

# Cheoah River Resource Management and Enhancement Fund

## Annual Report 2009

This annual report is submitted to satisfy the requirements of the Tapoco Project Relicensing Settlement Agreement (RSA) that requires an annual report be prepared and distributed to Board members and advisors and that Alcoa Power Generating Inc. (APGI) file the report with FERC by June 30 of the following year. The Cheoah River Resource Management and Enhancement Fund (“Fund”) (listed in the RSA as the North Carolina Resource Management and Enhancement Fund) was established through the Tapoco Project RSA and is to be administered by the Fund Board composed of authorized representatives of the North Carolina Wildlife Resources Commission (NCWRC), North Carolina Department of Environment and Natural Resources (NCDENR), USDA Forest Service (USFS), United States Fish and Wildlife Service (USFWS), and the Eastern Band of the Cherokee Indians (EBCI). APGI is required to provide an initial deposit of \$100,000 then annual deposits of \$25,000 (both in inflation adjusted dollars) except for the final 3 years of the new 40-year license.

### 2009 Board Activities

APGI provided its 2009 annual deposit to the Fund. Income from the APGI deposit plus interest totalled \$32,155.85. Disbursements totaling \$31,216.04 were made during 2009. A Fiduciary report for 2009 is provided in Attachment 1.

Conference calls of the Fund Board were held on January 5, 2009 (Attachment 2) and June 3, 2009 (Attachment 3). The Board held its annual meeting on October 6, 2009 (Attachment 4).

The following proposals were approved for funding for 2009:

<b>Title</b>	<b>Grantee</b>	<b>Amount</b>
Captive Culture and Reintroduction of Priority Fishes and Mussels to Restore Cheoah River Populations	NC Wildlife Resources Commission	\$10,000
Yellow Creek Exotic Invasive Vegetation Control	Land Trust for the Little Tennessee, Inc.	\$5,000
Propogation and Reintroduction of Wounded Darter	Conservation Fisheries, Inc.	\$8,000
		<b>Total \$23,000</b>

In November, APGI agreed to providing space on their website to archive pertinent documents of the Fund Board. This negated the need to pay an outside entity for those services.

If you have any questions about the Cheoah River Fund, or its operation during 2009, please contact Chris Goudreau, Board Chair (828-652-4360 ext. 223; [chris.goudreau@ncwildlife.org](mailto:chris.goudreau@ncwildlife.org)).

## CHEOAH RIVER RESOURCE MANAGEMENT AND ENHANCEMENT FUND

### Fiduciary Report

January 1 – December 31, 2009

<b>1/1/09</b>	<b>Fund Balance</b>	<b>\$140,653.96</b>
2/1/09	Alcoa 2009 deposit	\$28,395.00
1/1/09 – 12/31/09	2009 Interest Added	\$3,760.85
1/1/09 – 12/31/09	2009 Disbursements	(\$31,216.04)
<b>12/31/09</b>	<b>Fund Balance</b>	<b>\$141,593.77</b>

Disbursements 2009

1/15	Wildlife Resources Commission	Captive culture of fish and mussels	\$10,000.00
2/12	Virginia Tech	Restoration ecology of fish	\$5,656.75
2/19	Hargreaves Associates	Spiraea monitoring and management	\$500.00
6/18	Wildlife Resources Commission	Captive culture of fish and mussels	\$10,000.00
7/9	Robert Wallus	Larval fish identification	\$420.00
11/17	Virginia Tech	Restoration ecology of fish	<u>\$4,639.29</u>
		Total Disbursements	\$31,216.04

Cheoah Fund Board  
Conference Call  
January 5, 2009

Board Members: Chris Goudreau, Chair (NCWRC), Mark Cantrell (USFWS), Steve Reed (NCDWR), Jason Farmer (USFS), Mike Bolt (EBCI)  
Advisors: Jody Johns (Longview), Dick Eyestone (Friends of Lake Santeetlah)

Chairman Goudreau opened the call and listed two items for action – approval of the 2008 Fiduciary Report and review of the four grant proposals for 2009.

The 2008 Fiduciary Report prepared by DENR was reviewed. Cantrell moved to approve the report and Bolt seconded. The report was approved by consensus (Attachment A). Cantrell stated his appreciation to Reed and DENR for handling the financial aspects of the Fund Board.

