

**REEVALUATED FINDING OF NO SIGNIFICANT IMPACT**  
**TENNESSEE VALLEY AUTHORITY**

**Hallsdale-Powell Utility District**  
**Proposed Modification of Construction Plans for a**  
**Raw Water Pipeline and Intake on**  
**TVA Tract XMHR-80PT, Opposite Clinch River Mile 46.3,**  
**Bull Run Creek Mile 2.0L, Melton Hill Reservoir, Anderson County,**  
**Tennessee**

**Proposed Action and Need**

On March 27, 2003, TVA completed a final environmental assessment (EA) and Finding of No Significant Impact (FONSI) on the Hallsdale-Powell Utility District (HPUD) proposal to construct a new raw water intake structure and excavation at Bull Run Creek Mile (BRCM) 2.0, Melton Hill Reservoir, Anderson County, Tennessee. HPUD supplies potable water to residents and businesses in north Knox, Anderson, and Union Counties. The intake would initially withdraw 8 mgd with a capacity of 14 mgd and, as water demand dictates over the next 30 years, would be upgraded to eventually withdraw up to 22 mgd.

The use of a temporary cofferdam to protect water quality was included in the HPUD original project proposal and, therefore, included in the EA. Prior to implementation of construction, by letter dated March 22, 2004, W.L. Hailey & Company, Inc. (contractor), on behalf of HPUD, requested that TVA amend its Section 26a permit conditions to allow the use of a floating silt screen instead of a cofferdam during intake construction (Attachment 1). This request is based upon an anticipated substantial increase in construction noise generation during cofferdam installation and removal. TVA Standard and General Conditions for Section 26a and Land Use approvals, more specifically Best Management Practices item 6(b), included as Appendix H in the EA, committed HPUD to use a cofferdam to work "in the dry" when intake construction occurs below water elevation. Item 6(c) gives TVA the discretion of allowing the use of floating silt screens. Both items 6(b) and 6(c) were checked in the Section 26a permit approval package, while only item 6(b) was checked in Appendix H. The contractor also mentioned that blasting (i.e., drilling and shooting) rock to trench the intake piping into the reservoir-bottom could be required. Blasting was not included in the HPUD original construction plan.

Additionally, the buoy and shoreline signage would be amended such that information that identifies areas of structural or operational sensitivity, such as locations of certain utilities, would remain confidential.

**Impact Assessment**

The proposed changes would result in the use of a floating silt screen instead of a cofferdam. Blasting could also occur to allow intake piping trenching in the reservoir-bottom if bedrock is encountered. Upon review of these proposed construction plan changes, TVA believes use of the floating silt screen would allow disturbed reservoir-bottom silt and sediments to remain confined to the immediate waters surrounding the trench site and not be dispersed downstream. For underwater blasting, appropriate minimal strengths of charges would be drilled and set into bedrock below existing soil sediments within the area encircled by the floating silt screen. As a result, additional soil particulates would not be dispersed into the water column. Therefore, TVA does not

anticipate significant water quality effects if a floating silt screen is used instead of the originally proposed cofferdam, provided the conditions and mitigation measures identified in the previous review are implemented. The results of the previous review and analyses are incorporated by reference in this review (see Affected Environment, Water Quality and Environmental Consequences, Water Quality sections on pages 8 and 11, respectively, of the original EA).

Because silt and sediments would remain confined to the immediate waters surrounding the trench site, TVA believes use of the floating silt screen would not result in significant impacts on aquatic life. If underwater blasting is necessary, some small number of fish would be killed by the shock created, but there would be no long-term adverse effects on reservoir fisheries. Fish that inhabit this area are generally abundant species that also inhabit other areas of the reservoir. No federally listed aquatic species are known to occur in the impact area of the project (see Appendix B of the original EA). Regardless, impacts on aquatic life would be minor, temporary and insignificant, provided the conditions and mitigation measures identified in the previous review are implemented (see Mitigation Measures on page 14 of the original EA).

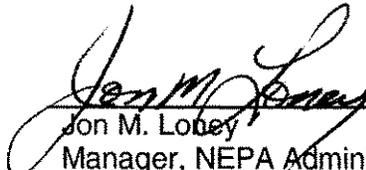
The shoreline sign and buoys would still be required to alert the public, particularly fisherpersons, boaters and swimmers, of a potential safety hazard in this reach of Bull Run Creek. However, HPDU will not be required to use the word "intake" on the buoy over the structure itself as indicated in Commitment #2 of the original EA. Also, the word "intake" would not be used on the shoreline sign. Instead, the standard regulatory warning buoy would be installed and the shoreline sign would use general language indicating the presence of an underwater obstruction, object, or structure.

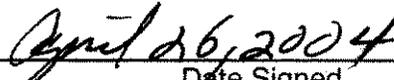
Additional construction noise caused by cofferdam installation and removal would not occur. Because blasting, if needed, would occur under approximately 4 to 12 feet of water, associated additional construction noise is expected to be minor. Operational noise levels would continue to be maintained within the 55 dBA DNL at the property line (see Mitigation Measures on page 14 of the original EA).

The March 2003 EA and FONSI are incorporates by reference the findings and conclusions of environmental effects included in these documents.

### **Conclusion and Findings**

After review of the HPUD request, TVA finds that the impacts of approving the HPUD proposed construction plan changes would not have a significant impact on the quality of the environment provided the commitments in the original EA are implemented. Accordingly, an environmental impact statement is not required.

  
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Jon M. Loney  
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Date Signed