

**Yadkin Project Relicensing (FERC No. 2197)  
Cultural Resources IAG Meeting  
November 5, 2003**

**Alcoa Conference Center  
Badin, North Carolina**

**Final Meeting Summary**

**Meeting Agenda**

See Attachment 1.

**Meeting Attendees**

See Attachment 2.

**Welcome and Introductions**

Jane Peebles, Meeting Director, opened the meeting with a welcome and introductions. Jane noted that Renee Gledhill-Early, Steve Claggett, Dr. Lee Novick, and Dr. Billy Oliver from the North Carolina Department of Cultural Resources (NCDCCR - State Historic Preservation Office and Office of State Archaeology) were participating in the meeting by phone.

**Request for Delegation of NHPA Section 106 Consultation**

Sarah Verville, Long View Associates, explained that Alcoa Power Generating Inc., Yadkin Division (Yadkin) filed a request with the Federal Energy Regulatory Commission (FERC) dated October 20, 2003 asking FERC to delegate authority to conduct National Historic Preservation Act (NHPA) Section 106 consultation with the North Carolina State Historic Preservation Office (NCSHPO) and others to Yadkin. To date, Yadkin has not received a response from FERC. Sarah said that she expects FERC will delegate the authority to conduct Section 106 consultation to Yadkin. Upon the receipt of a FERC response, Sarah agreed to share the response with the Cultural Resources Issue Advisory Group (IAG).

Sarah Verville briefly reviewed the discussions at the August 27, 2003 IAG meeting. At that meeting, she said that the NCSHPO had agreed to discuss the Yadkin Project Shoreline Management Plan and the associated cultural resource probability modeling at the next meeting. Sarah also said that Bob Smet, Yadkin, would discuss his experiences with implementation of the Yadkin Project SMP and that Phil Thomason, Thomason and Associates, would highlight the revisions to the National Register of Historic Places Eligibility Revised Draft Study Plan (see Attachment 3).

## **Development of the Yadkin Cultural Resources Probability Model**

Steve Claggett, Office of State Archaeology (OSA), explained that the OSA began working with Yadkin in the 1990s to provide assistance with cultural resources probability mapping during the development of the Yadkin Project SMP. He said that the NCDCCR shared site location data and advised Yadkin on how to best use the data to complete some probability mapping. Steve said that Yadkin then used the data and with the assistance of a consulting firm, developed a GIS (Geographical Information System) layer that was used to create the cultural resources high/medium/low probability area maps included in the Yadkin SMP. Steve clarified that the intent of the exercise was never to construct a highly detailed model that was based on statistical analyses, but rather to share the information that is the basis for the maps.

Larry Jones, High Rock Lake Association, said that at the August 27, 2003 IAG meeting, he was lead to believe that the maps that are a part of the Yadkin SMP are the work product of probability model developed by North Carolina. Based on Steve's presentation, Larry understood the probability model to be a product of APGI. Sarah Verville clarified that Yadkin, using the information provided by the NCDCCR, did produce the GIS data layer that was then used to produce the cultural resources probability area maps. Sarah understood Larry's question to be about the criteria used to define an area as a high, medium, or low probability area. Larry said yes, and specifically referred to his concern about a majority of the High Rock Reservoir shoreline being classified as a high probability area.

Dr. Billy Oliver, Office of State Archaeology, explained that the basis of the information provided to Yadkin by the NCDCCR was a cultural resources evaluation program – a computerized inventory of site attribute data (e.g. soils, slope, orientation, and distance from the water). He said that these data, together with information on developed areas provided by Yadkin, were used to classify shoreline areas as a high, medium, or low probability area.

Sarah Verville asked Dr. Oliver to specifically describe the site attributes along High Rock Reservoir that cause these areas to be classified as high probability areas. Dr. Oliver explained that High Rock Reservoir has a different configuration than the other Yadkin reservoirs. High Rock Reservoir has a different pattern of site locations and site occurrences and the resources at High Rock Reservoir are from different time periods and at different elevations. Dr. Oliver also noted that High Rock Reservoir has approximately 3-4 times the miles of shoreline than Narrows Reservoir.

Larry Jones contrasted Narrows Reservoir, much of which is classified as a low probability area but with many documented archaeological sites, to High Rock Reservoir, much of which is classified as a high probability area, but with few documented archaeological sites. Dr. Oliver generically explained the differences to be a result of the site attribute data (i.e. the slope of the land, access to water etc.). For example, early inhabitants were less likely to camp on a steep-side mountain where access to the water is limited. He also explained that the sites/events at each of the reservoirs are separated by time and space.

Larry Jones said that he was hearing conflicting accounts about the development of the cultural resource probability area maps from staff within the same department.

Steve Claggett said that a consulting firm, Dames and Moore, did the map work using information provided by the NCDCCR. Sarah Verville asked who actually classified the shoreline areas as a high, medium, or low probability area. Dr. Oliver said that he provided information to Long View Associates (a consultant to Yadkin) and to Dames and Moore who developed the maps. Dr. Oliver supposed the confusion to be about the purpose and capability of the probability model. He said that at the time (i.e. during the development of the SMP), the information provided to Yadkin was intended to be general. Dr. Oliver said that he was taught to rely on several variables when predicting the location of a cultural resources site: soil type, slope, orientation, and distance to water. APCI will try to obtain further clarification from Yadkin's consultants regarding the classification of high, medium, and low probability zones.

