



Relicensing Briefing Card

ISSUE: WATER RESOURCES

Brief: The Georgia Environmental Protection Division (GEPD, 2008) classifies the water use of the Chattahoochee River as Fishing in the segment located upstream of Osanippa Creek, and as Recreation and Drinking Water in the segment downstream of Osanippa Creek. The Alabama Department of Environmental Management (ADEM) classifies the Alabama waters of the Chattahoochee River as Fish and Wildlife in the segment upstream of Osanippa Creek, and as Public Water Supply, Swimming and Other Whole Body Water-Contact Sports, and Fish and Wildlife in the segment downstream of Osanippa Creek within Lake Harding.

- Existing, water supply withdrawal permits on Lake Harding include Harris County, Georgia (3 million gallons per day [MGD]) and the City of Opelika, Alabama (42 MGD).
- Lake Harding does not meet all of its designated uses because of legacy PCBs detected in fish tissue, attributed to historic stormwater runoff and nonpoint source pollution. A total maximum daily load (TMDL) completed for PCBs in Lake Harding determined that PCB loadings have been reduced to zero. PCBs have been banned in the U.S.; and levels are declining and will continue to decline. PCB Management criteria are unrelated to Project operations.
- Georgia Power has conducted field monitoring of water quality in Lake Harding since 1979. The data collected show compliance with applicable water quality criteria, including dissolved oxygen (DO).
- Georgia Power has monitored Bartletts Ferry tailrace DO concentrations during critical conditions to in part assess the impact of low DO discharges from West Point dam. The monitoring data indicate that, as expected, some DO concentrations are lower during low flow and drought periods. Project waters meet water quality standards as overall concentrations are within the range of acceptable DO criteria.
- Reservoir chlorophyll *a* data indicate the lake is likely in the upper Mesotrophic range, with recent data from Mountain Oak Creek indicating higher chlorophyll *a* in the Eutrophic range. Trophic state assessments by ADEM have indicated Eutrophic conditions in Alabama waters.

Bottom Line Take Away: The Bartletts Ferry Project waters are meeting their designated uses with the exception of fish consumption guidelines related to legacy PCBs persisting in fish tissue. GEPD has developed a TMDL addressing PCBs, and the levels are declining. Water quality in the lake is favorable for drinking water, recreation, and fish populations.

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