchery near Wilmington in Pender County.

The hatchery rears channel catfish fingerlings (3-4 inches) to harvestable size (8-12 inches) for the Wildlife Resource Commission's Community Fishing Program. The channel catfish, once they reach this size, are used to stock 23 of the 30 lakes participating in the fishing program. The remaining lakes are stocked by channel catfish produced at Watha State Fish Hatchery (Wildlife Resources Commission 2014).

This hatchery plays an important role in North Carolina's inland fisheries production and conservation effort. This role ensures the continued care and maintenance of the existing infrastructure and surrounding landscape. *Public Law 112-237*, which conveyed fee title to North Carolina, further guarantees that the property would be maintained in "substantially the same or better condition" as on the date of conveyance.



Figure 76. Mammoth Spring National Fish Hatchery, Arkansas, ca. 2010 [Kanaski 2010a].

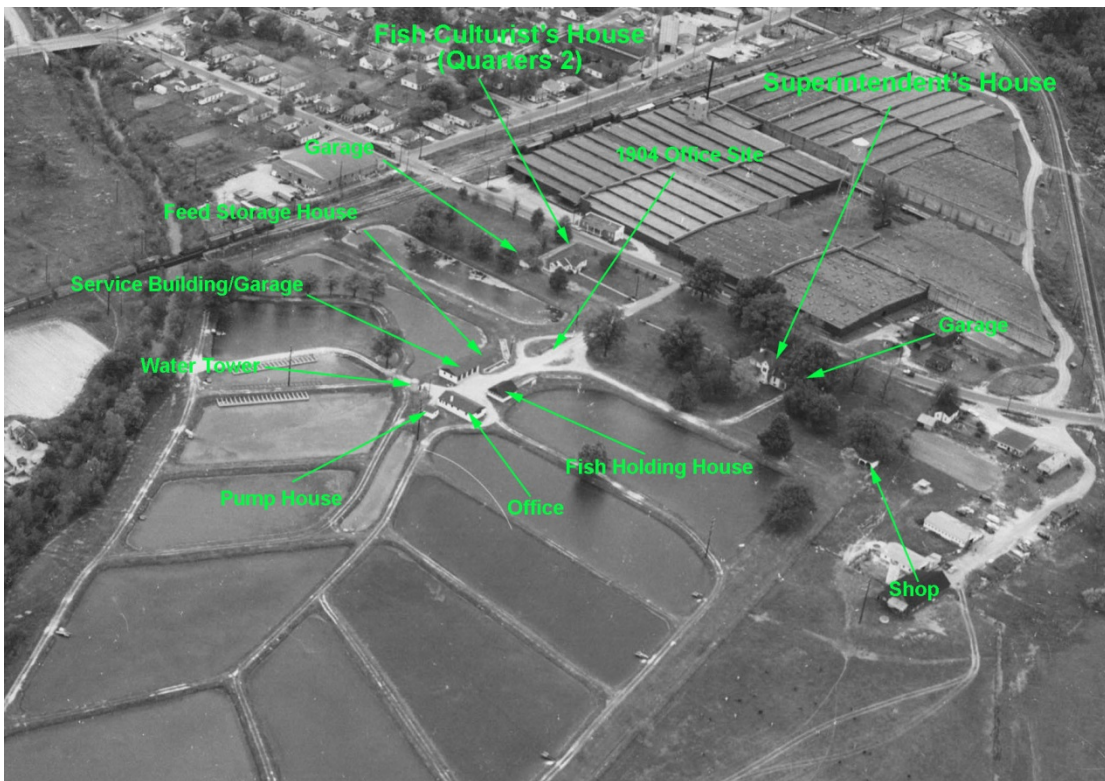


Figure 77. Private John Allen National Fish Hatchery, Mississippi, ca. 1962 [Kanaski 2010b].



Figure 78. Buildings at Welaka National Fish Hatchery, Florida. Upper: Service Building or Combination Office-Three Bay Garage. Center: Fertilizer House. Bottom: Oil and Paint House.. These buildings were constructed in 1959 and are virtually identical to their counterparts at McKinney Lake National Fish Hatchery. The only difference is material, brick at Welaka and concrete block at McKinney Lake [Source: Kanaski 2001].