Larry Jones commented that he did not think it is okay to broadly state that all of the High Rock Reservoir shoreline has a high probability for archaeological sites.

Ann Brownlee, Trading Ford Historic Preservation District Association, asked how the probability zones were used in practice. Sarah Verville answered that Bob Smet would share Yadkin's experiences with the implementation of the probability model.

### **Yadkin's Experience with Implementation of the Probability Model**

Bob Smet, Yadkin, explained how Yadkin uses the cultural resource probability area maps to implement the Yadkin Project SMP (see Attachment 4). He said that the SMP requires Yadkin to check the location of any proposed pier to determine if there are any known archaeological sites located in close proximity to the proposed pier location. If there is a known archaeological site, Yadkin must consult with NCDCCR to determine what must be done to protect the site. Bob said that since July 1, 1999 (the effective date of the SMP), Yadkin has issued permits for 130 new piers and 125 replacement piers. He said that none of the new or replacement piers were located near known archaeological sites and therefore, no cultural resource consultations were required.

Continuing, Bob Smet explained that excavation for recreational access may be permitted on High Rock Reservoir. However, if the area to be excavated is adjacent to shoreline that has been classified as a high probability area, prior written approval from NCDCCR is required. He said that Yadkin has received 145 excavation applications since July 1, 1999 and only one application required consultation with the NCDCCR. Similarly, shoreline stabilization may be permitted on the reservoirs. Bob explained that in some cases, shoreline stabilization also requires prior written approval from the NCDCCR. Of the 73 shoreline stabilization requests received since July 1, 1999, none have been located in proximity to a known archaeological site. Bob noted that excavation and shoreline stabilization require Clean Water Act Section 401 and Section 404 permits from the North Carolina Division of Water Quality and the U.S. Army Corps of Engineers respectively and therefore, the NCDCCR has the opportunity to review all of the applications regardless of the cultural resource probability classification.

Bob Smet explained that under the SMP's Subdivision Access Approval, Multi-use Permitting and Industrial Use Procedures, any proposed activity in a high or medium cultural probability zone requires an archaeological survey by a professional archaeologist. The geographical scope

of the survey must include the area within 100-ft of normal full pool. Also, in this situation, the NCDCCR must be consulted regardless of the cultural resource probability classification. Bob said that since July 1, 1999, Yadkin has received one major subdivision access application, 20 multi-use facility applications, and four industrial use applications. In total, four of the proposed projects were either in a high cultural resource probability area (3) or a medium probability area (1) and required archaeological surveys. The NCDCCR either concurred or had no comment on the projects and no new or potentially eligible sites were discovered.

Larry Jones commented that since a majority of the High Rock Reservoir shoreline is classified as high probability, any economic development at the reservoir will have to consider an archaeological survey as part of the development (an added cost). Dr. Novick, Office of State Archaeology, began by explaining that the geography of the reservoirs is very different. There are broad flood plains and low areas on some reservoirs, but not on the others such as Falls Reservoir, which has steep sides and narrow restricted flood plains. Dr. Novick had calculated shoreline miles as percentages and read these as a basis for discussion between reservoirs. She asked that the table with percentages and miles be included in the meeting summary (see table below). The highest percentage of high probability shoreline miles is located on Tuckertown Reservoir, not High Rock Reservoir.

	Falls		Narrows		Tuckertown		High Rock	
	%	Miles	%	Miles	%	Miles	%	Miles
Low Probability	49	3.2	2	2	7	5	2	6
Medium Probability	18	1.2	11	10	4.2	3	18	62
High Probability	25	1.6	40	36	77.5	55	45	156
Developed	8	0.5	47	43	11.3	8	35	123
<b>Total</b>	<b>100</b>	<b>6.5</b>	<b>100</b>	<b>91</b>	<b>100</b>	<b>71</b>	<b>100</b>	<b>347</b>

Bob Smet explained that Yadkin is obligated by its FERC license to protect cultural resources. To do this, Yadkin has relied upon the NCDCCR and its consultants to develop cultural resource probability areas. Bob said that Yadkin’s primary goal is to satisfy the conditions of its FERC license. He said that High Rock is not devoid of archaeological sites. Larry Jones supposed that inhabitants of the area would have been a lot closer to the original riverbed than the shoreline as it exists today. Bob agreed. He said that many of the archaeological sites are inundated by the Project reservoirs.

Bob Smet asked if there were any questions on his presentation. Ann Brownlee asked how the locations of known prehistoric fords were used during the classification of probability areas. Dr. Oliver said that if the prehistoric fords were recorded as archaeological sites at the time (mid 1990s), they were factored into the decision-making process. Ann claimed that these areas are being disregarded and information about them is being thrown into the trash can. Jane Peoples intervened and asked that everyone refrain from questioning people’s actions and/or motives. Jane asked Ann to submit documented information to the NCDCCR or Yadkin about any specific sites that she is aware of and concerned about that are not already recorded sites. Ann stated that she did submit this type of information to the NCDCCR. Jane suggested that the IAG move forward and focus on issues that can be addressed in the context of the Project relicensing.

