North Carolina Department of Natural and Cultural Resources

State Historic Preservation Office

Ramona M. Bartos, Administrator

Governor Roy Cooper
Secretary Susi H. Hamilton

Office of Archives and History
Deputy Secretary Kevin Cherry

December 18, 2017

Angela Allen aallen@wildlandseng.com
Wildlands Engineering
167-B Haywood Road
Asheville, NC 28806

Re: National Register Eligibility Evaluation of the Rocky River Power and Light Company (RRP&L) Dam and Powerhouse (Hoosier Dam), Chatham County, ER 13-0776

Dear Ms. Allen:

Thank you for your letter of October 31, 2017 transmitting the above referenced report.

Previously submitted historic and topographic maps note the potential presence of historic mills such as Henley's Mill in the project area. Attached is our letter of May 3, 2013, requesting a Phase I cultural resources investigation of the area of potential effects (APE) to evaluate the presence or absence of historic mill remains. Although the submitted report addresses the National Register of Historic Places eligibility of the Hoosier Dam, it does not address the requested pedestrian survey of the project area.

We concur that the Rocky River Power and Light Company Dam and Powerhouse/Hoosier Dam (CH0836) is eligible for National Register listing at the local level under Criterion A as an intact example of a 1920s-era small-scale hydroelectric power generating facility that served rural residents. It is also eligible under Criterion C for architecture as it possesses distinctive characteristics of an early twentieth-century small-scale hydroelectric power plant. The resources, including a ca. 1925 powerhouse, a ca.1925 slab-and-buttress dam and 1945 solid dam addition, all retain good historic integrity. However, the evaluation report does not specify National Register boundaries, which is a necessary component of the evaluation and should be included. Please provide them as soon as possible with the necessary justification.

Please note that the State Historic Preservation Office's guidelines for architectural survey reports and the Office of State Archaeology's guidelines for archaeological survey reports clearly state that these reports are not to be combined into a single report. They should be separate and able to stand alone. For this reason, we are not accepting the current report for our files and request that you resubmit the architectural report and submit the recommended archaeological report upon completion of the recommended survey.

We have determined that archaeological resources could be present within the proposed project area. Prior to any ground disturbing activities taking place, we recommend a comprehensive archaeological survey be conducted by an experienced archaeologist to identify and evaluate the significance of any archaeological remains that may be damaged or destroyed by the proposed project. *Please note that our office now requests consultation with the Office of State Archaeology (OSA) Environmental Review Archaeologist to discuss appropriate field methodology prior to the archaeological field investigation.*

If an archaeological field investigation is conducted, one paper copy and one digital file (PDF on disc) of each report, and one paper copy and one digital copy (MS Word on disc) of each site form should be submitted to the Office of State Archaeology through this office for review and comment as soon as they are available and well in advance of any earth moving activities. PDF-A (Archival format) is preferred but a high-quality standard PDF file is also acceptable.

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 environmental.review@ncdcr.gov. In all future communication concerning this project, please cite the above referenced tracking number.

Sincerely,

Renee Gledhill-Earley

for Ramona M. Bartos

Attachment

NATIONAL REGISTER ELIGIBILITY EVALUATION OF THE ROCKY RIVER POWER AND LIGHT COMPANY (RRP&L) DAM AND POWERHOUSE (HOOSIER DAM)

Chatham County, North Carolina

NEW SOUTH ASSOCIATES

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National Register Eligibility Evaluation of the Rocky River Power and Light Company (RRP&L) Dam and Powerhouse (Hoosier Dam)

Chatham County, North Carolina

Report submitted to:

Wildlands Engineering • 167-B Haywood Road • Asheville, North Carolina 28806

Report prepared by:

New South Associates • 6150 East Ponce de Leon Avenue • Stone Mountain, Georgia 30083

Ellen Turco – Principal Investigator

Ellen Turco – Historian and Author

January 12, 2018 • Final Report
New South Associates Technical Report 2744

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ABSTRACT

130 of Chatham, LLC proposes to establish the Hoosier Dam Umbrella Mitigation Bank to provide compensatory stream bank mitigation credits to offset unavoidable impacts to jurisdictional streams authorized under the Clean Water Act and the Rivers and Harbor Act. The proposed Bank site is located on the Rocky River in Chatham County approximately 5.5 miles upstream of its confluence with the Deep River. The Bank shall be planned and designed by Wildlands Engineering, Inc. The Hoosier Dam represents a significant blockage to the migration of the Cape Fear Shiner, a federally-listed endangered species. A number of measures are proposed to create the mitigation bank including the dewatering of Reaves Lake, the removal of the Hoosier Dam, the implementation of a sediment management plan, the stabilizing of stream banks, and other activities. This project is subject to review under Section 106 of the National Historic Preservation Act.

In June 2017, 130 of Chatham, LLC requested New South Associates, Inc. (New South) assess the National Register of Historic Places (NRHP) eligibility of the Rocky River Power and Light Company (RRP&L) Dam and Powerhouse (CH 836) and provide this report.

ACKNOWLEDGEMENTS

New South Associates wishes to thank David Hinton, Operator of the Hoosier Dam, for orienting staff to the project area and for providing recent background history of the site. Joseph Ellen, who owned the dam from 1978-1994, agreed to an interview and generously provided additional background history and an overview of how hydroelectric plants work. Copies of North Carolina State Historic Preservation Office (HPO) survey files and reports were provided by Chandrea Burch, HPO file clerk.

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Table 1. NRHP Recommendation 1

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I. INTRODUCTION

In June 2017, 130 of Chatham LLC requested New South Associates, Inc. (New South) assess the National Register of Historic Places (NRHP) eligibility of the Rocky River Power and Light Company Dam and Powerhouse (CH 836). 130 of Chatham, LLC proposes to establish the Hoosier Dam Umbrella Mitigation Bank to provide compensatory stream bank mitigation credits to offset unavoidable impacts to jurisdictional streams authorized under Sections 401 and 404 of the Clean Water Act and Section 10 of the Rivers and Harbor Act. This project is subject to review under Section 106 of the National Historic Preservation Act (NHPA). To establish the mitigation bank, 130 of Chatham, LLC proposes to remove the historic Rocky River Power and Light Company (RRP&L) Dam and Powerhouse (also referred to in this report as the RRP&L Plant; sometimes known locally as the Woody Dam, and more recently known as the Hoosier Dam), and its appurtenant features such as Reeves Lake, the dam embankment, and spillway in order to restore the flow of the Rocky River and the surrounding natural habitat.