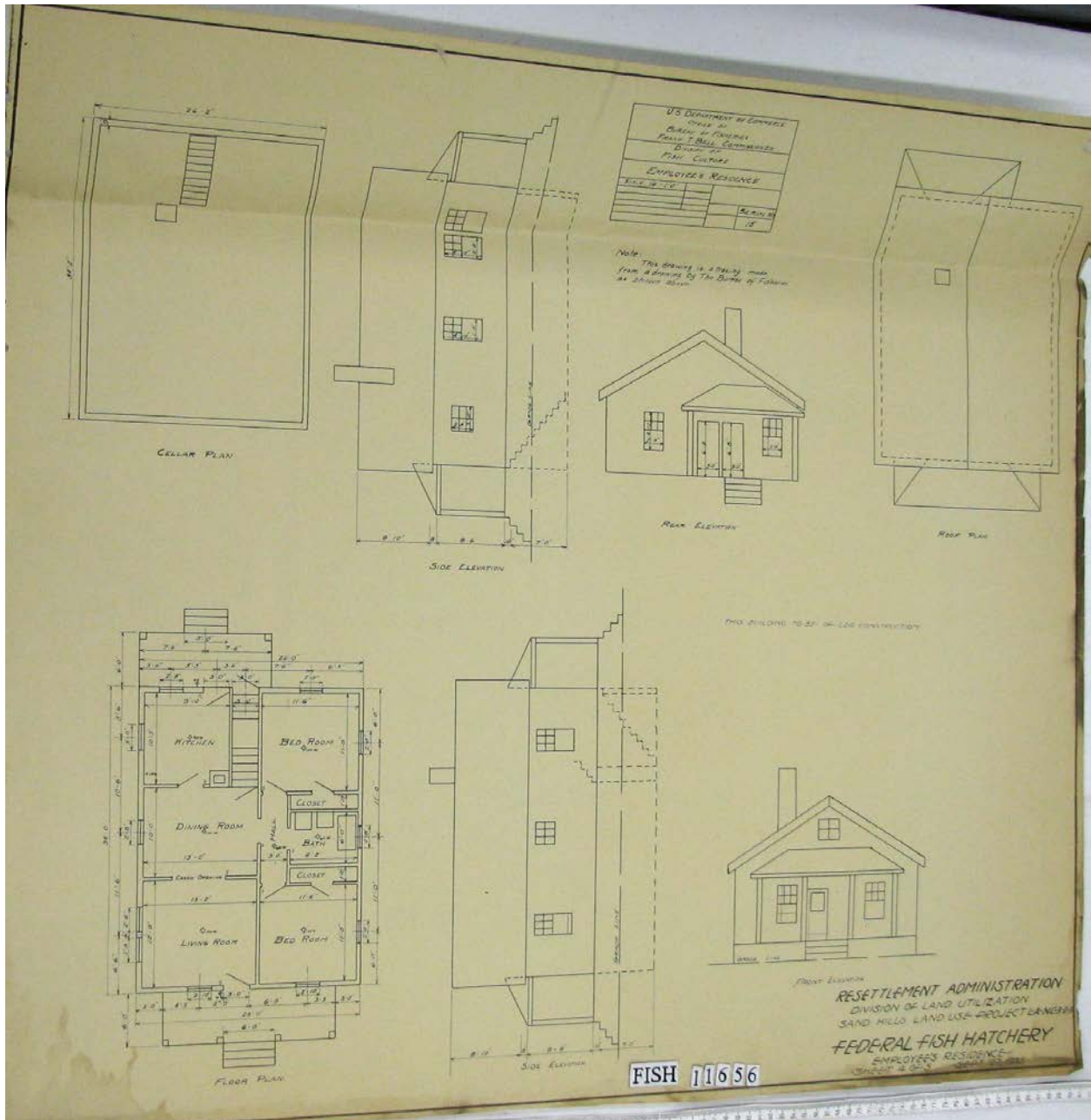


Figure 79. Plans for an employee house, 1935. The drawing was provided to the Resettlement Administration by the Bureau of Fisheries. The profile is similar to Quarters 1, but the latter has a side gable main entrance. The large gable end porch, seen on the drawing, is enclosed on the hatchery quarters (see Figs. 40 & 42 above). [Source: D. C. Booth National Historic Fish Hatchery and Archives].