Dr. Oliver stated that it is unfair to claim that there has been a lack of efforts to record archaeological sites. He said that the burden of recording sites has fallen to the citizens. He explained that in the 1930s, Dr. Wallace Caldwell, Joffre Coe, and Douglas Rights completed surveys and site forms in the area and organized the Archaeological Society of North Carolina. This Society was the beginning of recorded sites in North Carolina. Dr. Oliver explained that in the 1970s these records were transferred to the University of North Carolina, where they are now housed. He said that there are about 40,000 recorded archaeological sites in North Carolina. He said that private citizens reported a vast majority of these sites. He stated that nothing sent to the NCDCCR is ever casually discarded.

## **Cultural Resources Landscape Study Proposal**

Phil Thomason, Thomason and Associates, first reviewed the initial scope of work of the National Register of Historic Places Eligibility Revised Draft Study Plan (see Attachments 3 and 5). The Revised Draft Study Plan was emailed to the Cultural Resources IAG on October 30, 2003. He noted that the four Project developments would be evaluated as a complex of facilities rather than individual units such as the dams and powerhouses. The study will assess the eligibility of each development as a historic district made up of contributing and non-contributing elements (similar to what was done at APGI's Tapoco Project). He also noted that based on comments received at the last meeting, he added a task to inventory any original plans, notebooks, blueprints, photographs, and other associated documents and to provide recommendations for their preservation. Patricia Huckabee, Badin Museum, asked for copies of everything Phil finds. Before moving on to the discussion of the Cultural Landscape Study, Jane Peoples asked Patricia to read her comments into the record (see Attachment 6).

Continuing, Phil Thomason explained that based on comments received at the last meeting, he also expanded the scope of the study to include a Cultural Landscape Study (see Attachment 3). Phil described each of the study tasks. Ann Brownlee questioned the geographic scope of the landscape study. She said that the northern boundary of the study should not be limited to the area in the vicinity of the Trading Ford and that the entire Project area should be included in the study (in its comments dated December 11, 2003, the NCSHPO concurred that the entire Project area should be included in the study). Ann suggested that Phil post a request on [rootsweb.com](http://rootsweb.com) (county discussion groups) soliciting information from the public about historic sites along the river/reservoirs. She commented that military sites were not included in the study's scope. Phil said that such sites were implied – the study will include anything on the cultural landscape. Ann asked if the locations of the cemeteries in the area and the inscriptions on the tombs would be documented as part of the study. Phil explained that cemetery recordation is done on a county-by-county basis. Ann asked about the cemeteries under water. Phil said that he assumed any major cemetery would have been exhumed and relocated prior to inundation.

Dr. Oliver said that a statewide cemetery survey was completed in the mid 1990s. He said that these records are kept in the state archives (the contact person is Debbie Blake). Dr. Novick added that Yadkin may also have some cemetery information on file (e.g. when Yadkin extended the parking area at the Flat Creek Boat Access, it consulted information on the adjacent cemetery). Dr. Novick said that the U.S. Forest Service prepared maps that illustrate property owners and boundaries for the land they purchased in the early 20<sup>th</sup> century. She suggested that

APGI might have similar maps that the company prepared while purchasing property and efforts should be made to see if these exist prior to doing background research. If any of the aluminum companies prepared such maps, they could provide valuable information and save time doing record and title searches.

Ann Brownlee suggested soliciting information from the public. She asked that Phil Thomason review the study list application materials that she filed with the NCDCCR. She asked how she could ensure that the “other side” is considered. Sarah Verville asked Ann to clarify what she meant by “other side”. Ann noted that, for example, there is a strong disparity between the survey work completed by the North Carolina Department of Transportation (NCDOT) and others for the proposed expansion of Interstate 85. Sarah asked if the surveys completed by those other than the NCDOT were conducted by professional archaeologists recognized by the NCDCCR. Sarah explained that it is not Yadkin’s responsibility to resolve disputes over the eligibility of archaeological sites. She said that Yadkin can make recommendations, but these recommendations must be based on the work of professional archaeologists on NCDCCR’s approved list of archaeologists. Ann said that she was a consultant on the NCDOT project. Sarah asked if she was on NCDCCR’s approved list of archaeologists. Ann answered no. Ann asked who decided that information provided by someone without credentials cannot be considered. She asked to see something in writing. Sarah said that Phil will review all information available, regardless of the author, but that more weight would have to be given to information provided by professional archaeologists. Ann said that certain issues are not addressed in the NCDOT report. Ann stated that the sites in question are not archaeological sites. Ann questioned whether only archaeologists’ opinions would be taken into consideration. Ann emphasized that she wanted to ensure that information that she (or others) has (including information from an archaeologist and recognized experts) is taken into consideration. Phil confirmed that, as part of the cultural resources landscape study, he would be reviewing the report and providing recommendations on whether any additional assessment (including what other sources had been consulted) is necessary.

Jane Peeples reemphasized that Yadkin’s role is to consider the impacts of Project operations on environmental, cultural, and recreational resources. Yadkin is not an arbitrator of disputes between a group and the state. Jane said that any relevant available data will be reviewed. Ann Brownlee asked for a “fair hearing”. Sarah Verville said that the cultural landscape work had been added to the scope of the study at Ann’s request and the NCSHPO’s concurrence. She said that Phil would consider any relevant evidence. Phil stated that he has no preconceived notions about the survey work done to date. Ann said that she was unsure how much of what she submits will ultimately get to the consultants.