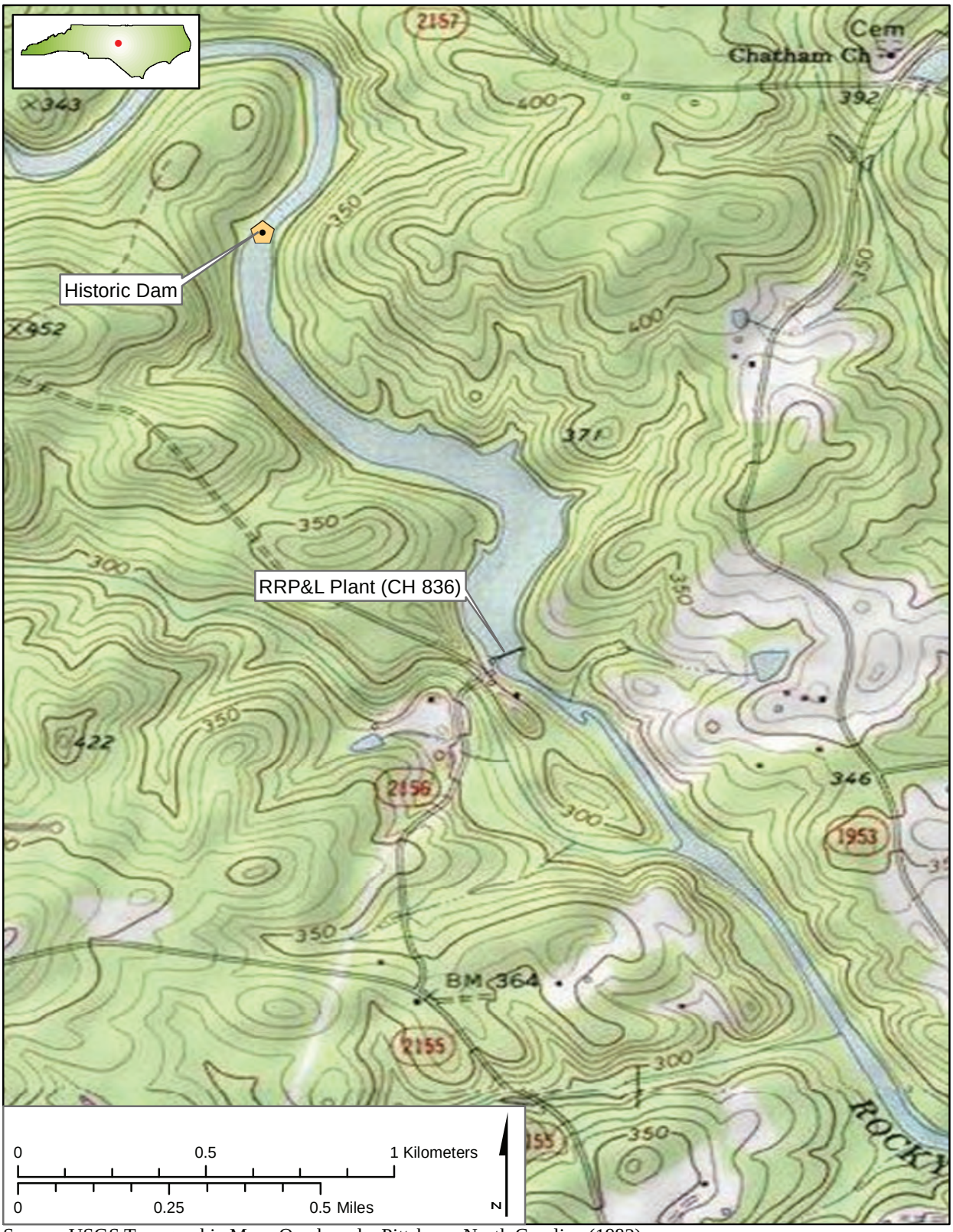
The former RRP&L Plant is located in Chatham County, six miles south of the Town of Pittsboro, North Carolina (Figure 1). The site is accessed by Woody Dam Road (SR 2156) west of N.C. Highway 87. The dam is located on the Rocky River approximately 5.5 miles upstream of its confluence with the Deep River.

As a result of this study, for the purposes of compliance with Section 106 of the NHPA, as amended, New South recommends the RRP&L Dam and Powerhouse as eligible for the NRHP (Table 1).

Table 1. NRHP Recommendation

Resource Name	Rocky River Power and Light Company (RRP&L) Dam And Powerhouse (historic); Hoosier Dam and Powerhouse (current);
HPO Survey Site #	CH 836
Location	590 Woody Dam Road, Oakland Township
PIN	9638 00 66 0000
Parcel ID	0018352
Date of Construction	Circa 1925; 1945
Recommendation	Eligible for NRHP Under Criteria A and C

Figure 1.
Location of the RRP&L Plant (CH 836)



Source: USGS Topographic Maps Quadrangle, Pittsboro, North Carolina (1982)

II. METHODS

ARCHITECTURAL SURVEY

As part of the due diligence for the project, Wildlands Engineering, Inc., on behalf of 130 of Chatham, LLC, conducted a search of the records of the North Carolina State Historic Preservation Office (NC HPO). This search identified no known National Register of Historic Places (NRHP) listed or eligible architectural or archaeological resources in the project area. However, Wildlands Engineering anticipated an NRHP evaluation for the RRP&L Plant identified in the Mitigation Bank Prospectus by its most recent name, the Hoosier Dam, would be required since the resource was over 50 years of age. In June of 2017, Wildlands Engineering, Inc., retained New South Associates, Inc. (New South) to intensively survey the RRP&L Plant and prepare a report assessing the property's eligibility for the NRHP. The HPO assigned survey site number CH 836 to this resource.

New South senior architectural historian Ellen Turco and architectural assistant Debra Bevin visited the Hoosier Dam on June 8, 2017. Mr. David Hinton, the dam operator, met Ms. Turco and Ms. Bevin on site. Hinton described how the dam operated and provided a recent history of the resource. The dam and powerhouse were visually inspected and the interior, exterior, associated features, and setting were documented through written notes and digital photographs. On June 30, 2017, Ms. Turco interviewed Mr. Joseph Ellen at his residence in Raleigh. Mr. Ellen owned the dam property between 1979 and 1994.

The statewide architectural survey records of the HPO were reviewed to identify other hydroelectric facilities within North Carolina. Reports and files were collected and consulted to develop the historic context that follows in this report. Historic topographic maps and aerial photographs were viewed at historicaerials.com, nationalmap.gov, and the U.S. Geological Survey's historical topographic map collection. U.S. Census records were reviewed at Ancestry.com. Chatham County real estate records were examined online at the Chatham County Register of Deeds (2017). Other sources consulted are listed in the References Cited at the end of this report.

