

Draft – For Discussion Purposes Only – 3/19/03

Duke Power – Nantahala Area Trial Balloon for the Nantahala River

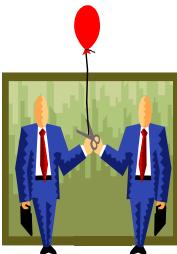
Purpose – Stimulate discussion within the Nantahala Cooperative Stakeholder Team concerning how the interests could fit together in a consensus agreement.

Ground Rules

- 1) Work together. Strive for an efficient process.
- 2) Find and focus on opportunities. Seek creative solutions.
- 3) Explain your interest, not position, and respect others' interests. Make sure others understand your organization's interests and their relation to Duke Power-Nantahala Area's (DPNA) hydro projects located on the Nantahala River.
- 4) Trial Balloon = an informal, preliminary proposal. Use trial balloons liberally... formal proposals will come later. Trial balloons are completely non-binding and may be withdrawn, in whole or in part, at any time prior to signing an agreement. We don't have a deal until an agreement is signed.
- 5) No surprises during discussions. Focus on honesty with tactfulness.
- 6) Keep all discussions at the table; Media contacts and information only as agreed to by the team.
- 7) Recognize that ground rule violations can severely impact likelihood of reaching the goal-----a consensus agreement.

Key Remaining Unknowns

- 1) CHEOPS Model runs for this trial balloon.
- 2) Scope of federal and state mandatory conditions.
- 3) Continued refinement of the collective priorities of the Nantahala Cooperative Stakeholder Team.
- 4) Impacts of relicensing expectations on other DPNA hydros.
- 5) Timely receipt of any approvals required to implement trial balloon conditions (e.g. FERC approval, agency permits, etc.).



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I. DPNA could agree to the following:

A. Recreation (Rec) Facilities

1. Nantahala Lake

- a. DPNA to add a wilderness toilet, trash collection, lighting and a bank fishing area to both the Big Choga and Rocky Branch Access areas.* (Tier 1**) (Note: NCWRC also to provided barrier-free access (if feasible) at one of these access areas).
- b. Upon completion, pay for the initial construction of boat-accessible-only, primitive, scattered camping sites on property owned by the USFS. One-time expense of up to \$50,000. (Tier 1**)

2. Nantahala Bypass

- a. Lease DPNA-owned property to the USFS to expand parking area by approximately 60 ft upstream at existing public access at Rowlands Creek on Wayah Road. Lease to begin and end with the new FERC license, with option but not the obligation to renew. (Potential additional partner – SWRC&D)
- b. Lease the DPNA-owned property that is presently being used as a commercial access launch site to the USFS. Lease to begin and end with the new FERC license, with option but not the obligation to renew. (Note: USFS to develop facilities enhancements on this DPNA-owned property including barrier-free access to bike trail, barrier-free fishing station off the bike trail, bathroom facilities, resurfacing the launch areas, and landscaping the area). (Potential additional partners – NCWRC, SWRC&D)
- c. Construct barrier-free fishing access area on DPNA-owned property located behind powerhouse. (Tier 1**)(Potential additional partners – NCWRC, SWRC&D)
- d. Partner with NCDOT and/or USFS to improve parking along road in Upper Nantahala River between Whiteoak Creek and the powerhouse (kayak put in/take out below the Cascades and parking for the fishermen). (Tier 1**)(Potential additional partners – NCWRC, SWRC&D)
- e. Partner with NCDOT and/or USFS to improve parking along road in Upper Nantahala River at the Cascades with 5 parking places and viewing platform. (Tier 1**)**(Potential additional partner – SWRC&D)
- f. Partner with USFS to improve parking along Old River Road in Upper Nantahala River at Slot Falls. (Tier 1**)(Potential additional partner – SWRC&D)
- g. Partner with USFS to improve parking along Old River Road in Upper Nantahala River above Whiteoak Creek at Cocktail Falls. (Tier 2**)**)**(Potential additional partner – SWRC&D)

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- h. Partner with USFS to improve parking along Old River Road in Upper Nantahala River at Whiteoak Creek. (Tier 2**)**)**) (Potential additional partner – SWRC&D)

* (1) Toilets will be made available only if pump and haul type can be approved by the NC Division of Water Quality and there is sufficient property for its installation, (2) Lighting will be provided if there is no charge for running the primary line to the site, (3) Trash collection will be provided so long as it doesn't become a domestic garbage issue and (4) the bank fishing area will be land based with trail (if the site is suitable).

** For Tier 1 projects, construction will be within 5 years following issuance of the new FERC license for the Nantahala Project and closure of all legal challenge periods. For Tier 2 projects, construction will occur from 6 to 15 years following issuance of the new FERC license for the Nantahala Project and closure of all legal challenge periods.