Dr. Novick clarified that the list of professionals on the NCDCCR website includes archaeologists, geoarchaeologists, underwater archeologists, and architectural historians. She explained that although the North Carolina SHPO does not regulate archaeologists, the federal government provides such guidance for the Section 106 process. The federal government provides regulatory oversight of professional standards for archaeologists, historians, and architectural historians working in the Section 106 process through the Department of Interior’s National Park Service (NPS) with the Secretary’s standards. North Carolina does not have an approved list, but

professionals in these disciplines are to have the minimum education and professional experience set forth by the NPS.

Ann Brownlee asked that information be assessed on the basis of its value, rather than the credentials of the person doing the work. Ann highlighted the second “meeting norm” on the “Issue Advisory Group Meeting Guidelines” – “Respect for opinions of others, look for merit in ideas”. She said that those questioning her credentials were not adhering to this meeting norm. Larry Jones commented that he did not hear anyone question Ann’s credentials. Sarah said that Ann’s point about evaluating the quality of the material rather than the credentials of the person producing the material was a point well taken.

Sarah Verville asked that any comments on the Revised Draft Study Report be submitted by November 13, 2003 (one week’s time). Renee Gledhill-Early said that she was fine with the study plan, as revised, and had no additional comments. Sarah said that upon the receipt of any other comments, Phil would finalize the study plan.

### **Additional Discussion, Schedule and Agenda for Next Meeting**

Sarah anticipated that the next meeting of the IAG would be in March 2004, but she suggested not scheduling a meeting until such a time that Phil completes his work.

The meeting adjourned at about 2:30 p.m.

**Attachment 1 – Meeting Agenda**

**Yadkin Project  
(FERC No. 2197)**

**Communications Enhanced Three-Stage Relicensing Process**

**Cultural Resources Issue Advisory Group Meeting**

**Wednesday, November 5, 2003**

**Alcoa Conference Center  
Badin, North Carolina**

**1:00 PM – 3:30 PM**

**Preliminary Agenda**

1:00	Introductions and Updates Request for Delegation of Section 106 Consultation	Sarah Verville
1:15	Development of Yadkin Cultural Resources Probability Model	NC DCR
2:00	Yadkin's Experience with Implementation of Probability Model	Bob Smet
2:30	Cultural Resources Landscape Study Proposal	Phil Thomason
3:00	Additional Discussion, Schedule and Agenda for Next Meeting	Sarah Verville

## Attachment 2 – Meeting Attendees

<b>Name</b>	<b>Organization</b>
Ann Brownlee	Trading Ford Historic District Preservation Association
Bob Smet	APGI, Yadkin Division
Dr. Billy Oliver	Office of State Archaeology
Dr. Lee Novick	Office of State Archaeology
Jane Peeples	Meeting Director
Jody Cason	Long View Associates
Larry Jones	High Rock Lake Association
Matt Brinkley	Town of Badin
Patricia Huckabee	Badin Museum
Phil Thomason	Thomason and Associates
Renee Gledhill-Early	NC SHPO
Robert Petree	SaveHighRockLake.org
Sarah Verville	Long View Associates
Steve Claggett	Office of State Archaeology

## **Attachment 3 – National Register of Historic Places Eligibility Revised Draft Study Plan**

### **Yadkin Project (FERC No. 2197) National Register of Historic Places Eligibility Study Draft Study Plan October 2003**

#### ***Background***

Alcoa Power Generating Inc. (APGI) is the licensee for the Yadkin Hydroelectric Project. The Yadkin Project is currently licensed by the Federal Energy Regulatory Commission (FERC) as Project No. 2197. This license expires in 2008 and APGI must file a new license application with FERC on or before April 30, 2006 to continue operation of the Project.

The Yadkin Project consists of four reservoirs, dams, and powerhouses (High Rock, Tuckertown, Narrows, and Falls) located on a 38-mile stretch of the Yadkin River in central North Carolina. The Project generates electricity to support the power needs of Alcoa's Badin Works, to support its other aluminum operations, or is sold on the open market.

As part of the relicensing process, APGI prepared and distributed, in September 2002, an Initial Consultation Document (ICD), which provides a general overview of the Project. Agencies, municipalities, non-governmental organizations and members of the public were given an opportunity to review the ICD and identify information and studies that are needed to address relicensing issues. To further assist in the identification of issues and data/study needs, APGI formed several Issue Advisory Groups (IAGs) to advise APGI on resource issues throughout the relicensing process. IAGs also have the opportunity to review and comment on Draft Study Plans. One of the IAGs, the Cultural Resources Issue Advisory Group, was formed to address historic, architectural, and archaeological properties within the project's boundary.

#### ***Issue/ Overview***

Section 106 of the National Historic Preservation Act (NHPA) requires that FERC take into account the effects of its relicensing decision on historic properties, and to allow the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on FERC's relicensing decision. In North Carolina, the Division of Historic Resources serves as the State Historic Preservation Office (SHPO). This office is responsible for the administration of the Section 106 program and has specific requirements for historic property analysis and assessment. In recent years, the SHPO has reviewed two FERC relicensing efforts regarding historic properties: APGI's Tapoco Hydroelectric Project and Duke Power's Nantahala Project. The SHPO has indicated that the level of effort and research produced for these two studies meet the state's criteria. This level of effort will include the National Register eligibility assessments of the Yadkin Project's four hydroelectric developments: Narrows, Falls, High Rock and Tuckertown.

