John H. Kerr Section 216 Study Status Report, February 2012

A report is being prepared for the Alternative Formulation Briefing (AFB) scheduled for July 2012. The AFB is a USACE checkpoint/milestone meeting, and sponsors and resource agencies will be invited to the introductory portion of the AFB. The AFB report will contain the study background, information on prior reports, describes public involvement undertaken to this date, covers the plan formulation process, and will identify a tentatively selected plan

Based on the identified problems, opportunities, constraints, and established study planning objectives developed during the plan formulation process, a series of management measures, consisting of both structural and operational changes and activities, are being investigated. These management measures focus on resolving the following two major issues: 1) degradation of the lower Roanoke River bottomland hardwood ecosystem due to changes in the natural hydrology of the system caused by long duration 20k cfs releases during flood operations, and 2) impaired dissolved oxygen (DO) levels below Kerr Dam which have degraded in-stream habitat conditions. The measures to address these problems are undergoing a detailed evaluation as a part of the AFB report, and all necessary investigations needed to assist in the evaluation of these measures have been completed. The following is a brief description of measures that have been investigated for each of the two major issues indicated above.

- 1) Improve bottomland hardwood ecosystem in the lower Roanoke River Several measures have been investigated that would allow for more frequent 35k cfs releases from the reservoir thus reducing the duration of 20k cfs releases. These measures all involve adjustment to the reservoir guide curve meant to minimize impacts to hydropower revenue, and the measures would take affect either during the growing season or year-round.
- 2) Improve dissolved oxygen downstream of Kerr Dam Several measures have been investigated that would allow release of oxygenated waters from Kerr Dam to meet the state standard of 5 mg/l for at least 6 miles downstream of the dam. These measures would only need to be used during the warmer months when Kerr Reservoir is stratified.

The tentatively selected plan will consist of a measure from category 1), 2) or both and will be presented in the completed AFB report. Prior to the AFB meeting, the Wilmington District will meet with the Executive Committee and stakeholders to present the tentatively selected plan.

The schedule of major study tasks are as follows:

Task	Date
Feasibility Scoping Meeting	June 2011
Alternative Formulation Briefing Meeting	July 2012
Submittal of Draft Feasibility Report to SAD/ HQ, USACE	Dec 2012
Distribute Draft Feasibility Report for NEPA/Public review	Feb 2013
Submit Final Feasibility Report to SAD	Jul 2013
SAD Submits Final Report to HQ, USACE	Aug 2013