

STATE OF GEORGIA
REVISED TMDL IMPLEMENTATION PLAN
Coosa River Basin
Revision 01; April 28, 2006

**FISH CONSUMPTION GUIDELINES DUE TO PCBs and
 COMMERICAL FISHING BAN DUE TO PCBs**

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TMDL Implementation Plans are platforms for establishing a course of actions to restore the quality of impaired water bodies in a watershed. They are intended as a continuing process that may be revised as new conditions and information warrant. Procedures will be developed to track and evaluate the implementation of the management practices and activities identified in the plans. Once restored, appropriate management practices and activities will be continued to maintain the water bodies.

The initial TMDL Implementation Plan was part of the TMDL developed in 2004. This Revision supercedes the initial TMDL Implementation Plan.

This Implementation Plan is applicable to the following segments in the Coosa River Basin:

Impaired Waterbody	Location	Pollutant	Miles Impacted
Armuchee Creek	Oostanaula River Tributary (Floyd)	CFB	20
Beech Creek	Downstream Hicks Lake, near Rome to Coosa River (Floyd County)	CFB	10
Big Cedar Creek / Cedar Creek	Johnson Lake Rd. Cedartown to Coosa River, Lake Weiss(Polk/Floyd)	CFB	25
Big Dry Creek	Rome (Floyd County)	CFB	3
Burwell Creek	Rome (Floyd County)	CFB	3
Connesenna Creek	Etowah River Tributary (Bartow)	CFB	6
Coosa River	Rome to Hwy 100 (Floyd County)	CFB/ FCG	16
Coosa River	Hwy. 100 to Stateline (Floyd County)	CFB/ FCG	15
Dozier Creek	Oostanaula River Tributary (Floyd)	CFB	3
Etowah River	Hwy. 411 to Coosa River (Bartow/Floyd County)	CFB/ FCG	21
Hamilton Creek	Coosa River Tributary (Floyd County)	CFB	5
Horseleg Creek	Rome (Floyd County)	CFB	4
Kings Creek	Coosa River Tributary (Floyd County)	CFB	4
Little Dry Creek	Rome (Floyd County)	CFB	6

Mt. Hope Creek	Coosa River Tributary (Floyd County)	CFB	5
Oostanula River	Hwy. 140 to Coosa River (Floyd)	CFB/ FCG	14
Silver Creek	Rome (Floyd County)	CFB	15
Smith Creek / Cabin Creek	Smith Creek Headwater to Coosa River, Lake Weiss (Floyd County)	CFB	5
Spring Creek	Etowah River Tributary (Floyd)	CFB	2
Toms Creek	Etowah River Tributary (Bartow)	CFB	1
Two Run Creek	Clear Creek to Etowah River (Bartow)	CFB	10
Webb Creek	Coosa River Tributary (Floyd County)	CFB	4
Woodward Creek	Oostanula River Tributary (Floyd)	CFB	8
Conasauga River	Holly Creek to Oostanula River (Murray / Gordon County)	FCG	24
Conasauga River	Hwy. 286 to Holly Creek (Whitfield / Murray County)	FCG	18
Etowah River	Richland Creek to Euharlee Creek (Bartow County)	FCG	4
Etowah River	Euharlee Creek to US Hwy. 411 (Bartow County)	FCG	10
Etowah River	Lake Allatoona To Richland Creek (Bartow County)	FCG	12
Oostanula River	Hwy. 156 to Hwy. 140 (Floyd County)	FCG	18
Oostanula River	Oothkalooga Creek to Hwy 156 (Gordon County)	FCG	5
Oostanula River	Conasauga / Coosawattee to Oothkalooga Creek (Gordon County)	FCG	11

INTRODUCTION

The State of Georgia has identified these segments in the Coosa River Basin as partially supporting or not supporting their designated use due to the issuance of Commercial Fish Ban (CFB) and/or Fish Consumption Guidelines (FCG) because of Polychlorinated Biphenyls (PCB) contamination. The water use classification for the Coosa River is Fishing. The *2005 Guidelines for Eating Fish from Georgia Waters* (Georgia Department of Natural Resources, 2005), recommends limiting consumption of Carp, Striped Bass, Largemouth Bass and Bullhead Catfish to either one meal per week or one meal per month in these stream segments.