In August of 2003, Thomason and Associates prepared a Draft Study Plan for this project based upon the level of work previously performed for the Tapoco and Duke Power projects. On August 27, 2003 APGI hosted a meeting of the Cultural Resources Issue Advisory Group in Badin, North Carolina, to discuss the scope of work for the project's cultural resource assessment. At this meeting there was general agreement on approval of the initial scope of work. Further

comments were received from the North Carolina SHPO in a letter dated September 26, 2003. Based upon these comments the initial scope of work was revised as follows:

### **Initial Scope of Work**

Yadkin proposes to conduct architectural and historical surveys of the four hydroelectric plants within the Yadkin Hydroelectric Project. These properties consist of the Narrows, Falls, High Rock and Tuckertown Developments. Since the Narrows Development was listed on the NRHP twenty years ago, a reassessment of its eligibility will be conducted. Work to be performed includes the following:

1. A physical inventory of each development will be conducted. This will include an architectural description of each property associated with the development, dates of construction, changes and alterations to the property over time, modern intrusions, and level of historic and architectural integrity.
2. Black and white photographs will be taken of each exterior façade, significant details and representative interiors. Color slides will also be taken to support NRHP nominations for eligible properties.
3. Historical research on the four developments will be completed. This will include primary research at the state archives in North Carolina, Yadkin's records and any other relevant repository of historical data. This information will be used to prepare an historical narrative of the development of the Yadkin River and its significance and historic contexts on a local, state, and nationwide level.
4. Recommendations for NRHP eligibility will be made in accordance with National Register criteria. The reassessment of the Narrows Development will include a descriptive and photographic update of all of the Narrows Development properties and a reevaluation of its NRHP-listed boundaries. The Falls and High Rock Development may be potentially eligible for the NRHP based upon their dates of construction, historical significance, and retention of their architectural and engineering character. In the case of the Tuckertown Development, the guidelines for properties that may have achieved significance within the past 50 years will also be applied.
5. The four hydroelectric projects will be evaluated as a complex of facilities rather than as individual units such as the dams, powerhouses, and other ancillary buildings or structures. The approach will focus on the eligibility of each project as an historic district made up of contributing and non-contributing elements. Surface remains of earlier buildings and structures will also be assessed for eligibility within the district boundaries.
6. In updating the nomination for the National Register-listed Narrows Hydroelectric Development, an historic context for the ownership and construction by the Whitney Companies and the L'Aluminum Francais will be developed to incorporate identified and potential archaeological properties at the site. Such properties may include the foundations of worker dwellings, roadbeds, stone walls, and other features. Based on this research and survey, the boundary for this nomination will be reassessed. As part of this research, original plans, notebooks, blueprints, photographs, and other documents

associated with the Whitney Companies and L'Aluminum Francais will be inventoried along with recommendations for conservation.

### **Additional Scope of Work – Cultural Landscape Study**

At the meeting of August 27, 2003 and in later communications, representatives of the North Carolina Department of Cultural Resources (SHPO), the Trading Ford Historic District Preservation Association, and other participants expressed an interest in the preparation of a cultural landscape study of the project area as part of the overall cultural resources analysis. A “cultural landscape” is defined as a geographical area that historically has been used by people, or shaped or modified by human activity, occupancy, or intervention, and that possesses a significant concentration, linkage, or continuity of areas of land use, vegetation, buildings and structures, roads and waterways, and natural features.<sup>1</sup> Cultural landscapes may be significant within such themes as agriculture, settlement, architecture, military, mining, industry, and transportation. To meet National Register criteria, cultural landscapes must not only be significant within a particular context or theme, but the landscape must also retain integrity from its period of significance. Landscape features which contribute to a property’s significance can include buildings and structures, roadbeds, fords or ferry crossings, field patterns, walls and fences, mines, and other manmade features. Once identified, cultural landscapes meeting National Register criteria are subject to review if affected through federally funded projects.

The Yadkin FERC project encompasses portions of Stanly, Montgomery, Davie, Davidson, and Rowan Counties in North Carolina. The cultural landscape of much of this area was transformed in the 20<sup>th</sup> century partially as a result of the construction of a series of dams and lakes to provide hydroelectric power for Alcoa’s Badin plant. The first of these, the Narrows Dam, was completed in 1917 and created the 5,355-acre Badin Lake. Downstream, the Falls Dam was built in 1919 and impounded the Falls Reservoir which has a pool area of 204 acres. The High Rock Dam was completed in 1927 and impounds the 15,180-acre High Rock Reservoir. The final dam built for Yadkin is the Tuckertown Dam and the Tuckertown Reservoir contains 2,560 acres.

The construction of these dams along with other 20<sup>th</sup> century projects changed the cultural landscape of the Yadkin River valley in central North Carolina from a 19<sup>th</sup> century traditional agricultural society to primarily a 20<sup>th</sup> century industrial society. Villages, buildings, structures, ferries, roads and bridges within the reservoir’s boundaries were either relocated, removed, or inundated when the lakes were impounded.

