Yadkin Project Relicensing (FERC No. 2197)  
Wetlands, Wildlife, Botanical IAG Meeting  
October 8, 2003  

Alcoa Conference Center  
Badin, North Carolina  

Final Meeting Summary

Meeting Agenda

See Attachment 1.

Meeting Attendees

See Attachment 2.

Welcome and Introductions

Jane Peeples, Meeting Director, opened the meeting with introductions and a review of the agenda. Wendy Bley, Long View Associates, introduced Dana Bradshaw, Center for Conservation Biology at the College of William and Mary (CCB), who presented information on the on Bald Eagle and Great Blue Heron surveys at the Yadkin Project. Wendy said that Dana has been conducting surveys at the Project since the mid-1990s. Dana and the Center for Conservation Biology will also be conducting the Avian Inventory.

Bald Eagle and Great Blue Heron Surveys

Dana explained that the CCB initiated Bald Eagle surveys at the Project in 1994 as part of the shoreline management planning process. The CCB also assisted Yadkin with the Bald Eagle Management Plan (approved by FERC in 1995). Dana said that in 2001 the CCB started surveying the Project area again, this time to provide a baseline assessment for the relicensing. In 2001, the CCB identified three active Bald Eagle territories – one just below North Potts Creek and two on the west shoreline of Narrows and Falls reservoirs. Dana said that in 2002 there were four active territories at the Project (the North Potts Creek nest, a nest on Tuckertown Reservoir below the dam, and the nests on west shoreline of Narrows and Falls reservoirs) and in 2003 there were three active territories (the North Potts Creek nest, the nest on Tuckertown Reservoir, and a nest in the Uwharrie National Forest about ½ mile upstream of the dam). Dana concluded that nests that were once active and now are inactive were probably affected by some level of disturbance (e.g. boating traffic).

Andy Abramson, Land Trust for Central North Carolina, asked if there are factors, other than recreation, that may cause an eagle to abandon its nest. Dana replied that water-borne disturbances are typically the cause. Ken Knight, North Carolina Wildlife Resources Commission (NCWRC), commented that there is a nest on upper High Rock Reservoir that has a four-wheel trail immediately below it. He was uncertain what to do about it. Dana said that any
disturbance to the eagles would really depend on the on the timing of the four-wheel traffic. Dana explained that eagles build their nests in the late fall and early winter, therefore, if the four-wheel traffic is high during this period, the eagles might abandon the nest and move elsewhere. Donley Hill, U.S. Forest Service (USFS), asked about the specific location of the four-wheel trail. Ken said that the trail in on upper High Rock Reservoir on the Davidson County side.

Larry Jones, High Rock Lake Association, asked how far an eagle would travel from its nest. Dana said that historically eagles traveled no further than about one square mile from their nest. He said that eagles would travel further if it becomes necessary to find food (e.g. the eagle nests on the Chesapeake Bay are located in very close proximity to one another, so eagles may have to travel further to find food). Larry asked about the range of offspring from a nest. Dana said that offspring when they fledge will typically travel some distances, possibly out of state. He said that offspring typically travel to their native area when they are ready to breed. Robert Petree, SaveHighRockLake.org, asked if the nest near Panther Creek produced any young. Dana said no, the nest blew out of the tree and was not reestablished.

Sarah Allen, Normandeau Associates, asked how far back from the reservoir the eagles will nest. Dana said that it would depend upon the surroundings – topography, tree canopy, visibility etc.

Gene Ellis, Alcoa Power Generating Inc. (APGI), asked if the CCB had located any nests at the Yadkin Project during the mid-1990s work. Dana said that there was one active nest below Falls Dam on Lake Tillery, but no nests at the Yadkin Project.

Shannan Sharp, USFS, asked for the specific location of the nest located in the Uwharrie National Forest. Dana offered to show Shannan the location on a topographic map during a break.