Figure 80. Superintendent's Residence, Private John Allen National Fish Hatchery, Mississippi. The Queen Anne-style house was constructed in 1903. It was listed on the National Register of Historic Places in 1992 [Kanaski 2009 & 2010a].

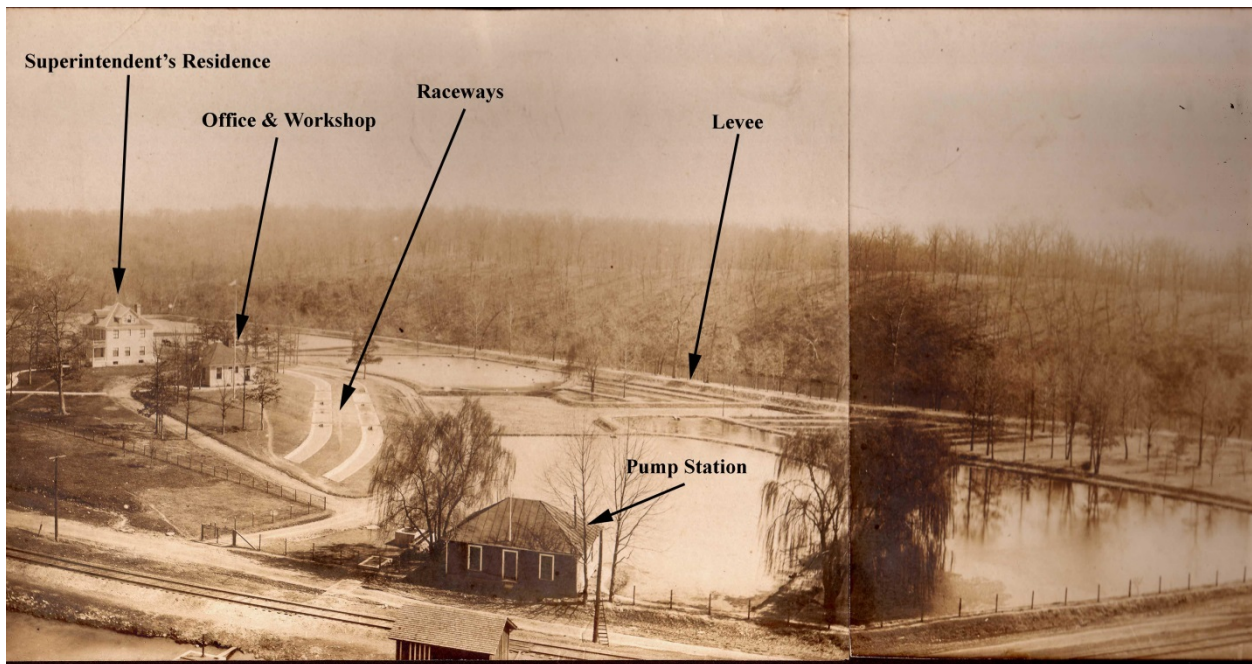


Figure 81. The Superintendent's Residence, Mammoth Spring National Fish Hatchery, Arkansas, ca. 1910. The four-square style structure was constructed ca. 1905. This building, like the others shown in the picture, no longer stand [Source: Kanaski 2010b].



Figure 82. Quarters 2, Private John Allen National Fish Hatchery, Mississippi. This house was constructed for the station's fish culturist in 1939. The structure was sold by the General Services Administration in 1986-1987 and moved to Verona, Mississippi. [Source: Kanaski 2010a]. This structure is similar in appearance to McKinney Lake's Quarters. 2.



Figure 83. One of the bungalows built for the state hatchery at Welaka, Florida, ca. 1927. The state hatchery and game farm was purchased by the Resettlement Administration about the same time. The hatchery was transferred to the Bureau of Fisheries in 1938. The hatchery was renamed Welaka National Fish Hatchery [Source: Kanaski 2001].

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