The cultural landscape of the Yadkin FERC area is now representative of the 20<sup>th</sup> century effects of the dam and powerhouse construction, and reservoir impoundment. Within the past fifty years, sections of the shoreline have also been extensively developed for residential construction especially along Abbott and Swearing Creeks on High Rock Lake, and Beaverdam Creek on Badin Lake. The National Forest Service has also developed sections of the shoreline along Badin Lake for recreational uses.

In order to complete a cultural landscape study of the Yadkin FERC project area, the Consultant proposes the following actions:

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<sup>1</sup> “National Register Bulletin 30, Guidelines for Evaluating and Documenting Rural Historical Landscapes,” (Washington: National Park Service), 1.

1. Completion of historical research on the Yadkin River valley area between the vicinity of Trading Ford on the north to the southern boundary of the Falls Reservoir on the south. This research will include a review of primary and secondary source materials pertaining to communities along the river, significant persons or families in the area, agricultural use and development, mining, logging or other industrial activities, road construction and development, ferry landings and fords, and other impacts on the landscape.
2. Identification of buildings and structures which existed within the project area such as dwellings and outbuildings, commercial buildings, churches, schools, social buildings, cemeteries, and other uses.
3. The Consultant will utilize all readily available 19<sup>th</sup> and early 20<sup>th</sup> century maps of the project area. These maps may include countywide USGS quad maps, soil survey and geologic survey maps, road maps, Civil War-era maps, and overall county maps. The North Carolina Archives, University of North Carolina, the David Rumsey Map Collection, maps at county libraries, and other sources will be examined for this study.
4. The Consultant will contact county historians and historical groups in Stanly, Montgomery, Davie, Davidson, and Rowan Counties to gain additional information on the project area. Of particular interest will be the acquisition of historical photographs of buildings, individuals, views, and lifestyles to illustrate the cultural landscape of the project area. Historical photographs will be examined at the North Carolina Archives, the Southern Historical Collection and the UNC Photograph Collections at Chapel Hill, the Duke Photograph Collections, and photographs on file with APCI at Badin. Relevant photographs will be reviewed and copied for inclusion within the report.
5. For the Trading Ford area of the Yadkin Project, the Consultant will review studies and reports completed by the North Carolina Department of Transportation (NCDOT) within the Trading Ford vicinity. Several studies have already been completed of the Trading Ford by NCDOT and within this area the agency has identified the Wil-Cox Bridge and Fort York site as meeting National Register criteria.<sup>2</sup> Following the review of these reports, the Consultant will provide an assessment of the need for any additional cultural landscape description in the Trading Ford area of the Yadkin Project.
5. Upon the completion of research, the Consultant will utilize present-day USGS quad maps of the project area to identify any possible landscape elements that remain along the shoreline. For any extant properties that may be potentially significant, the Consultant will conduct site visits to record any surface features which remain. It is anticipated that the majority of properties identified in this study will be beneath the surface of the reservoirs. Possible sites along the shoreline may include sections of roadbeds, cemeteries, building foundations, ferry crossings, bridges, remnants of farmsteads such as outbuildings and stone walls, and vegetation such as fruit trees and domestic plantings.

## Reporting

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<sup>2</sup> Mary Pope Furr, NCDOT, Telephone Interview, 15 October, 2003.

At the conclusion of the research, field survey, and NRHP assessment phases, a draft report will be prepared that contains the following information.

1. An overview of the history of hydroelectric power in North Carolina.
2. An overview of the history of Alcoa and its operations in North Carolina.
3. Architectural, historical and photographic documentation of the four developments.
4. A listing of hydroelectric property types and registration requirements.
5. Recommendations for or against NRHP eligibility of the four developments.
6. Recommendations, if any, to changes in the NRHP status or boundaries for the Narrows Development.
7. An analysis of the cultural landscape of the Yadkin FERC project area containing an historical overview of the project area, how the cultural landscape has evolved over time, maps and photographs documenting the history of the area and identified resources along the shoreline or within the FERC boundary. All properties subject to field survey will be discussed and reviewed for their eligibility to meet National Register criteria. The report will contain an analysis of the cultural landscape of the Yadkin River valley prior to its acquisition and inundation in the 20<sup>th</sup> century by Alcoa, what remains today along the shoreline and within the project area, and the identification of significant properties. The report will also identify potentially eligible properties presently submerged which may need protection during times of drawdowns and drought.

The draft report will be distributed to the IAG for review and comment, the comments addressed, and a final report prepared. Upon acceptance of the final report by the SHPO, nominations for any NRHP-eligible properties will be prepared in accordance with National Register standards.

### **Schedule**

- |  |                          |
|--|--------------------------|
| 1. Physical inventory, photography, historical research and NRHP assessments | August 2003-January 2004 |
| 2. Draft Report  | February 2004            |
| 3. Final Report  | May 2004                 |
| 4. Submittal of NRHP Nominations to SHPO                                     | July 2004                |

**Attachment 4 – Yadkin SMP Cultural Resources Protection (Presentation)**

# Yadkin Shoreline Management Plan



Cultural Resources Protection



## Private Pier Requests

- Specifications require Yadkin to check the location of the proposed pier with respect to known archaeological sites to determine that no known sites are located in close proximity to the proposed pier location.
- If there is a known site, Yadkin must consult with NC DCR to determine what measures should be taken to protect the site.