Prior to reviewing the 2009 grant proposals, Goudreau provided an analysis of the funds available to the Board for allocation after considering funds already earmarked to existing projects and known future expenses, such as the gravel addition in 2010. Reed reminded everyone of another project that was funded in 2008. See Attachment B.

The first proposal reviewed was from the Land Trust for the Little Tennessee for \$10,000 to control exotic invasive plants on the tract of land they recently purchased in the Yellow Creek area. Questions were raised concerning how this proposal was related or coordinated with the USFS as an adjacent landowner and also with the Spiraea study being conducted by Hargreaves for the USFS and USFWS along the Cheoah River. It was mentioned that LTLT has an overall management plan for the parcel, which includes some large-scale activities, such as controlled burns. Cantrell said he would provide the LTLT management plan to the Board members.

Questions were also raised about the need for ongoing exotic control (thus funding) and the magnitude (acres) of the effort. It was unclear if the exotic plants in the Yellow Creek area were actually contributing to problems in the Cheoah River corridor. Reed mentioned that he is going to meet with USFS and USFWS to discuss the Spiraea study on January 9. After further discussion it was decided to review the other proposals and then return to each for a decision.

The Board then reviewed the proposal from the N.C. Wildlife Resources Commission for \$10,000 to collect, culture and release Spotfin chubs, Wavy-rayed lampmussels and Rainbow mussel into the Cheoah River; and to continue experimental propagation of Appalachian Elktoe and develop propagation and culture techniques for production of releasable size animals for release in the Cheoah River. The proposal received favorable review in that it fulfills the goals of the Cheoah Fund and would directly affect the ecology of the Cheoah River. It was agreed that this would be a high priority for funding.

The third proposal reviewed was from American Whitewater for \$20,000 to remove vegetation from the Cheoah River for boater safety and biological restoration. There was discussion on whether this proposal was mainly for the benefit of recreation or ecological function. Concerns were raised about funding this project before the Environmental Assessment being conducted by the USFS was completed (projected to be in spring 2009) and the lack of specificity in the

## Attachment 2

proposal regarding the location and amount of vegetation to be removed. Several members expressed substantial concern that the proposal only marginally addressed the goals of the Cheoah Fund charter. A question was raised whether this project could be conducted without Cheoah Fund money. Several members suggested that if it were done with non-Fund money, then the process would be one controlled solely by various agency regulations and procedures.

The final proposal reviewed was from Brian Carson for \$8,000 to design and maintain a website to house documents for the Cheoah and Tallassee Fund Boards. Eyestone, who had professional experience in this arena, stated that he talked to several people to solicit input. He disclosed that Carson is his son-in-law. Eyestone explained the proposal in some detail and said that the product is very basic in nature. The website will not provide any analysis capabilities, just online storage and retrieval. The proposal includes additional maintenance fees to convert non-digital documents and for an annual archive of the site. There would also be fees to an outside web-hosting company. Since the proposal is designed to cover both the Cheoah and Tallassee Funds, discussion ensued on what might be an equitable dollar amount for each Fund to pay. It was recommended that the ratio be the same as the annual payment from APGI to each Fund. This would be 20% from the Cheoah Fund and 80% from the Tallassee Fund.

Returning to the LTLT proposal, it was decided that the questions raised by the Board would be submitted to LTLT for a response before making a final determination. Also, Reed will report to the Board on the outcome of his meeting with the USFS and USFWS concerning the relationship between the LTLT proposal and the Spiraea study currently underway. Upon hearing from Reed, Goudreau will prepare a letter to LTLT listing the Board's questions.

The WRC proposal was approved by consensus. Goudreau will send a letter to Steve Fraley notifying him that the grant was approved.

After further discussion, the Board decided not to fund the American Whitewater proposal. Goudreau will send a letter to Bob Hathcock outlining the concerns of the Board.

The Board decided to postpone a decision on the website proposal until Cantrell brought it to the Tallassee Fund Board for consideration.

There being no further business, the conference call was ended.