The historical development, architecture, and cultural significance of the RRP&L Plant was assessed and evaluated within its respective context according to the established NRHP criteria. The results of this NRHP evaluation are presented in the following chapters. This report complies with the requirements of Section 106 of the NHPA of 1966, as amended; and HPO's *Report Standards for Historic Structure Survey Reports/Determinations of Eligibility/ Section 106/110 Compliance Reports in North Carolina.*

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III. HISTORIC AND ARCHITECTURAL CONTEXT

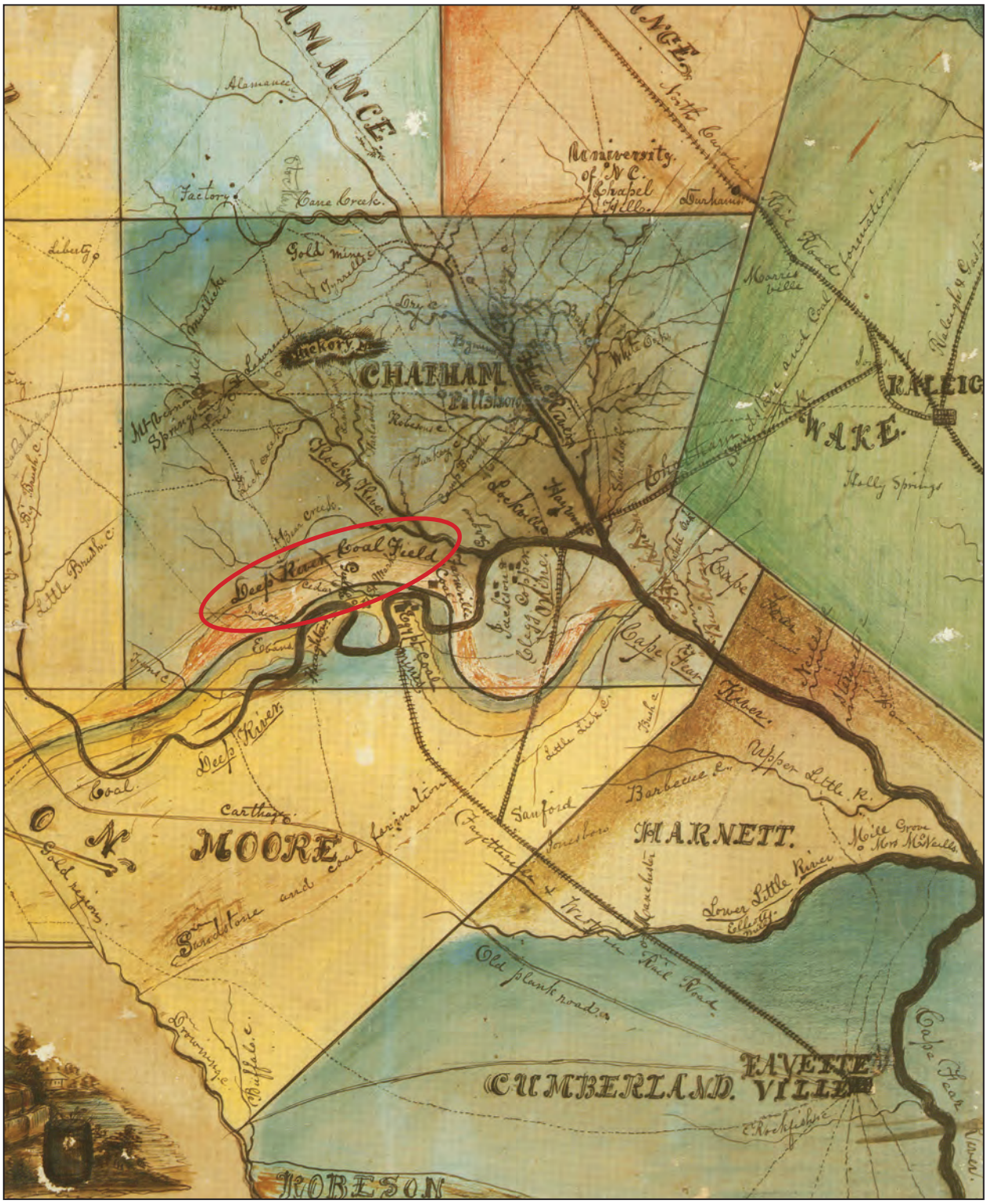
HISTORY

Natural resource extraction and waterpower have played an important role in Chatham County's history. Numerous tributaries and five rivers drain the county: the Haw River, the New Hope River, the Rocky River, the Deep River, and the Cape Fear River. Timber was abundant, as was the case in many parts of the state, yet the county also had deposits of coal, iron, gold and sandstone. The Deep River coal field, situated in the southwestern half of the Triassic Basin, was the state's only commercially significant deposit of the mineral (Fletcher 2005) (Figure 2). Between the 1850s and the 1920s, a number of mining concerns were established, but despite intensive investment they were never successful (Osborn and Selden-Sturgill 1991:3). In 1922, Thomas Clarkson (T.C.) Woody, the son of a local textile mill owner, incorporated the RRP&L to provide hydroelectric power to the coal mines south of the Rocky River (Marshall 2017). Although the county's rivers and creeks had powered saw and grist mills since its settlement, Mr. Woody sought to harness the river's flow for a modern use--to generate saleable electrical power.

Maps, deeds, and other historical records strongly suggest that a dam and mill were in place at or near the dam site many years prior to Woody's establishment of the RRP&L Company. Seven water-powered mills appear along the Rocky River on the 1870 Ramsey Map of Chatham County (Figure 3). Two of these mills were in Oakland Township; "Tyser's Mill" near the present day RRP&L Dam on the southwest bank of the river northeast of its confluence with Bear Creek, and Henley's Mill, on the south bank of the river east of Bear Creek. A rock dam across the Rocky River north of the RRP&L Dam was inundated when Reeves Lake was impounded around 1925 (Joseph Ellen, personal communication 2017; David Hinton, personal communication 2017; Wildlands Engineering, Inc. 2014:1). This may be the Tysor family mill dam shown on the 1870 Rumsey map. The Tysor family was among the county's early settlers; they appear in eighteenth-century county court records and three early nineteenth-century Tysor family houses have been recorded by the statewide historic architecture survey.[1] The 1933 Chatham County Soil Map is also labeled with "Tyser's Mill" and shows a dam spanning the river, although by this time it was owned by T.C. Woody under the auspices of RRP&L (Figure 4).