B. Public Info

1. Reservoir information

- a. Actual lake level readings and Normal Operating Range for Nantahala Lake added to DPNA Website.
- b. Lake level information provided beginning in 2004.

2. Recreational flow information

- a. Standard recreational flow schedule for Nantahala maintained by DPNA telephone information line and / or website.
- b. Messages communicated when augmented recreational flows are reduced per the Low Inflow Protocol or the Hydro Project Maintenance & Emergency Protocol.
- c. Recreational flow information beginning in 2004.

3. Gage activation

- a. Upon completion by the USGS, pay for reactivation and ongoing maintenance of USGS gage # 03505500 in the Nantahala Gorge. **)**) (Potential additional partners – NCDWR, USFWS)
- b. Gage fully operational by 2004, provided USGS can complete by then.

C. Lake Levels

- 1. **Convention** - All elevations listed below are relative to the top of the dam (including the flood gates), with 100.0 ft = Full Pond. Normal Minimum, Normal Maximum and

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Normal Target Elevations change on a daily basis. The elevations shown are for the 1st day of the given month. Elevations for other days of the month are determined by linear interpolation.

2. Nantahala Lake – Maintain the following Normal Operating Range:

Month	Normal Minimum Elevation (ft)	Normal Target Elevation (ft)	Normal Maximum Elevation (ft)
Jan	70	75	80
Feb	75	80	85
Mar	80	85	90
Apr	87	91	95
May	95	97	99.5
Jun	95	97	99.5
Jul	95	97	99.5
Aug	93	96	99.5
Sep	90	94	99
Oct	80	87	94
Nov	75	78	84
Dec	70	75	80

3. Whiteoak, Dicks and Diamond Valley Ponds – No lake level limitations.

4. Any changes from current operation to begin in 2006.

D. Minimum Flow and Bypass Flow

1. Continue existing Continuous Minimum Flow/bypass flow agreement for Nantahala River downstream of Nantahala Dam:

- a. Dicks Creek flow not diverted into Nantahala Tunnel (provides approximately 12 cfs avg. annual flow).
- b. 8 cfs released from the Whiteoak Pipeline into Dicks Creek Bypass from July 1 to November 15.

2. Provide an additional 5 cfs or streamflow, whichever is less, continuous flow from Whiteoak Dam from January 1 to December 31.

3. Provide an additional 5 cfs continuous flow from present Whiteoak release valve location into Dicks Creek Bypass from July 1 to November 15 (13 cfs total).

4. Implement new and additional minimum and bypass flows in 2006, or within 1 year following receipt of FERC construction approval, whichever comes last.

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E. Recreation Flows

- 1. Establish rec flows on the main stem of the Nantahala River:**
 - a. March – 10:00 am to 3:00 pm, three days per week
 - b. April – 10:00 am to 4:00 pm, five days per week
 - c. May – 9:00 am to 5:00 pm, seven days per week
 - d. June through Labor Day – 9:00 am to 5:00 pm, seven days per week
 - e. September after Labor Day – 10:00 am to 4:00 pm Sunday through Friday, 9:00 am to 5:00 pm Saturday
 - f. October – 10:00 am to 3:00 pm Sunday through Friday and 9:00 am to 5:00 pm Saturday
 - g. All main stem recreational releases are at least 606 cfs on the reactivated USGS gage.
- 2. Establish rec flows on the Nantahala Bypass using a Tainter Gate at Nantahala Dam:**
 - a. Release water for six hours per day for one weekend (Saturday and Sunday) per year in April. Releases will be @ approximately 250 cfs on Saturday and @ approximately 350 cfs on Sunday. Releases will be timed to reach the Cascades section at approximately 10 am.
 - b. Provide four total afternoon releases per year for 3 hrs each @ approximately 250 cfs, scheduled on days in the months of May through August. Releases will be timed to reach the Cascades section at approximately 4pm.
 - c. Release water for seven hours per day for one weekend per year in September to enable the Nantahala Gorge Association and American Whitewater to host an Upper Nantahala/Cascades Whitewater Festival. Releases will be for seven hours @ approximately 300 cfs on Saturday; and five hours @ approximately 425 cfs and two hours @ approximately 250 cfs on Sunday. Releases will be timed to reach the Cascades section at approximately 10 am.
 - d. Any time the flow in the Nantahala Bypass is naturally at or above the desired flow within 4 hours prior to the scheduled release time, DPNA does not need to provide a release.
- 3. Implement new recreation flows in 2006, with DPNA continuing rec flow releases in accordance with the existing license and settlement agreement until then.**

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F. Resource Enhancement Initiatives

Note – these initiatives also encompass other DPNA hydro projects beyond just the areas covered by this stakeholder team.