DISCUSSION OF POLLUTANT

The following general background on the impact of PCBs on fish consumption is taken from the U.S. EPA *Fact Sheet: PCBs Update: Impact on Fish Advisories* (U.S. EPA, 1999).

PCBs are a group of synthetic organic chemicals that contain 209 possible individual chlorinated biphenyl compounds. These chemically

related compounds are called congeners and vary in their physical and chemical properties and toxicity. There are no known natural sources of PCBs. Although banned in the United States from further production in 1979, PCBs are distributed widely in the environment because of their persistence and widespread use. PCB mixtures found in the environment are different from the commercially produced PCB mixtures (known as Aroclors in the United States) because of differences in chemical properties, persistence, and bioaccumulation among the different congeners. The most common analytical method used to detect PCBs in the environment is based on Aroclor analysis; however, congener-specific methods have been developed and currently are being tested. PCB exposure is associated with a wide array of adverse health effects in experimental animals. Experimental animal studies have shown toxic effects to the liver, gastrointestinal system, blood, skin, endocrine system, immune system, nervous system, and reproductive system. In addition, developmental effects and liver cancer have been reported. Skin rashes and a severe form of acne have been documented in humans; however, other effects of PCB exposure in humans are not well understood. EPA has classified PCBs as probable human carcinogens (Group B2). As of 1998, 37 States have issued 679 fish advisories for PCBs. These advisories inform the public that high concentrations of PCBs have been found in local fish at levels of public health concern. State advisories recommend either limiting or avoiding consumption of certain fish from specific water bodies or, in some cases, from specific water body types (e.g., all freshwater lakes or rivers).

POLLUTANT SOURCES

There are no known natural sources of PCBs. The manufacture and use of PCBs were banned in the United States in 1977, but we can still find them in our environment. The U.S. EPA lists the following as potential sources for PCBs:

- Poorly maintained hazardous waste sites,
- Illegal/improper dumping of PCB waste such as electrical transformer fluids,
- Leaks or releases from electrical transformers containing PCBs,
- Improper disposal of PCB-containing consumer products,
- Old microscopic oil and hydraulic fluids,
- Old televisions and refrigerators, lighting fixtures, electrical devices or appliances containing PCB capacitors made before 1977, and
- Previously contaminated sediments in the bottom of lakes and rivers.

PCBs have been banned, there are no new sources, and over time the levels of these contaminants are expected to decrease.

PLAN FOR TMDL IMPLEMENTATION/MONITORING/EDUCATION

Through the NPDES reasonable potential procedures, Georgia Environmental Protection Division will determine whether PCB monitoring requirements or effluent limitations are necessary for the permitted dischargers to the Coosa River watershed.

Georgia Department of Natural Resources will continue a progressive program to evaluate problem areas and to protect public health by giving people the information they need to make decisions about eating fish from Georgia waters. The DNR fish testing program is ongoing. Testing on additional lakes and rivers is balanced with retesting of waters where change may be occurring. Contaminant levels in fish change very slowly, and sampling the same species of fish from the same locations over time will allow the DNR to document changes and trends in contaminant levels. Information on contaminant levels is updated yearly and published in the *Guidelines for Eating Fish from Georgia Waters*.

REFERENCES

U.S. EPA, 1999. Fact Sheet: Polychlorinated Biphenyls (PCBs) Update: Impact on Fish Advisories. USEPA Office of Water, September 1999. EPA-823-F-99-019.

Georgia Department of Natural Resources, 2005. Guidelines for Eating Fish from Georgia Waters – *2005 Update*.

GA EPD, 2005. Total Maximum Daily Load for Thirty-one Segments in the Coosa River Basin for PCBs in Fish Tissue and Commercial Fishing Ban Due to PCBs. January 2005.

Georgia Rules and Regulations for Water Quality Control, Chapter 391-3-6-03, Water Use Classifications and Water Quality Standards, Revised February 2004.