[1] The name is spelled both Tysor and Tyser in historical records. Tysor is the more common spelling.

Figure 2.
Portion of the "Map of the Coal Fields of Chatham and the Mineral Region of N.C. 1874" Showing the Deep River Coal Field

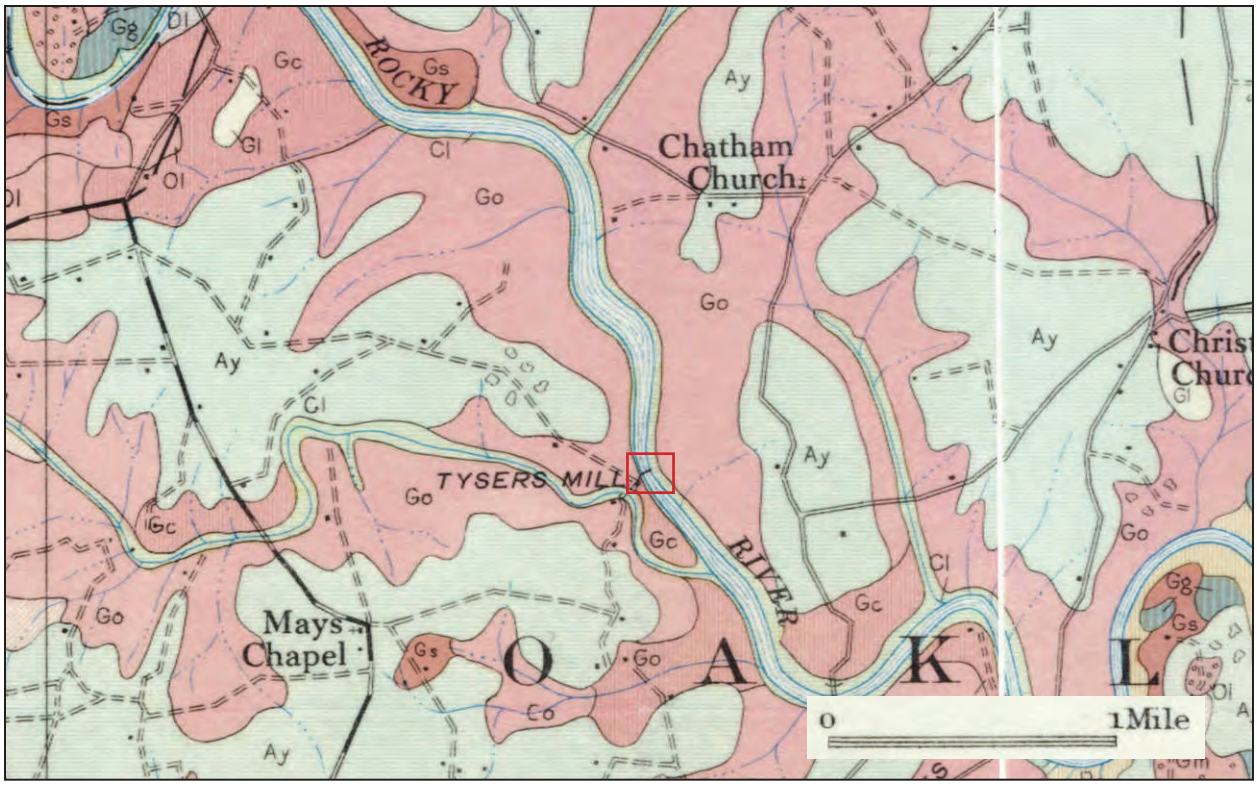


Source: Chatham County Historical Association

Figure 3.
Portion of the "Map of Chatham County, N.C. 1870" Showing the Water-Powered Mills Along the Rocky River

Source: North Carolina State Archives

Figure 4.
Soil Map, North Carolina, Chatham County Sheet, 1933



Source: North Carolina State Archives

The Woodys were a prominent Quaker family from Guilford County. The family was engaged in a number of industrial enterprises throughout Chatham, Guilford and Moore counties in the nineteenth century. In 1897, Newton Dixon Woody and his sons William E. and Thomas N. Woody organized the High Falls Mills Manufacturing Company on the Deep River in Moore County, approximately 22 miles southwest of the Hoosier Dam site (Rubenstein Library 2014). High Falls was a water-powered textile mill with a company-owed "model mill village" (Greensboro Daily News 1919). T.C. Woody, president of RRP&L, was the son of William E. Woody. The Woody family's industrial expertise enabled T.C. Woody to build the RRP&L Plant at the young age of 21.

Woody and his RRP&L Company spent the first half of 1922 obtaining land and rights for the hydroelectric facility he planned to build. A deed made on August 5, 1922, recorded the sale of 150 acres of land from W.H. and Olivia Hill to the RRP&L Company (Chatham County Courthouse (CCH) 1922, Deed Book [DB] FY.264). The tract included "the mill site" and gave RRP&L: "the full right…to erect thereupon dams, pond and impound water, construct buildings, machinery and do all things necessary to properly develop and utilize the entire available waterpower on said Rocky River." An earlier deed made in May 1922 conveyed 9.4 acres from W.D. and Lena Burns to RRP&L. The deed referred to the Hills' property as the "Tyser Mill property" (CCH 1922: DB FY.263).[2] This deed allowed RRP&L to "cut and open roads" for the erection of "poles, wires, and towers for transmitting electrical power." However, the deed stipulated that the roads could not interfere with Mr. Burns' "cultivated and growing crops."

T.C. Woody chose Mees and Mees Consulting Engineers and Industrial Architects of Charlotte to design a state-of-the-art dam, a version of the slab-and-buttress design patented by civil engineer Nils Frederick Ambersen in 1903 (Martens et al. 2016:E-16). Ohio-born brothers Curtis Adolphus and Erich Mees had established a civil engineering firm in Charlotte by 1916 (Leonard 1922:1:861). The firm specialized in "hydro electric development, power plants, factories and industrial plants" and other infrastructure-type projects (Advertisement 1922:32). Curtis Mees marketed himself as an expert-for-hire in the design and business operations of hydroelectric facilities and published and spoke widely on the topic in industry journals and at meetings. Around the same time they were working on T.C. Woody's dam, the Mees' were designing the arch-and-buttress type hydroelectric dam at Lake Lure in Rutherford County (RF 605; DOE).