Andy Abramson asked if any of the birds were tagged during the surveys to determine if they are reproducing. Dana stated that eagles are not migratory birds, they are birds with incredible site fidelity that nest in the same areas year after year. He said that even if a nest is abandoned, a new nest would be constructed within about ½ mile. Andy asked whether the eagle population is increasing or decreasing over time. Dana said that he could not be certain, but that he felt that the population is growing. In fact, he thought, the population would become saturated in the near future not because of lack of habitat but because of the inability to acquire food in an undisturbed environment. Dana doubted that the area could support more than six or seven active territories. Ken Knight asked about the potential for active territories to spread throughout the entire Yadkin Pee Dee River system. Dana said that while there is not much opportunity for expansion above the Yadkin Project, there is some potential for expansion down towards Cheraw, South Carolina. He estimated that the Yadkin Pee Dee River system could probably support about 10-12 active territories.

Larry Jones asked if the eagle’s diet is strictly aquatic. Dana said that eagles will not take mammals live, but will take road kill or crippled waterfowl.

Gene Ellis asked if more eagles than nests were being found. Dana said no. Generally, the birds are associated with an active territory and a nest.
Yadkin Project Avian Inventory

Dana explained that the objective of the Avian Inventory is to evaluate the current status of migratory and breeding bird use of the Yadkin Project. Dana said that CCB will survey all four Yadkin Project reservoirs for federally threatened and endangered species, state threatened and endangered species, and Partners-in-Flight Conservation Program species (i.e. “watch list” species). The surveys will focus on the following habitats: 1) mainland uplands, 2) tributary mouths and marsh lands, 3) islands, and 4) open water. Dana said that the CCB would start with aerial and land surveys in the fall/winter (approximately October 15, 2003 – March 15, 2004) across the open water, tributary mouths, and marsh lands to understand shorebird use of the Project. Larry Jones asked what type of shorebirds might use the Yadkin Project reservoirs. Dana answered possibly sandpipers or yellowlegs, among others. Larry commented that he had seen a lot of mallards and geese on the reservoirs.

Dana said that the CCB would survey all the habitat types during spring migration (March 15, 2004 – June 1, 2004). He noted that the survey protocols are specific to the type of habitat being surveyed. He added that the CCB will also survey the terrestrial and marsh habitats during the breeding season (June 1, 2004 – July 30, 2004).

Andy Abramson asked if there would be some study of the birds’ habitat associations (that is the types of areas and habitats they are using). Dana said that the inventory would not include a lot of habitat association work, but that where large assemblages of birds exist he would try to associate the birds with the habitats being used.

Chris Goudreau asked Dana to discuss the status of the Great Blue Heron rookery at the Project. Dana said that the CCB had also surveyed the Project area for herons. He said that there are seven heron colonies along the Yadkin Project reservoirs that have been present and growing since 2001. Dana said that the two biggest heron colonies are on High Rock Reservoir (about 310 pairs) and the next biggest colony is on Narrows Reservoir (about 185 pairs). He noted that there are just as many pairs on the Progress Energy reservoirs and for this reason, the area is coming close to reaching saturation (not enough habitat).

Wetlands Evaluation

Sarah Allen, Normandeau Associates, said that true color aerial photographs of the Project reservoirs were taken during the period July 17 through August 26 at a scale of 1 inch = 800-ft. She explained that Normandeau would use the photos to delineate wetlands at the Project and then do some ground truthing in 2004 (see Attachment 3 – meeting presentation).

Wendy Bley said that she had briefly discussed Larry Jones’ comment at the October 7, 2003 Fish and Aquatics and Water Quality Joint IAG meeting about the resurgence of aquatic vegetation in High Rock Reservoir over the summer and the fact that these aquatic beds might not show up on the aerial photos with Sarah Allen. She said that Normandeau proposed a field visit sometime during the next couple of weeks to locate and sketch these new aquatic beds. Larry Jones, High Rock Lake Association, said that he was very encouraged by the regrowth of
aquatic vegetation and hopeful that the vegetation could help improve the reservoir’s water quality. Larry specifically noted the aquatic vegetation growing in Abbotts Creek. Gene Ellis asked Larry to mark the locations of the new aquatic beds on a map for Normandeau’s use in the field. Larry agreed. He also commented that Normandeau would have to get into the field as quickly as possible before the reservoir level drops and the vegetation begins to dry out. Sarah Allen said that Normandeau could be in the field by the end of October.