1. Dillsboro STEP (Small Town Enhancement Planning) Initiative

- a. Work with the Town of Dillsboro to complete the conceptual plan for their STEP Initiative by 5/30/03 and follow through on any DPNA action items agreed to in the Initiative Plan.
- b. Complete necessary environmental and engineering assessments and determine if Dillsboro Dam removal can be done in a safe, environmentally beneficial and cost-effective manner.
- c. Assuming positive results from Item b above, file application with the FERC to surrender license, decommission Dillsboro Powerhouse and remove Dillsboro Dam as follows.
 1. Partner with the USFWS and other stakeholders and complete the necessary assessments by 1/1/06.
 2. File license surrender application with the FERC by 1/1/07.
 3. Decommission powerhouse and complete dam removal within 3 years following the final FERC approval order and the closure of all legal challenge periods.
 4. Complete any DPNA portion of the post-removal stream remediation and monitoring within 2 years following completion of dam removal.
 5. Dillsboro Project operation to continue under terms of existing license until powerhouse decommissioning occurs.

2. Unique Fishery Identification

- a. Partner with the USFWS and the NCWRC on studies to determine the range and distribution of the sicklefin redhorse sucker in the Little Tennessee, Hiwassee and Tuckasegee Rivers.
- b. DPNA's contribution may be in the form of a one-time funding contribution, in-kind services or a combination of the two, not to exceed a total cost of \$40,000.

3. Southern Brook Trout Restoration Partnership

- a. Partner with the NCWRC and the USFS in a project to restore the native strain of brook trout to a selected stream in the vicinity of Tennessee Creek Hydro Station.
- b. DPNA's contribution may be in the form of a one-time funding contribution, in-kind services or a combination of the two, not to exceed a total cost of \$40,000.

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4. General Resource Enhancement Fund

- a. Make a one-time contribution to a resource enhancement fund for use during the terms of the new licenses for the East Fork, West Fork, Nantahala and Dillsboro Projects to protect or enhance the environmental, recreational, cultural or aesthetic opportunities within the Tuckasegee and Nantahala river basins.
- b. Resource enhancement fund to be designed and oversight provided by a board of trustees composed of a DPNA representative and at least one representative each from a federal agency, a state agency, a local government and a non-governmental organization, each of which are member organizations of the present Tuckasegee Cooperative Stakeholder Team and Nantahala Cooperative Stakeholder Team. Funds will be awarded based on consensus agreement among the board of trustees.
- c. DPNA contribution to be provided 6 years following issuance of the new FERC licenses for the East Fork, West Fork, Nantahala and Dillsboro Projects (or the FERC order approving Dillsboro Powerhouse decommissioning and dam removal) and closure of all legal challenge periods.
- d. DPNA contribution will be 100% of the total value of cost-share funding provided by other stakeholders until initial construction of the recreation facilities proposed for relicensing of the East Fork, West Fork and Nantahala Projects or for removal of Dillsboro Dam is begun.
- e. DPNA's maximum contribution will be ?.
- f. Funds may be used to enhance the environmental, recreational, cultural or aesthetic opportunities within, adjoining or in the near vicinity of:
 - 1) The subject hydro projects
 - 2) Direct tributaries to the subject hydro projects
 - 3) River segments that have their flows directly affected by the subject hydro projects.
- g. Funds will only be awarded for cost-share requests with a minimum required match from other sources of 50%.
- h. Other stakeholders besides DPNA may also contribute to the fund.
- i. Once the fund's principle has been expended, the fund will be terminated.
- j. Any portion of the DPNA contribution that remains at the end of the new license period for the East Fork, West Fork or Nantahala Projects will revert back to DPNA.

G. Shoreline Management

- 1. Continue enforcing shoreline protection measures for environmentally sensitive areas (e.g. Duke-designated wetlands) and continue limiting cutting of trees within the FERC project boundaries.**
- 2. Develop shoreline classification maps for Nantahala Lake, identifying any unique areas that need protection for environmental, recreational, cultural or operational reasons and provide the associated lake use restrictions, including incorporating any necessary Species Protection Plans.**
- 3. Work with others to support an annual “Lake Wide Clean Up” on Nantahala Lake. DPNA’s contribution will be to remove trash during the week following the clean-up from pre-designated disposal sites around the lake.**
- 4. Implement the final version of the lake use restrictions, vegetation management requirements and the shoreline management guidelines on 7/1/03.**