Woody established the RRP&L Company to supply electric power to the Deep River Coal Fields where there were several coal mining communities in the early 1920s: Cumnock (formerly

[2] Neither deed was recorded until September 2, 1922.

known as the Egypt mine), Gulf, and Coal Glen (earlier known as Farmville).[3] The industry ultimately realized little profit and was extremely dangerous, resulting in the deaths of over 100 local miners. The most famous and lethal incident was the 1925 explosion at Coal Glen in which 53 miners were killed. Local residents recall that Woody's primary power customer was to be the Cumnock Mine, but the mine flooded and was closed, ruining his plan (Joseph Ellen, personal communication 2017).[4] Left with a hefty bank loan and without a customer, Woody pivoted, and obtained a second loan to extend power lines to private homes on the south side of the Rocky River.

Available company annual reports suggest that RRP&L was never a highly lucrative endeavor for the Woodys (Joseph Ellen, personal communication 2017; David Hinton, personal communicaton 2017). The facility had a maximum production capacity of 168 kilowatts. The company operated at a loss in both 1944 and 1945. The 1944 annual report documented that power was sold to 18 residential customers and one public utility (CP&L). Energy sales that year were $3,193, equal to about $41,000 today. By 1945, the number of residential customers had increased to 32, but energy sales decreased slightly to $3,061. Joseph Ellen, who owned the plant in the 1980s, estimates there were about 75 residential customers in the 1950s, most of them located in the area southwest of the dam; however, no annual reports were found to confirm his estimate. The 1945 annual report reflects a $10,000 expense attributed to "flood damage to dam." A flood that year caused the river to bypass the dam with a new channel on the west side, and Woody was forced to quickly extend the dam another 75 feet. To supplement his income, Woody also used the electricity generated at the dam to power the adjacent gristmill, now gone, that he built 1930. This income was not reflected in his company's annual reports.

By the mid-twentieth century, hydropower was falling out of favor to be replaced by coal-fired utilities, which were not dependent on water levels. In 1957, CP&L purchased RRP&L's dam property, equipment, and 18 miles of power lines for $36,297 (CCH 1957: DB 248.318). To consolidate their market share, CP&L began acquiring and decommissioning small hydroelectric plants in the late 1950s and early 1960s. In addition to RRP&L's, Sandhill Power Company's plant at Carbonton (CH 677; DOE 2004) and the Moncure Manufacturing Company's plant at Lockville (CH18; NRHP 1984) were also acquired (Thomas and Glass 1983). CP&L shuttered the RRP&L Plant in 1962 and removed the generator and turbines shortly thereafter.

Joseph Ellen acquired the non-operational mill from CP&L in 1979 (Joseph Ellen, personal communication 2017). Ellen, a U.S. Navy trained electrical engineer, worked for private electrical engineering and contracting companies across the southeast before founding the firm of

[3] The names of the mines were often changed by new owners after an explosion or business failure.
[4] Secondary sources note that the Cumnock mine flooded multiple times between the 1870s and the 1920s, before closing for good in 1929.

Ellen, Larson, and Kirkpatrick in Raleigh, North Carolina, in 1962. Ellen repaired the deteriorated roof, updated the electrical controls, and installed a new generator he obtained from a textile mill in Gaston County. By 1982, the hydroelectric plant was operable and Ellen was selling power to CP&L. In 1985, the Cape Fear Shiner, an endangered species of fish, was identified in the Rocky River near the dam. To protect this fish, the U.S. Fish and Wildlife Service mandated that the river must flow continuously. Until this time, water flow was restricted to allow the upstream level above the dam to build up and then be released through the sluice gates though the intake in a controlled manner. The new endangered species requirements disallowed this practice. To create a mechanism for a controlled, yet continuous water flow, Ellen designed and hand built a water wheel that he installed in 1985 (Figure 5). The wheel currently is detached from it axis and lies covered in debris at the bottom of the channel.

Ellen sold the property to Luther Allen of Burlington in 1994 (CCH 1994: DB 640.1025). Allen did not make significant changes to the structure but did upgrade the electric control panels and boxes. Hoosier Hydro, LLC, a small renewable energy producer, purchased the property from Allen in 2005 (CCH 2005: DB 1153.297). The current owner, Rocky River Hydro, LLC, purchased the property from Hoosier Hydro in 2012 (CCH 2005: DB 1153.297). The facility is not currently in use.

HISTORICAL AND ARCHITECTURAL CONTEXT

Rural electrification in North Carolina's rural areas was not widespread until after 1935, when the legislature created the North Carolina Rural Electrification Authority. However, this modern convenience came to rural Chatham County in the early 1900s via the county's two large-scale textile mills, the Odell Manufacturing Company at Bynum and the Hadley-Peoples Mill in Siler City. Excess electrical power generated by these mills was distributed to nearby company-owned villages of worker housing. By the 1920s, industrialists were building hydroelectric plants to generate both industrial and residential power. By 1924 there were 19 hydroelectric facilities providing residential power statewide, as opposed to facilities dedicated primarily to powering mills and factories (Brown 2004:9). Three of these were located in Chatham County. On the Lee-Chatham County border, the Sandhill Power Company erected the Carbonton hydroelectric dam across the Deep River in 1921. The company provided residential power to communities in Lee, Chatham (including Siler City), and Moore counties (Brown 2004:9). In 1922, the Moncure Manufacturing Company purchased the lock and canal works at Lockville, which had been built in the 1850s, to improve river transportation along the Deep River and built a modern dam and hydroelectric powerhouse to supply residences in Pittsboro (Barnett 1987:8–9; Thomas and Glass 1983:8.6). The hydroelectric plants at both Lockville and Carbonton were similar in size, scale, and type to the RRP&L Plant.

Figure 5.
Waterwheel In Situ Circa 1990

Photograph Provided by Wetlands Engineering

The 1922 dam at Lockville is a poured concrete gravity dam with wing walls and six arched gate openings (Figure 6). This type of solid construction dam was a tried-and-true design, but lacked the innovative hollow bay buttress construction used at the RRP&L dam. This dam also differs from RRP&L in that it utilized a 2,300-foot diversion canal to increase water pressure. The diversion canal was repurposed from the 1850s granite lock and canal system built to bypass the falls just upstream from the dam. The natural fall of the Rocky River makes a canal unnecessary at the RRP&L site. The 1924 Lockville powerhouse is similar to that of RRP&L, a shed-roofed utilitarian brick building with metal casement windows on a concrete base (Figure 7A). After a period of abandonment, the Lockville Dam is currently owned by Dean Brooks, who sells power to CP&L.

The dam at Carbonton was removed as part of a stream restoration around 2005. Documentation on file at the HPO identifies it as a "gravity dam…a functional, unadorned concrete structure" (Brown 2004:10) (Figure 7B). The 1921 powerhouse is a rectangular shed-roofed brick building with parapet walls on three sides and deteriorating metal casement windows. The water level has receded to its natural state since the dam's removal, leaving the substantial six-sluice concrete foundation, previously obscured, now visible. The generator and turbines have been removed.