**Preliminary List of Yadkin Project RTE Species of Concern**

Continuing, Sarah distributed a preliminary list of rare, threatened, and endangered species (RTE species), which includes mammals, amphibians, and reptiles, birds, terrestrial insects, and vascular plants, to be considered for species searches at the Yadkin Project. She said that she purposefully excluded RTE fish and aquatic invertebrates, which will be addressed by the Fish and Aquatics IAG. She noted that Dana Bradshaw would be responsible for the RTE bird species. Sarah listed the data sources used to compile the species list: the U.S. Fish and Wildlife Service (USFWS), the U.S. Forest Service (USFS) Uwharrie National Forest Land Management Plan, the North Carolina Natural Heritage Program, the North Carolina Center for Geographic Information and Analysis, the Yadkin Project Initial Consultation Document and surveys conducted by Baranski and Dames and Moore.

Sarah reviewed a list of the RTE species definitions. She noted that the list does not include “watch list” species. She explained that the criteria for a species’ inclusion on the list were: 1) affected by Project operations, 2) located within 200-ft of the Project boundary, and/or 3) located within 50-ft of a transmission line corridor or powerhouse clearing.

Sarah asked if there were any general comments on the list. Larry Jones said that for the Bald Eagle under “comments” in the table, High Rock Reservoir should also be listed as a known occurrence. Sarah agreed to make the addition. Dana Bradshaw asked how the criterion “within 200-ft of the Project boundary” was chosen. Sarah said that 200-ft is about the extent of any interior lighting coming from the reservoir area.

Before discussing the list species by species, Sarah explained that the list is organized by the rank of the species (i.e. each species was ranked 1=included, 2=undecided, and 3=excluded). Those species ranked a 1 will be included in species searches at the Project and those ranked a 3 will be excluded from searches at the Project. Sarah said that she needed input on those species ranked a 2 – should these species be included or not included in species searches at the Project.

After discussing each species, Donley Hill and Shannan Sharp, USFS and Chris Goudreau and Ken Knight, NCWRC agreed to consult with some others (Gary Kauffman and Chris McGrath) to provide Sarah more guidance on the rank 2 species. Andy Abramson suggested that Sarah also consult with Moni Bates, North Carolina Department of Agriculture Plant Conservation Program and Pete Diamond, North Carolina Zoological Park.

Chris Goudreau questioned why the bog turtle was classified as a rank 3 species if the turtle’s habitat is sphagnum bogs. Sarah said that it is unlikely that the turtle’s habitat would be found close to the river.
Robert Petree asked if the transmission lines now outside of the Yadkin Project boundary would be included in the RTE species transmission line searches. Sarah said no. Normandeau will only search the two transmission lines remaining within the Project boundary.

Chris Goudreau suggested that Normandeau add a column to the table, which indicates if the species will be searched for along the Project transmission lines.

Several IAG members asked for an electronic copy of the species list. Sarah said that she would revise the list based on comments received at the meeting, consult with some others, and distribute an electronic copy of the list. She assured everyone that no species would be deleted from the list, but just moved around within the three categories. Wendy noted that the IAG would have a another opportunity to review the list. Sarah said that after this list is finalized, Normandeau would begin to assemble a list of species descriptions, complete some mapping, determine search locations and timing, and then conduct searches in 2004.

Gene Ellis invited those with the appropriate expertise to accompany Normandeau on the RTE species searches.

Schedule and Agenda for Next Meeting

Wendy Bley tentatively scheduled the next meeting for February 3, 2004. Chris Goudreau suggested that the IAG begin discussing some of the other study plans at the February meeting.