Cheoah Fund Board  
Conference Call  
June 3, 2009

Board Members: Chris Goudreau, Chair (NCWRC), Mark Cantrell (USFWS), Jim Mead (NCDWR), Jason Farmer (USFS)

Advisors: Dick Eyestone (Friends of Lake Santeetlah), Dave Meeker (Cross Creek Property Owners Association), Gerrit Jobsis (American Rivers)

Chairman Goudreau opened the call and listed two items for action – revisiting the grant proposal from Land Trust for the Little Tennessee (LTLT) to control exotic vegetation in the Yellow Creek area, and review of a new grant proposal from Conservation Fisheries Inc. (CFI).

Mike Bolt (EBCI) was not on the call, so according to the Cheoah Fund Board Operating Protocol, any decisions would be considered tentative. The tentative decisions will be sent to non-present Board Members in writing by the Chair. The non-present Board Member(s) has 14 calendar days to object to the tentative decisions, otherwise the tentative decisions are final.

Goudreau provided a quick recap of the LTLT proposal and the earlier tentative decision not to fund the project at \$10,000. Members discussed that the tentative decision was primarily based on available money in the Cheoah Fund, not the efficacy of vegetation control. After discussing several options, it was tentatively decided that there was no consensus to fund the project as originally submitted, but LTLT should be asked if they would be interested in a partial funding for 2009 not to exceed \$5,000. Goudreau said he will call Paul Carlson of LTLT to ask if that were acceptable.

Goudreau provided an overview of the CFI proposal, which is for \$8,000 annually to continue propagating and stocking selected fish species into the Cheoah River. Cantrell said that the USFWS had been supporting these efforts for a number of years, but their funding had recently expired. Funding by the Cheoah Fund would enable the propagation and stocking work to continue. All members and advisors on the call agreed that the proposal should be funded for 2009-2010 at \$8,000 each year, provided that favorable progress it made each year.

Quick updates on other Cheoah Fund projects and responsibilities were provided.

- Cantrell reported that larval fish identification had yet to be performed under the contract with Jeff Wallus. The contract expires at the end of June, so the samples will have to be done quickly.
- Goudreau reported that the 2008 contract with NCWRC to propagate fish and mussels also expires at the end of June. However, the Fund Board decided in January 2009 to continue funding this work. NCWRC and NCDENR personnel are determining if a new contract will be prepared or the existing contract will be amended to reflect the 2009 approval.
- Goudreau reported that the annual report of the Cheoah Fund Board was being prepared and will be sent to APGI for submittal to the FERC by June 30.

### Attachment 3

- Cantrell reported that the 2009 grant proposal to design and maintain a website to house documents for the Cheoah and Tallassee Fund Boards has been sent to a subcommittee of the Tallassee Fund Board.

There being no further business, the conference call was ended.

Cheoah River Resource Management and Enhancement Fund  
Annual Meeting  
October 6, 2009, 1:00 p.m.  
USFWS Office and Conference Room  
160 Zillicoa Street  
Asheville, NC

Meeting Notes

Participants: Chris Goudreau (NCWRC)\*  
Jason Farmer (USFS)\*  
Mark Cantrell (USFWS)\*  
Jim Mead (NCDWR)\*  
Mike Bolt (EBCI) [by phone for part of meeting]\*  
Marshall Olson (APGI)  
Jody Johns (Long View Associates)  
Dick Eyestone (Lake Santeetlah)  
Steve Fraley (NCWRC)  
Gary Kauffman (USFS) [for part of meeting]  
\* Board member

Chris Goudreau called the meeting to order and noted that all Board members were in attendance except Mike Bolt, who was attending a conference in Washington, DC. Unless Mike could participate by phone, the Cheoah Fund Operating Protocol states that any decisions made by the Board at the meeting would be considered tentative. Since there were no grant proposals before the Board, the only decision expected to be made during the meeting was the selection of the next Chair.

1. Update of Finances

Chris Goudreau provided a copy of the financial report for 2009 through September 30 (Attachment 1). The top part of the report was prepared by Darren England (NCDWR). Currently, there is \$145,596.71 in the account. Chris then added the bottom part of the report showing additional financial obligations of the Fund for the next few years. Without considering additional payments from APGI and interest in the next few years, the Board has obligated \$204.66 more than is currently in the account. This indicates that the Board has to be careful in deciding to fund any additional projects in the next few years.