Figure 6.
Downstream Side of Lockville Dam Looking West, 1982

Source: Library of Congress Prints and Photographs Division Washington, D.C.

Figure 7.
Similar Dam Sites

A. View of Lockville Powerhouse Looking North from Old US I Bridge Over the Deep River
Source: Google Earth, 2017

B. View of Carbonton Powerhouse Looking Southeast from NC 42 Bridge Over the Deep River
Source: Google Earth, 2017

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IV. RESOURCE DESCRIPTION AND RECOMMENDATIONS

SETTING

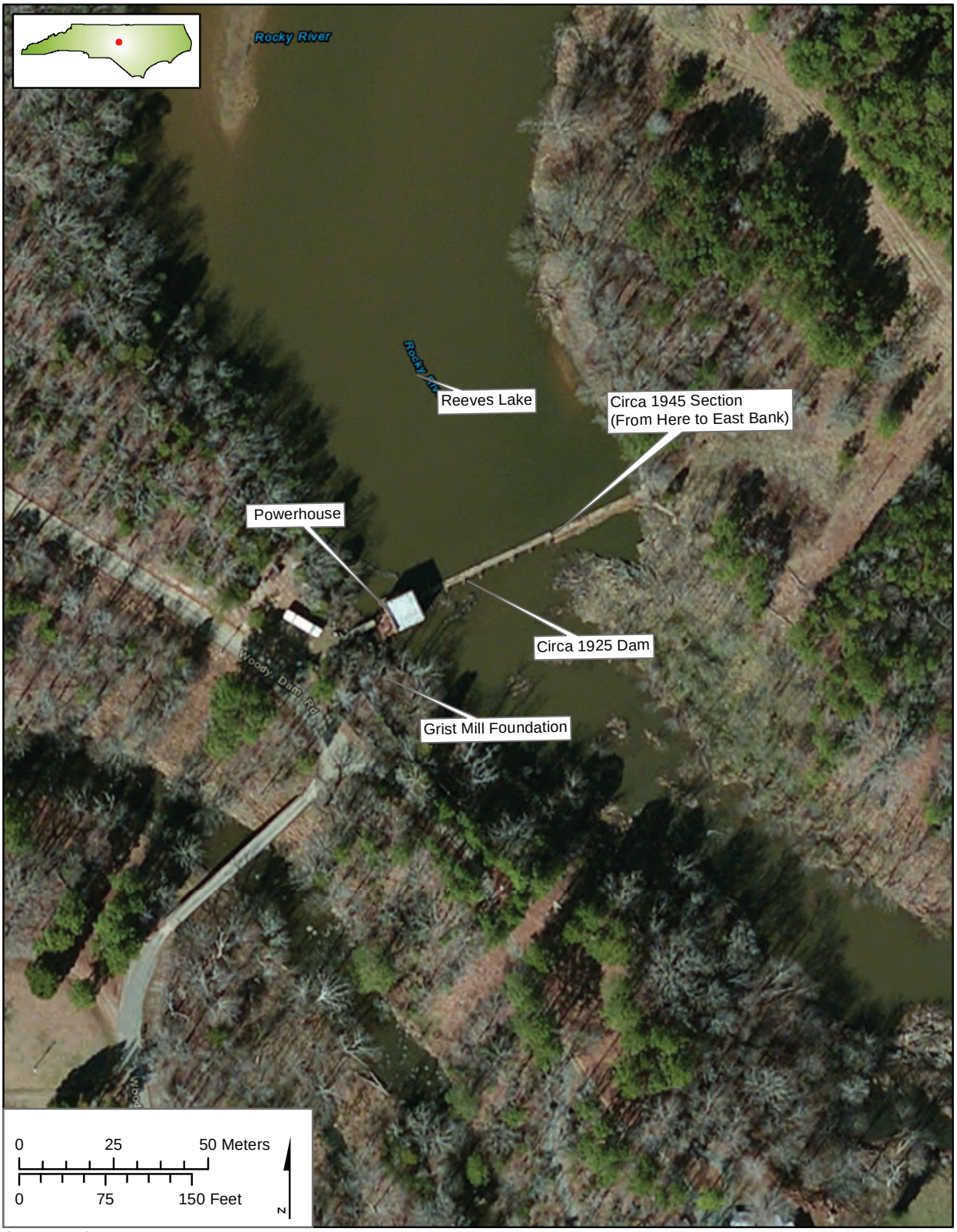
The Rocky River enters northwestern Chatham County and flows southeast in a serpentine manner to its confluence with the Deep River, which is approximately five miles southeast of the Hoosier Dam. Above and below the RRP&L Dam and Powerhouse, or plant, the river runs almost due south, with a slight eastward bearing. Bear Creek empties into the Rocky River approximately 4,000 feet south of the dam. The Rocky River curves back to the northeast just downstream of Bear Creek. The landscape surrounding the dam is wooded and the area is sparsely populated. The 2010 U.S. Census recorded 1,250 people in Oakland Township, the smallest of Chatham County's 12 townships (U.S. Census Bureau 2010).

The plant consists of a brick hydroelectric powerhouse and a concrete dam built in two stages by the RRP&L in 1925 and 1945 (Figure 8). The plant is situated on the east bank of the Rocky River in central Chatham County approximately six miles south of the county seat of Pittsboro (see Figure 1). Woody Dam Road accesses the 1.38-acre parcel containing the powerhouse. The approximately 210-foot concrete dam spans the river creating a reservoir known as Reeves Lake. South of the powerhouse on the west bank of the Rocky River are the ruins of a circa 1930 gristmill. The ruins consist of a poured-in-place concrete foundation.

PHYSICAL DESCRIPTION

The RRP&L constructed the plant around 1925. The dam is a concrete structure, measuring approximately 210 feet in total length and 25 feet in height (Figure 9). The dam was built in two phases using two construction techniques. The circa 1925 slab-and-buttress section of the west side employs an innovative early twentieth-century construction technique with eight open bays delineated by seven triangular buttresses spanned by an inclined upstream face. This hollow type of construction minimized needed building materials and lessened the chance of failure. Anchored to the river's east bank is an approximately 75-foot section built in 1945 using traditional solid design, where the mass of the construction materials resists the pressure of water pushing against the upstream side (Figure 10). The 1945 section is built of concrete aggregate with a nearly vertical downstream face. The concrete retaining wall on the east riverbank immediately upstream and downstream of dam was built in the 1980s.