H. Cultural Resources

- 1. Develop a Cultural Resources Management Plan for the Nantahala Project to ensure that significant cultural resources within the FERC Project boundary are documented and protected to the extent necessary.**
- 2. Conduct additional archaeological study of two identified sites if a planned drawdown of the lake will be conducted, with the lake at or below 60 ft of drawdown for 30 consecutive days or longer.**
- 3. Cultural Resources Management Plan to be developed and implemented within 2 years following FERC issuance of the new license and the closure of all legal challenge periods.**

II. If the Nantahala Cooperative Stakeholder Team could agree in consensus to the following:

A. Support continued operational flexibility for DPNA’s Nantahala Hydro Project

1. **Flow Prescriptions** - No requests or support for prescribed flows of any kind (minimum flows, bypass flows, recreation flows, channel maintenance flows, etc.) other than the prescribed flows proposed in this trial balloon.
2. **Lake Level Limitations** – No requests or support for lake level restrictions of any kind other than those identified in this trial balloon.
3. **Operational Restrictions** – No requests or support for hydro operational restrictions of any kind (e.g. ramping rate limits, peaking power limits, etc.).
4. **Low Inflow Protocol** – Agreement to share the burden of low water availability.
5. **Hydro Project Maintenance & Emergency Protocol** – Agreement to the approach for temporary deviation from certain license conditions to handle in a practical manner specific abnormal situations.

B. Actively participate with DPNA in recreation area construction and/or management.

1. Access Area Operation and Maintenance

- a. NCWRC to enter into a cooperative maintenance agreement with DPNA similar to the existing agreement on Duke’s Catawba-Wateree Hydro Project for the access areas located on property owned by DPNA at Nantahala Lake (2), and the Nantahala Bypass (1).
- b. USFS to operate and maintain the above facilities that are located on land owned by the USFS.
- c. USFS to operate and maintain the above facilities that are located on land leased from DPNA.

2. Access Area Construction

- a. NCWRC to provide any cost-share funding and construction support as noted above and to repair / rebuild the facilities as needed.
- b. USFS to repair / rebuild the facilities located on their land as needed.
- c. USFS to repair / rebuild the facilities located on land leased from DPNA as needed.

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C. Support new FERC license conditions and compliance monitoring requirements and 401 Water Quality Certification conditions that are consistent with this trial balloon, reasonably simple to implement and that define any future risks to DPNA.

1. Compliance Monitoring

- a. All agencies to work cooperatively with DPNA to design adequate, yet simple compliance monitoring programs.

2. FERC Licenses

- a. No requests or support for any FERC license conditions that conflict with the above trial balloon or that add substantial additional burden, cost or risk to DPNA above the burdens, costs and risks associated with this trial balloon.
- b. No requests or support for any FERC license re-openers of any kind beyond those customarily included by FERC in licenses for hydro projects of this size.
- c. No Section 18 Mandatory Conditions for fishways included in the new license orders, beyond the standard reservation of that authority.
- d. No Section 4e Mandatory Conditions beyond those absolutely essential to protect National Forest resources located on FERC Project land that is owned in fee by the USFS and that do not conflict with the above trial balloon and do not add substantial additional burden, cost or risk to DPNA above the burdens, costs and risks associated with this trial balloon.

3. 401 Water Quality Certifications

- a. No requests or support for any 401 Water Quality Certification conditions that conflict with the above trial balloon or that add substantial additional burden, cost or risk to DPNA above the burdens, costs and risks associated with this trial balloon.
- b. No requests or support for any re-openers of any kind in the 401 Water Quality Certifications for these hydro projects.

D. Agree that the above actions adequately protect, mitigate, and enhance all the resources of the Nantahala River Basin as they may relate to DPNA's hydro station, including but not limited to:

1. **Water Quality** (e.g. dissolved oxygen, temperature, etc.)
2. **Fish habitat and management**
3. **Fish entrainment, impingement and turbine mortality**
4. **Fish Passage** – Agreement that the USFWS will not petition the FERC for any fish passage requirements at any of the Nantahala Area hydros until at least 15 years after the issuance of all the new license orders by the FERC and closure of all legal challenge periods. If after that 15-year period any fish passage requirements are

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imposed, the USFWS will pay for at least 75% of the capital cost of the facilities and at least 75% of the operational cost of any non-structural fish passage requirements, with DPNA being responsible for the other 25% plus providing any attraction flows.

- 5. Habitat fragmentation**
- 6. Rare, Threatened or Endangered Species**
- 7. Wetlands, conservation areas and other unique habitats**
- 8. Shoreline and riparian buffers**
- 9. Terrestrial species**
- 10. Cultural resource protection**
- 11. Recreational facility needs, enhancement, construction and management**
- 12. Prescribed flow releases of any kind**
- 13. Aesthetics**
- 14. Land and water management**
- 15. Sedimentation and nutrients**
- 16. Shoreline or riverbank erosion**