2. Reports of Funded Projects

Chris led the participants through each of the projects funded by the Cheoah Fund since the first award in 2007. He noted that with the annual rotation of the Chair among the representative entities, it was difficult to keep track of the paperwork. Chris created a tracking form for each project, which he sent out to Board members, Advisors and the Licensee via email. There are several questions and issues with several of the projects that need clarification.

a. Appalachian elktoe genetics (USFWS & NCWRC 2007)

Steve Fraley reported that a final report has not been provided because the investigator who is to perform the genetic analysis (Dr. Morgan Raley) has not recovered from his move from NC State University to the NC Museum of Natural Sciences. The Cheoah Fund money (\$15,000) was paid to NCWRC, but NCWRC is holding the money and will not pay Dr. Raley until they get final report.

b. Virginia spiraea monitoring & management (USFWS, USFS, Hargreaves 2007)

Mike Bolt joined the meeting via phone for a few minutes and indicated that he was not comfortable assuming the position of Chair for 2010 due to other work responsibilities and asked that another person take the Chair position.

Gary Kauffman joined the meeting and provided an overview of the second year annual summary report produced by Jane Hargreaves (Attachment 2). To date, treatment has focused on buffering the 16 known spiraea locations from invasives. Most work has been chemical, but some early work was done using non-chemical treatment of kudzu. ARRA funds will be used by USFS to treat kudzu. Nantahala Outdoor Center and Warren Wilson College were scheduled to assist in treating mimosa and princesstree, but weather did not cooperate. NOC will assist USFS next year. Overall, it is still a little early to tell the effectiveness of treatment in 2009, but Gary will make a site visit soon to check.

Marshall Olson asked if Gary knew if spiraea had been surveyed near the dam, in relation to extending the safety fence. Gary will check it out next week.

Chris relayed a concern of Jane regarding releasing data to others assisting in vegetation control. After reading the contract language, it was decided that USFS or USFWS personnel could release those data without violating the contract.

c. Restoration ecology of fishes (Virginia Tech 2007)

Ryan McManamay joined the meeting via phone and discussed the written report he provided by email (Attachment 3). Jason Farmer asked if Ryan had a map of good locations for gravel addition. Ryan said he is now more inclined to focus on lower gradient areas of importance to certain species, such as redhorse. Site 1 would work (YD 7 and YD8). Ryan also recommended using diverse gravel sizes so that the gravel would be more likely to lock together and provide better habitat than gravel that is widely dispersed.

Marshall asked if chubs or other fish were using the new gravel. Ryan reported that they had in Site 1 (4 mounds in 2008 and 10 mounds in 2009).

In 2008 and 2009 Ryan has gathered data on 110 chub nests. Also, he assessed 30 nests before/after a high flow event. He is still analyzing these data.

In June and July 2009, Ryan snorkeled mesohabitats to assess habitat use by various fish species. He is still analyzing these data.

Also, Ryan is doing a comparison of Cheoah River to other streams in the Blue Ridge Physiographic Province to hopefully assemble a likely species community list and which species should be restored.

Steve Fraley asked if VPI work could be adjusted to also assess substrate for mussels. Steve also stated that he thought what is missing in the river is smaller materials, like sand. Chris indicated that the original concept of using VPI was that the mussel work could be done in a few years and that everything did not have to be accomplished concurrently.

d. Gravel enhancement (Clear Blue Grading 2008)

The gravel was added in February 2008. Mark Cantrell will provide e-procurement documents to Chris to assist him in making the next purchases of gravel in 2010.

e. Larval fish identification (Wallus 2008)

Mark indicated that the contract is completed. Although the contract was for up to \$2000, only \$420 was paid due to the small number of samples and small number of fish per sample. Mark has received written reports from Robert Wallus and will send them to Chris.

f. Captive culture of fishes and mussels (NCWRC 2008)

Steve reported he had submitted a final report to DENR for work in 2008-09. Chris will need to get a copy for the official files. Construction of the facility is completed. Additional work was done in 2009 to pipe cooler water into the facility to reduce impacts to fish and mussels from high temperatures and resulting infections.