The meeting adjourned at about 11:15 a.m.
Attachment 1 – Meeting Agenda

Yadkin Project
(FERC No. 2197)
Communications Enhanced Three-Stage Relicensing Process

Wetlands, Wildlife and Botanical Issue Advisory Group Meeting

Wednesday, October 8, 2003
Alcoa Conference Center
Badin, North Carolina

9:00 AM – Noon

Preliminary Agenda

1. Introductions, Review Agenda
2. Results of 2003 Bald Eagle and Great Blue Heron Surveys
3. Update on Yadkin Project Avian Inventory
4. Update on Wetlands Evaluation
5. Review Preliminary List of Yadkin Project RTE Species of Concern
6. Schedule and Agenda for Next Meeting
## Attachment 2 – Meeting Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
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<tbody>
<tr>
<td>Andy Abramson</td>
<td>The Land Trust for Central North Carolina</td>
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<tr>
<td>Chris Goudreau</td>
<td>NC Wildlife Resources Commission</td>
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<tr>
<td>Dana Bradshaw</td>
<td>Center for Conservation Biology</td>
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<tr>
<td>David Wright</td>
<td>US Forest Service</td>
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<tr>
<td>Donley Hill</td>
<td>US Forest Service</td>
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<tr>
<td>Elizabeth Wilson</td>
<td>High Rock Lake Business Owners Group</td>
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<td>Gene Ellis</td>
<td>APGI, Yadkin Division</td>
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<td>Jane Peeples</td>
<td>Meeting Director</td>
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<td>Jody Cason</td>
<td>Long View Associates</td>
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<td>Julian Polk</td>
<td>PB Power</td>
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<tr>
<td>Ken Knight</td>
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<td>Larry Jones</td>
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<td>Shannan Sharp</td>
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<td>Steve Reed</td>
<td>NC Division of Water Resources</td>
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<tr>
<td>Wendy Bley</td>
<td>Long View Associates</td>
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YADKIN PROJECT

Wetlands, Wildlife & Botanical Issue
Advisory Group Meeting

Normandeau Associates Inc

Wetlands Evaluation

- Aerial photos flown between 7/17 and 8/26
- Scale 1 inch = 800 feet
- True color, stereo pairs
- 27 flight lines, ~ 360 photos
Rare, Threatened and Endangered Species

Preliminary Species List

Species Included

• Mammals, amphibians, reptiles
• Birds
• Terrestrial insects, including odonates
• All vascular plants

• Excluded
  – Fish
  – Aquatic invertebrates
Principal Sources

- **US Fish and Wildlife Service**
  - Southeast County Lists, 2003
- **NC Natural Heritage Program**
  - List of the Rare Plant Species of North Carolina, 2002
  - List of the Rare Animal Species of North Carolina, 2001
- **NC Center for Geographic Information and Analysis**
  - Updated via personal communications w/staff, 2003.
- **Baranski, M.J. 1994. Natural Areas Inventory for Rowan County.**
- **Yadkin Initial Consultation Document 2002.**

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<table>
<thead>
<tr>
<th>State</th>
<th>Federal</th>
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<tbody>
<tr>
<td>E- Endangered</td>
<td>E- Endangered</td>
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<tr>
<td>E-SC Endangered but commercially traded</td>
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</tr>
<tr>
<td>T- Threatened</td>
<td>T- Threatened</td>
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<tr>
<td>SC- Special Concern</td>
<td>FSC-Special Concern</td>
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<tr>
<td>SR-Significantly Rare</td>
<td>T/SA- Threat. due to Similarity of Appearance</td>
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<tr>
<td>SR-T Sig. Rare Throughout</td>
<td>C- Considered for Listing</td>
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<tr>
<td>SR-P Sig. Rare Peripheral</td>
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<tr>
<td>SR-L Sig. Rare Limited</td>
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<tr>
<td>SR-O Sig. Rare Other</td>
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RTE GIS map
(confidential)

Criteria for Inclusion

• Reservoirs
  – Affected by reservoir operation
  – Within 200’ of project boundary

• Transmission lines and powerhouses
  – Within 50’ of edge of transmission line corridor or powerhouse clearing
Next Steps

• Take comments from IAG and finalize list
• Assemble list of species descriptions
• Map locations most likely to support species
• Coordinate search windows and locations with appropriate IAG members
• Conduct searches in 2004