Philpott Lake, VA (Section 216) Feasibility Study
NATURAL (AQUATIC) RESOURCES WORK GROUP MEETING
PHILPOTT LAKE VISITOR'S CENTER, DECEMBER 8, 2006

MEETING NOTES

Attendees: **Bud LaRoche (VDGIF)**
Dr. Don Orth (VA Tech)
Scott Smith (VDGIF)
Kim Smith (USFWS)
William Hester (USFWS)
Earl Wright (USACE)
Phil Payonk (USACE)
Al Kittridge (Smith River Trout Unlimited Chapter)
John Ross – Virginia Trout Unlimited Council

Agenda – See Attached

The meeting opened with a short welcome to all and introductions around the table. Bud LaRoche then gave a short overview of the 216 process which included two (USACE) handouts depicting a "Typical GI Project Timeline" and a flow chart of the 216 "Three Phase Study Approach".

The group then reviewed the current list of aquatic resource stakeholders identified to date and a few additions were suggested.

North Carolina Trout Unlimited – Rusty Barenez (sp?)
Smith River TU Chapter – Robert Woods (President)
Dan River Basin River Keeper – Wayne Kirkpatrick

At this point, we addressed the Project Management Plan (PMP) and the tasks written for the Aquatic Resources Work Group. The discussion revolved around what we didn't know (data needs) and general discussion on how to capture the data needs. I have listed each of the tasks below and provided a bullet list of items discussed.

Task 2.A.1 – Endangered Species Restoration
Task 2.A.3.b – Temperature Management

- Upstream survey of Roanoke logperch has been completed. Discussion of findings.
- Discussion of the Towne Creek survey conducted by Terry Smith of VA Tech. Data needs to be reviewed.
- Are Roanoke logperch breeding in the mainstream Smith River?
- Status of the Towne Creek Roanoke logperch population.

- Is Towne Creek the source of all Roanoke logperch collected in the Smith River?
- What is the source of the Smith River Roanoke logperch population?
- Model (RRBRAM?) historical reservoir water levels considering alternative flow regimes.
- How can mainstream habitat be improved to support Roanoke logperch reproduction?
- What are temperature flux impacts on species in the river? Literature search?
- Is there a surrogate logperch species that could be used in temperature flux experiments? Blotchside logperch is a possibility.
- Logperch prefer 15-20◦ temperature. How do we get 15-20◦ from the reservoir and stay there during the summer months. Stratification characterization. Reservoir modeling by the USACE Waterways Experiment Station. 1-dimension model should be sufficient.
- Is there enough volume of the preferred temperature in the reservoir?
- What are potential options to alter temperature other than variable release tower? Downstream re-regulation dam?
- Can reservoir be mixed to attain a better discharge temperature? This could produce a win/win situation for both the river and reservoir.
- Is the Martinsville Dam a barrier to logperch recovery?
- We reviewed a subset of the summer 2006 experimental release temperature data. A cursory review indicated that there was some benefit as the one hour morning release seemed to cool the lower river down 3-4 degrees over the no release weekend. This was based on a limited data set.

Task 2.A.a – Habitat Management

- How do we restore the river channel to move sediment?
- The flow regime needs to be determined before the mainstream channel could be designed for recovery.
- There has been a ph shift of one unit (down) over the last decade. Is this significant? What has caused this shift?
- How does the Martinsville Dam influence habitat recovery and channel design?
- Is land use above the reservoir affecting resources? ATV use in streams.

Task 2.A.3.b – Flow Management

- What would be a better ramping scenario? What is the biological impact?
- Study of new turbine technology available for variable flow releases.

<u>Additional Items</u>

- Discussion of "Trout in the Classroom Program"
- Smith River Festival – September 16, 2007. This could be a good public

relations/involvement opportunity to publicize the 216 Study.

- Smith River Chapter of Trout Unlimited would like to invite the 216 participants to an informational public meeting like they did last year. Proposed date: March 1, 2007.

PHILPOTT 216 STUDY
AQUATIC RESOURCES WORK GROUP MEETING
PHILPOTT LAKE, DECEMBER 8, 2006

AGENDA

1. Welcome and Introductions

2. General Overview of 216 Process - Handouts

3. Review of Aquatic Resource Group Stakeholders – Suggestions

4. General Discussion of Project Management Plan (PMP) Development
   - Fluid document

5. Review and Discussion of Natural Resources PMP Tasks – Is what we have adequate? What needs to be added? Can anything be dropped? Do we need additional tasks? Scopes of Work?
   - Task 2.A.1 – Endangered Species Restoration
   - Task 2.A.2 – Habitat Management
   - Task 2.A.3.a – Temperature Management
   - Task 2.A.3.b – Flow Management

6. Discussion of where we go from here.

7. Adjourn