



Addendum to Draft Plan
Middle Chattahoochee Regional Water Plan

For Consideration at Council Meeting 10
April 13, 2011

Item 1., page 3-14, insert the following additional impact:

Referring to Work Group Comment 1

River Flow Impacts. In addition to Corp operations and the affects on river flow, the Council is concerned about upstream and regional consumptive use and flow returns to the river. Upstream interbasin transfers and increases in consumptive use reduce downstream flows and reduce the natural flows in the river.

The Council encourages better stewardship through land use planning and permitting to maximize flow returns to the river. Furthermore, a more scientific understanding is needed for such uses as agricultural irrigation, wastewater land application, and septic systems in order to better quantify the water balance with truer representations of consumptive uses associated with these uses.

Item 2., page 3-12, add the following to the first paragraph:

Referring to Work Group Comment 3

Similarly, the relationships between water turbidity, water detention/velocity, water temperature, precedent weather/flow conditions, pH, growing season duration and algal growth require further study in West Point and Walter F. George lakes to establish a chlorophyll-a standard that is appropriate for these reservoirs. A chlorophyll-a standard of 25 micrograms/liter for Walter F. George Lake has been suggested as reflective of Southeastern Plains Ecoregion reservoirs (Raschke 1994, EPA 1999).

Item 3., page 3-5, add the following to the second paragraph under **Navigation**:

Referring to Work Group Comment 4

Navigation is important to the regional economy and must be maintained between Columbus and Apalachicola Bay.

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Item 4., page 6-4, Table 6-1, revise WW-2 as follows:

Referring to Paul Chappell comments

<p>WW-2: Encourage studies to determine the appropriate water returns ratios for <u>agricultural irrigation and wastewater</u> land application and septic systems</p>	<p>The assumption of 100% consumptive use is believed to inadequately reflect the quantity and timeliness of water returns from <u>agricultural irrigation and wastewater</u> land application and septic systems. This exacerbates the magnitude and duration of gaps in the EPD resource assessments. The studies would be scaled to reflect appropriate geographic and physiographic provinces, since returns would be dependent on topography, soil, and climate differences.</p>
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Item 5., page 7-14, Section 7-4 Recommendations to the State, at the end of Recommendation 1, insert the following:

Referring to Work Group Comment 7

The following modeling constraints are the beginning point for revisions to the Corps' water control manual.

INSERT Table 5-1 showing the desire flows and lake levels

Item 6., page 7-16, revise the third recommendation to read as follows:

Referring to Work Group Comments 8 & 10

3. Metro North District Returns and Nutrient Loading

The May 7, 2009 Metro North District Plan includes ambitious predictions of returns to the river for which the Middle Chattahoochee resource assessments now greatly depend. The Council would like a comprehensive audit of these predictions and ongoing measurement and regular reporting on the progress to achieving these goals. Furthermore, the Council desires that such progress be reported as a range of statistical flows, including mean, minimum, and maximum values of consumptive use.

The Middle Chattahoochee Council is also concerned about the nutrient load increase projected for 2050 that is estimated at the Whitesburg gauge. Nutrient loadings of phosphorus and nitrogen are expected to increase 200 percent by 2050. The Middle Chattahoochee region should

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not be burdened with additional waste water treatment or storm water BMPs caused by increases in upstream discharges.

Specific to nutrients, the Council is concerned about the increases in phosphorus and nitrogen and the resulting chlorophyll-a to West Point Lake and Lake Walter F. George and the potential for degradation of lake water quality.

The Council requests that the Metro North District provide: 1) specific details of how the increased nutrient load will be mitigated before it reaches the Middle Chattahoochee basin, and 2) provide annual progress reports of nutrient levels and reduction effectiveness.

Finally, the Council recommends a peer review of the lake and watershed models to better understand the methodology as it relates to the output and calibration. Pending the review, the council recommends that the model outputs not be utilized for setting water quality standards instream or for any other regulatory purposes, including point source permitting in the region.

Item 7., page 8-6, insert the following text as follows:

Referring to Work Group Comments 9

The Council recommends an increased awareness of water balance in the region and therefore, has requested that additional measurement and water return ratio studies be performed to better understand consumptive uses and related water returns. Once completed, this information will better equip the Council and region for managing consumptive uses and allow the Council's vision of an abundant water supply for our descendants to be achieved.

Item 8., pages 8-5 to 8-7, the following change will be made:

Referring to EPD discussions with Black & Veatch about the draft plan

*Section 8-5 will be removed and will be incorporated into an **Executive Summary** that will be inserted at the beginning of the plan.*