## Private Pier Requests

- Since July 1, 1999, the effective date of the SMP, Yadkin has issued permits for 130 new piers and 125 replacement piers.
  - None of the new or replacement pier requests have been in close proximity to known sites.
  - No cultural resource evaluations have been required for the installation of these piers.

## Excavation Requests

- Excavation for recreational access may be permitted in High Rock Reservoir.
- Excavation of the Reservoir adjacent to the shoreline which has been designated as a high cultural probability zone requires prior written approval from NC DCR.
- Yadkin has received 145 Excavation Applications since July 1, 1999.
  - One application required consultation with NC DCR. It was determined that the known site was outside of the proposed area of impact.

## Shoreline Stabilization Requests

- Shoreline stabilization, in the form of vegetative plantings, riprap, or in extreme circumstances, retaining walls, may be permitted if a registered professional engineer determines there is a need.
- Shoreline stabilization requests, in some instances, require written approval from NC DCR.
- Yadkin has received 73 shoreline stabilization requests since July 1, 1999.
  - None have been located in proximity to a known site

## Subdivision Access Approval, Multi-Use Permitting, and Industrial Use Procedures

- Any proposed activity in a high or medium cultural probability zone requires completion of an archaeological survey by a professional archaeologist.
- The survey requires an assessment of potential impacts to cultural resources within 100 feet of normal full pool elevation.
- NC DCR is a consulted agency for any proposed activity and has the opportunity to comment on the proposal regardless of the cultural resource zone designation.

## Subdivision Access Approval, Multi-Use Permitting, and Industrial Use Procedures

- Since July 1, 1999, Yadkin has received one major subdivision access application and 20 multi-use facility applications.
  - Of those 21 projects, three were in high cultural resource probability zones. All others projects were in low probability zones or in developed zones.
- Yadkin has also received four industrial use applications, primarily from NC DOT.
  - One proposed project was in a medium probability zone. All others were in low probability zones or developed zones.

## Subdivision Access Approval, Multi-Use Permitting, and Industrial Use Procedures

- Four formal archaeological surveys have been conducted in association with all requested subdivision access approval, multi-use permitting, and industrial use applications.
  - No new eligible or potentially eligible sites were discovered
  - NCDRCR either concurred or had no comment on the remaining projects
- One Yadkin public access area improvement project was identified as having a potential impact upon cultural resources. NCDRCR asked that they be notified if any artifacts were discovered while the work was underway.
  - No artifacts were discovered during completion of the project.

**Attachment 5 – NRHP Eligibility Revised Draft Study Plan (Presentation)**

***NRHP Eligibility Draft  
Study Plan***

*Thomason and Associates  
Preservation Planners  
Nashville, TN*

November 2003

**INITIAL SCOPE OF WORK**

## **#1**

A physical inventory of each development will be conducted. This will include an architectural description of each property associated with the development, dates of construction, changes and alterations to the property over time, modern intrusions, and level of historic and architectural integrity.

Initial Scope of Work, continued

## **#2**

Black and white photographs will be taken of each exterior façade, significant details and representative interiors. Color slides will also be taken to support NRHP nominations for eligible properties.

Initial Scope of Work, continued

### #3

Historical research on the four developments will be completed. This will include primary research at the state archives in North Carolina, Yadkin's records and any other relevant repository of historical data. This information will be used to prepare an historical narrative of the development of the Yadkin River and its significance and historic contexts on a local, state, and nationwide level.

Initial Scope of Work, continued

### #4

Recommendations for NRHP eligibility will be made in accordance with National Register criteria. The reassessment of the Narrows Development will include a descriptive and photographic update of all of the Narrows Development properties and a reevaluation of its NRHP-listed boundaries. The Falls and High Rock Development may be potentially eligible for the NRHP based upon their dates of construction, historical significance, and retention of their architectural and engineering character. In the case of the Tuckertown Development, the guidelines for properties that may have achieved significance within the past 50 years will also be applied.

Initial Scope of Work, continued

## #5

The four hydroelectric projects will be evaluated as a complex of facilities rather than as individual units such as the dams, powerhouses, and other ancillary buildings or structures. The approach will focus on the eligibility of each project as an historic district made up of contributing and non-contributing elements. Surface remains of earlier buildings and structures will also be assessed for eligibility within the district boundaries.

Initial Scope of Work, continued

## #6

In updating the nomination for the National Register-listed Narrows Hydroelectric Development, an historic context for the ownership and construction by the Whitney Companies and the L'Aluminum Francais will be developed to incorporate identified and potential archaeological properties at the site. Such properties may include the foundations of worker dwellings, roadbeds, stone walls, and other features. Based on this research and survey, the boundary for this nomination will be reassessed. As part of this research, original plans, notebooks, blueprints, photographs, and other documents associated with the Whitney Companies and L'Aluminum Francais will be inventoried along with recommendations for conservation.

Initial Scope of Work, continued

# CULTURAL LANDSCAPE SURVEY

## ACTION #1

Completion of historical research on the Yadkin River valley area between the vicinity of Trading Ford on the north to the southern boundary of the Falls Reservoir on the south. This research will include a review of primary and secondary source materials pertaining to communities along the river, significant persons or families in the area, agricultural use and development, mining, logging or other industrial activities, road construction and development, ferry landings and fords, and other impacts on the landscape.