Despite parasite problems with spotfin chubs in the winter, 600 of the original 1000 were stocked into the Cheoah River in 2009. Subsequent surveys have shown that spotfins are in the river and growing very well. Habitat looks great, but heavy periphyton seems to be a problem in the upper part of the river. If not corrected, this could affect recovery of some species.

g. Captive culture and reintroduction of fishes and mussels (NCWRC 2009)

Steve reported that spotfin mortalities were high from the beginning of the 2009 cohort, and already about 500 have been lost to parasites.

Over 18,000 wavy-rayed lampmussels and 7,000 rainbow mussels were produced in spring 2009. It is projected that about 30% of those numbers will be available for stocking in 2011.

Work has started on captive propagation of Appalachian elktoe. Several gravid females were brought in from the wild and transported to NCSU. After good early success, the entire cohort was lost. Steve suggested that in addition to continuing propagating elktoes, other research has indicated that translocating elktoes from Little Tennessee River or

Tuckasegee River could be done to speed recovery efforts up. The same thing could be done for wounded darters. NCWRC and USFWS will discuss this more and ask the Fund Board if such an approach would be considered as fulfilling the contract. No additional money would be asked for from the Fund to translocate the mussels.

Surveys in 2009 have found the first younger elktoe, aged 4, in the Cheoah River, indicating that natural reproduction and recruitment has occurred. The mussel showed good growth rates.

h. Propagation of wounded darters (Conservation Fisheries 2009)

CFI provided a written report of activities in 2008-09 (Attachment 4), work prior to the contract from Cheoah Fund.

i. Management of Yellow Cr. exotic vegetation (Land Trust for the Little Tennessee 2009)

No report. Contract just began.

3. Review of Fund Proposals for 2010

Chris reported that no proposals were received for 2010 prior to the meeting. However, there are several possible projects that were discussed.

a. Website creation

This proposal was submitted in 2009, but final action was not going to be taken by the Cheoah Board until the Tallassee Board provided feedback as to their interest in partnering to fund the project. Mark reported that although Tallassee Board appointed a committee to look into this in more detail, no action has taken place. Chris will contact the Tallassee Board chair to inquire about this proposal.

b. Yellow Creek exotic vegetation

Additional funding may be requested by Land Trust for the Little Tennessee in 2010, pending favorable progress in 2009. However, the Cheoah Fund has not received an update on activity in 2009, so no further discussion was possible.

c. Gravel addition

After reviewing the FERC order, Jody indicated that the gravel addition does not have to occur prior to March 1, 2010. However, it should be done in 2010, preferably in March – May, before most of the high flow events. Jason Farmer indicated that he needs to prepare a Biological Evaluation in order for gravel to be added on USFS property. Since the BE would be good for five years, all possible locations should be identified. In addition to the BE, a 404 permit will be needed from the Corps of Engineers prior to adding the gravel.

## Attachment 4

Discussion was held about possible sources of gravel, including Tuckasegee River (Dillsboro or near Whittier), Pacolet River, or Graham County (Rick Pennington). Another possible solution is to obtain substrate from the head of Lake Santeetlah by dredging or using a substrate collection device.

Jason, Mark and Chris will make a trip to the river to identify specific locations in October.

### 4. Select Chair for 2010

The Operating Protocol calls for the chair to rotate to EBCI for 2010. Since Mike Bolt indicated that he did not want to be Chair, consensus was that Chris would remain Chair for 2010.

### 5. Action Items

- a. Gary to send to Chris an electronic copy of Hargreaves 2009 report.
- b. Mark to obtain Ryan's final dissertation work plan and send it to the Board members. The Board will discuss the need for more detail on deliverables.
- c. Mark to send to Chris the 2008 gravel eprocurement files.
- d. Mark to send to Chris the larval fish identification report from Wallus.
- e. Jim to send to Chris a copy of the NCWRC 2008-09 report.
- f. Chris to call Susan Shaw (Chair of Tallasse Fund) regarding the website proposal.
- g. Jason, Mark and Chris to visit Cheoah River on October 26 to identify specific locations for adding gravel.
- h. Jason to prepare a Biological Evaluation for the gravel addition.
- i. Chris to initiate the 404 permit process for the gravel addition.