Figure 8.
Aerial Photograph of the Hoosier Dam (CH 836)



Source: ESRI Resource Data

Figure 9.
Downstream Photographs of the Hoosier Dam

A. Downstream Side of Dam Looking Northeast from South of Powerhouse

B. Downstream Side of Dam Looking Northeast from South of Powerhouse Photograph by Chris Flowers

C. Downstream Side Dam Looking Northwest from East Bank of Rocky River
Photograph by Chris Flowers

Figure 10.
Historic Photograph Showing Upstream Sides of the Circa 1925 and the 1944 Dam Sections

The circa 1925 powerhouse is accessed by a concrete catwalk anchored to the west riverbank (Figure 11A). The powerhouse is an utilitarian building measuring approximately 25 square feet and constructed of five-to-one brick bond walls and a poured concrete base (Figures 11B-C). The rectangular brick upper section rests on a massive poured-in-place concrete foundation with two open bays. Imprints of the wood forms are prominently visible on the face of the concrete. An entry with solid double doors is on the west wall. These doors consist of an exterior face of diagonal boards sandwiched with vertical boards on the interior side (Figure 12A). Above the doors is a brick soldier course. There are four courses corbelling at the cornice above the entry. The decorative corbelling pattern is repeated on the north and west exterior walls (Figure 12B). Pairs of metal sash windows pierce the north, east and south walls of the powerhouse (Figure 13A). All windows have concrete headers. The windows consist of 25 panes with two rectangular hopper sashes and fixed rectangular sash (Figure 13A). The windows of the north side are covered with plywood. The metal-covered shed roof slopes downstream but is obscured from ground view by a brick parapet wall on the north, east and south sides. The parapet is capped with a steel band. The ends of the roof rafters are exposed on the south side.

The interior of the powerhouse is a single room with a concrete slab floor, exposed brick walls, and exposed wood rafters and roof decking (Figure 13B). The roof dates to circa 1980. The powerhouse was in use until 2014; and therefore, its electricity generating equipment is still in place. Situated in the southeast corner of the powerhouse is a General Electric AC direct drive generator, which was relocated from a textile mill north of Gastonia in Gaston County around 1980. It is similar to the generator originally installed by the RRP&L Company (Joseph Ellen, personal communication 2017). On the floor of the southeast corner is a circular metal grate that covers a pit for a second generator, which was never installed (Figure 14A). On the south wall are two metal control panel boxes that date from around 2000 (David Hinton, personal communication 2017). On the floor at the north end of the building are two rectangular floor openings for water regulating sluice gates (Figure 14B). Since a second generator was never installed, the west opening is covered with a metal grate and there is no gate. However, the east gate remains in place under the plywood. It is suspended from a chain and pulley system secured to a frame of steel I-beams.

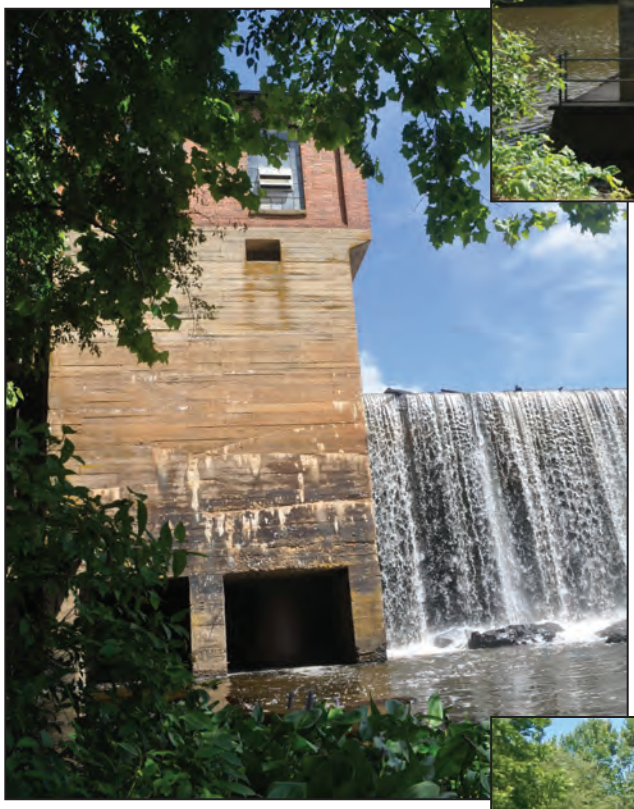
NRHP EVALUATION

INTEGRITY

Integrity is the ability of a property to convey its historic significance though its physical characteristics. A property must possess historic significance and retain integrity in order to be eligible for the NRHP. The seven aspects of integrity are: location, design, setting, feeling materials, workmanship and association (Joeckel 2001:44).

Figure 11.
Photographs of the Powerhouse

A. Powerhouse Looking East
Photograph by Chris Flowers



B. Powerhouse Looking North

C. Powerhouse Looking Upstream/North

Figure 12.
Photographs of the Powerhouse Interior, 1 of 3

A. Doors, Interior Looking West

B. North Wall of Powerhouse

Figure 13.
Photographs of the Powerhouse Interior, 2 of 3

A. Interior Window Detail

B. Interior of Powerhouse Looking Southwest

Figure 14.
Photographs of the Powerhouse Interior, 3 of 3

A. Circa 2000 Control Panel Boxes

B. Interior of Powerhouse Looking North

The four primary historic components of RRP&L property are the brick hydroelectric powerhouse, the concrete dam, the gristmill foundation, the Rocky River, and the impounded water body (Reeves Lake) above the dam. These components have remained substantially intact since 1925. The resource's historic location, setting and feeling are evident and the property's association with 1920's residential hydroelectric power generation in the North Carolina Piedmont remains strong. Mees and Mees' innovative dam design, as well as the construction materials and workmanship of the dam and powerhouse are clearly evident. All are without major alterations or additions that would detract from their historic character. The 1945 extension of the dam was a necessary repair due to flood damage, and the "new" section of the dam is visually and structurally distinct from the circa 1925 slab-and-buttress section. As a result of the 1960s consolidation movement undertaken by the large public utilities, all three of the surviving small-scale hydroelectric plants in Chatham County have lost their original power generating equipment.

The RRP&L compares well with the Lockville Dam and Powerhouse and the Carbonton Powerhouse, both Chatham County resources that are either listed or determined eligible for listing in the NRHP.