Cultural Landscape Study, continued

## ACTION #2

Identification of buildings and structures which existed within the project area such as dwellings and outbuildings, commercial buildings, churches, schools, social buildings, cemeteries, and other uses.

Cultural Landscape Study, continued

## ACTION #3

The Consultant will utilize all readily available 19<sup>th</sup> and early 20<sup>th</sup> century maps of the project area. These maps may include countywide USGS quad maps, soil survey and geologic survey maps, road maps, Civil War-era maps, and overall county maps. The North Carolina Archives, University of North Carolina, the David Rumsey Map Collection, maps at county libraries, and other sources will be examined for this study.

Cultural Landscape Study, continued

## ACTION #4

The Consultant will contact county historians and historical groups in Stanly, Montgomery, Davie, Davidson, and Rowan Counties to gain additional information on the project area. Of particular interest will be the acquisition of historical photographs of buildings, individuals, views, and lifestyles to illustrate the cultural landscape of the project area. Historical photographs will be examined at the North Carolina Archives, the Southern Historical Collection and the UNC Photograph Collections at Chapel Hill, the Duke Photograph Collections, and photographs on file with APGI at Badin. Relevant photographs will be reviewed and copied for inclusion within the report.

Cultural Landscape Study, continued

## ACTION #5

For the Trading Ford area of the Yadkin Project, the Consultant will review studies and reports completed by the North Carolina Department of Transportation (NCDOT) within the Trading Ford vicinity. Several studies have already been completed of the Trading Ford by NCDOT and within this area the agency has identified the Wil-Cox Bridge and Fort York site as meeting National Register criteria.<sup>4</sup> Following the review of these reports, the Consultant will provide an assessment of the need for any additional cultural landscape description in the Trading Ford area of the Yadkin Project.

<sup>4</sup> Mary Pope Furr, NCDOT, Telephone Interview, 15 October, 2003.

Cultural Landscape Study, continued

## ACTION #6

Upon the completion of research, the Consultant will utilize present-day USGS quad maps of the project area to identify any possible landscape elements that remain along the shoreline. For any extant properties that may be potentially significant, the Consultant will conduct site visits to record any surface features which remain. It is anticipated that the majority of properties identified in this study will be beneath the surface of the reservoirs. Possible sites along the shoreline may include sections of roadbeds, cemeteries, building foundations, ferry crossings, bridges, remnants of farmsteads such as outbuildings and stone walls, and vegetation such as fruit trees and domestic plantings

Cultural Landscape Study, continued



Yadkin River, 1897

Yadkin River Area  
Civil War Era



# REPORTING

- ✓ An overview of the history of hydroelectric power in North Carolina
- ✓ An overview of the history of Alcoa and its operations in North Carolina
- ✓ Architectural, historical and photographic documentation of the four developments.
- ✓ A listing of hydroelectric property types and registration requirements

Reporting, continued

- ✓ Recommendations for or against NRHP eligibility of the four developments
  
- ✓ Recommendations, if any, to changes in the NRHP status or boundaries for the Narrows Development

Reporting, continued

✓An analysis of the cultural landscape of the Yadkin FERC project area containing an historical overview of the project area, how the cultural landscape has evolved over time, maps and photographs documenting the history of the area and identified resources along the shoreline or within the FERC boundary. The report will contain an analysis of the cultural landscape of the Yadkin River valley prior to its acquisition and inundation in the 20th century by Alcoa, what remains today along the shoreline and within the project area, and the identification of significant properties. The report will also identify potentially eligible properties presently submerged which may need protection during times of drawdowns and drought.

Reporting, continued

## SCHEDULE

•Physical inventory, photography, historical research and NRHP assessments.

August 2003-January 2004

•Draft Report

February 2004

•Final Report

May 2004

•Submittal of NRHP Nominations to the SHPO

July 2004

**Attachment 6 – Bridget Huckabee’s Letter**

The main focus for Badin Museum as it relates to the Project's relicensing is the protection of historic properties associated with ~~the~~ relicensing.

Alcoa, and Yadkin, Inc have in their possession dozens of old photographs of the Yadkin River, the Narrows and Falls Dam, the Hardaway site when it was a construction camp, original architects plans of the Badin townhouses, the plan of the town, and many other historic documents pertaining to Badin.

What I am asking for, on behalf of Badin Museum, are copies of these historic documents. We do not plan to exploit them or sell them. We would like to display them for the benefit of our museum visitors, our children and any researchers and scholars who wish to use them.

I was allowed access to a few photographs through the good graces of Bob Smet, but was told not to ask for too many or I wouldn't get any at all.

Let me use this analogy: to Badin Alcoa, is like Big Daddy, the family patriarch, and he has in his keeping all the family photos and memorabilia and documents. For whatever reason, he's keeping them to himself instead of sharing them with his family. If he divorces this part of his family and goes away, that family history, the family's heritage, goes with him.

The river along with its history is our history. And so are the dams and so is the town. When the river flooded in 1916 and washed away part of the Narrows dam, Alcoa was there to document that event. And years later, I had to beg for a bit of that documentation.

I'm asking Yadkin, Inc., to do whatever is necessary to help obtain photos, documents, plans, even old contracts, for Badin Museum so that the Badin family can know its own history.