

**STATE OF GEORGIA
TMDL IMPLEMENTATION PLAN**

**For Zinc in Turkey Branch
Suwannee River Basin**

Prepared by
The Georgia Department of Natural Resources
Environmental Protection Division
Atlanta, GA

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 overall goal of the Plan is to define a set of actions that will help achieve water quality standards in the state of Georgia.

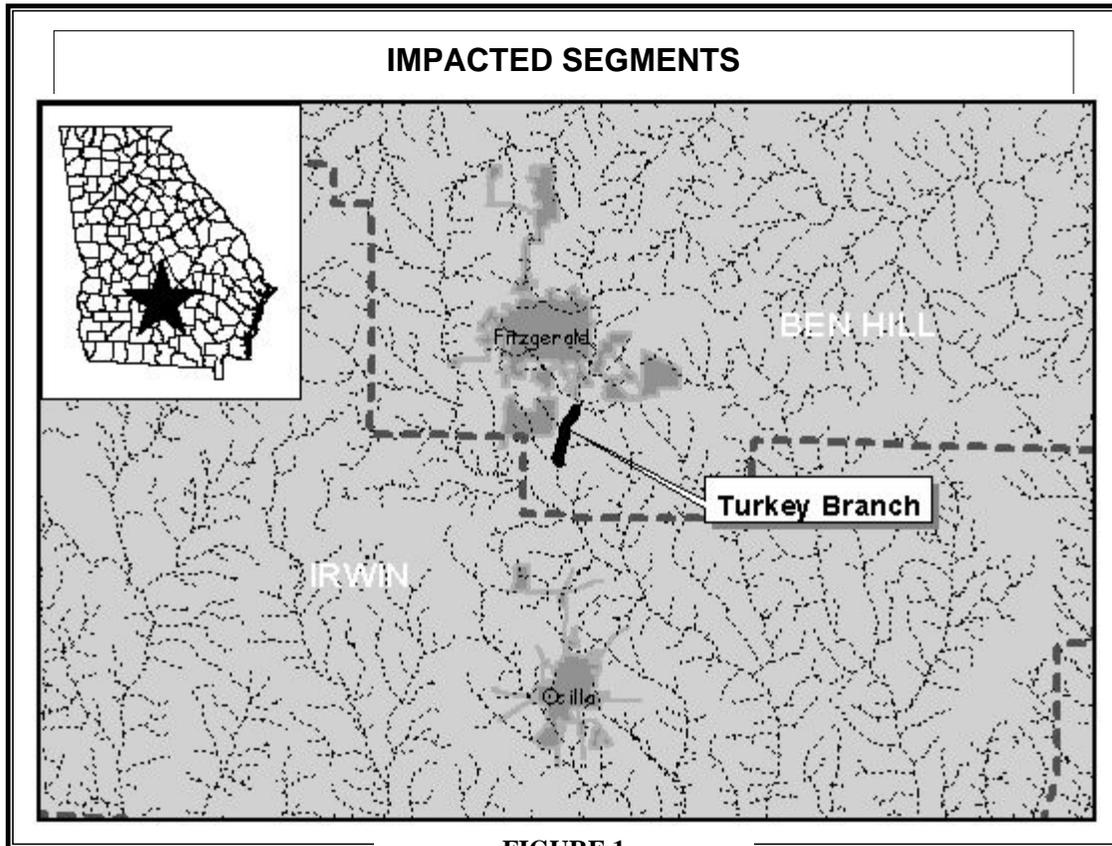


FIGURE 1

Impaired Waterbody Name	Location	Miles/Area Impacted	River Basin
1. Turkey Creek	Fitzgerald	8	Suwannee

INTRODUCTION

In June 2000, the Georgia Environmental Protection Division (GA EPD) established a Total Maximum Daily Load (TMDL) for zinc. The City of Fitzgerald WPCP (NPDES Permit # GA0047236) treats both municipal and industrial wastewater using an activated sludge system. It is the only major point discharger in the Turkey Branch watershed.

DISCUSSION OF POLLUTANT

Zinc is a common metallic element with a variety of uses. It is used as a coating to rustproof steel, in dry batteries, and to make alloys such as brass and bronze. Zinc compounds are widely used to make paint, rubber, dye and wood preservatives. Excessive amounts of zinc have been shown to be deleterious to health.

WATERBODIES COVERED IN THIS PLAN

The State of Georgia's 2000 Section 303(d) list identifies 8 miles of Turkey Branch from its headwaters to its confluence with the Willacoochee River as not supporting its designated use of fishing due to zinc. The TMDL established for low-flow critical conditions is as follows:

Chronic=5.963 kg/day

Acute= 6.542 kg/day

POLLUTANT SOURCE(S)

The TMDL identifies the C.A. Newcomer WPCP as a municipal point source for the impairment.

PLAN FOR IMPLEMENTATION OF TMDL/ MONITORING PLAN

The discharge permit for the City of Fitzgerald's C.A. Newcomer WPCP was revised on August 28, 2002 to include effluent and instream monitoring for zinc. Terms of the revised permit require the City of Fitzgerald to monitor total recoverable zinc once per month for twelve months after issuance of the permit. Should the results indicate that zinc is present at levels of concern, GA EPD may reopen the permit to include specific chemical limits for these parameters.

STAKEHOLDERS

City of Fitzgerald, Ben Hill County, Delphi Automotive Systems, Aeroquip Corp., Custom Profiles Corp.

REFERENCES

Agency for Toxic Substances and Disease Registry, 1999. *Zinc* CAS # 7440-66-6.