EVALUATION

Properties can be eligible for the NRHP if they are associated with a significant event or pattern of events that have made contributions to history at the local, state, or national level. The RRP&L Company Dam and Powerhouse is recommended eligible as an intact example of a 1920s-era small-scale hydroelectric power generating facility that served rural residents, rather than industrial customers. RRP&L is the most intact of the two other similar facilities that survive in Chatham County. The property is significant at the local level. The period of significance is circa 1925, when the plant was placed into service, through 1962, when CP&L shuttered it. *Therefore, the RRP&L Company Dam and Powerhouse is recommended eligible for the NRHP under Criterion A.*

Properties can be eligible for the NRHP if they are associated with persons significant within community, state, or national historic contexts. Properties are not eligible simply for their links to members of an identifiable profession, class or social or ethnic group. The RRP&L Plant is associated with the Woody family, and specifically T.C. Woody who built the plant and managed it until 1962. While T.C. Woody was a member of prominent family of industrialists, research did not show that he had gained special importance within his profession. *Therefore, RRP&L Company Dam and Powerhouse is recommended not eligible under Criterion B.*

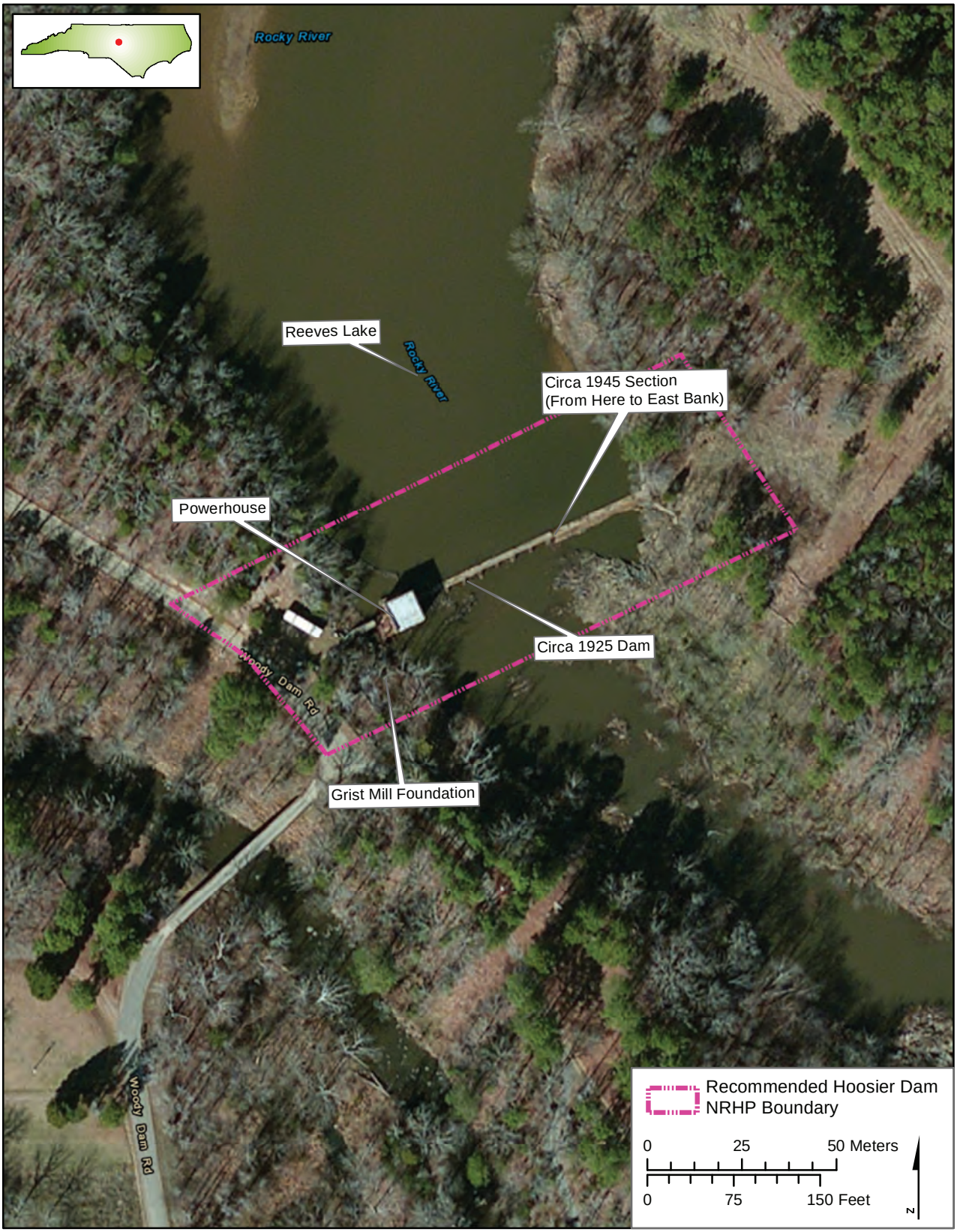
Properties may be eligible under Criterion C if they embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic value. The RRP&L Company Dam and Powerhouse possess the distinctive characteristics of an early twentieth-century small-scale hydroelectric power plant. Only one other of these plants, the Lockville Dam, remains fully intact in Chatham County and it differs from the RRP&L in two important ways: its use of a diversion channel and its traditionally designed gravity dam. Designed by the Charlotte civil engineering firm of Mees and Mees, RRP&L's innovative design utilized a state-of-the-art dam type--the material saving slab-and-buttress design. Only one other power plant in North Carolina has been confirmed to have been designed by Mees and Mees (the Lake Lure Dam and Hydroelectric Plant [RF 657; DOE 2016]). *For these reasons, RRP&L Company Dam and Powerhouse is recommended eligible for the NRHP under Criterion C.*

It is unlikely that additional study of this property would yield any unretrieved data not discoverable through informant interviews and documentary sources. All of the dam features were identified by the historic architectural survey. *Therefore, the RRP&L Company Dam and Powerhouse is recommended not eligible for the NRHP under Criterion D.*

RECOMMENDED BOUNDARY

The recommended NRHP boundary for the RRP&L Company Dam and Powerhouse encompasses approximately two acres and contains the brick hydroelectric powerhouse, the concrete dam (both circa 1925 and circa 1945 sections), and the gristmill foundation (Figure 15). Each of these features contributes to the resource's overall historic character. Approximately 100 feet of the Rocky River, known as Reeves Lake on the north side of the dam, is included in the recommended NRHP boundary in order to provide physical context to the hydropower site. On the west side, the recommended boundary follows the alignment of an approximately 190-foot section of Woody Dam Road. The recommended boundary on the east side is drawn approximately 100 feet from the east edge of the dam to mirror the size of the boundary on the west side.

Figure 15.
Recommended NRHP Boundary



Source: ESRI Resource Data

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