The Nine Elements

This document describes the Cat Creek contamination problem and how to deal with it, in the form of a Nine-Element Plan for Cat Creek:

a. Identify causes and sources of pollution
b. Estimate pollutant loading into the watershed and the expected load reductions
c. Develop management measures to achieve goal
d. Identify technical and financial assistance needed to implement plan
e. Develop an information/education component
f. Develop a project schedule
g. Describe the interim, measurable milestones
h. Identify indicators to measure progress
i. Develop a monitoring component

The U.S. Environmental Protection Agency (EPA) requires a Nine Element Plan to apply for grants under the Clean Water Act section 319 Nonpoint Source Program. The Georgia Environmental Protection Division (GA-EPD) has a similar requirement.

For more about Nine Element Plans, see these U.S. EPA publications:

- A QUICK GUIDE to Developing Watershed Plans to Restore and Protect Our Waters
- Handbook for Developing Watershed Plans to Restore and Protect Our Waters

This Plan is similar to the one in the 2013 Withlacoochee River Watershed Improvement Plan:

https://www.sgrc.us/documents/transportation/watershed/Withlacoochee%20FINAL%20WIP.pdf

See page 26 in that document, APPENDIX A: NINE (9) – KEY ELEMENT SUMMARY.

Beyond sorting out this particular contamination issue, a Nine Element Plan will make it easier for the participants, individually or collectively, to apply for other grants related to Cat Creek.

A. Identify causes and sources of pollution

> *"An identification of the causes and sources or groups of similar sources that will need to be controlled to achieve the load reductions estimated in this watershed based plan (and to achieve any other watershed goals identified in the watershed based plan), as discussed in item (b) immediately below. Sources that need to be controlled should be identified at the significant subcategory level with estimates of the extent to which they are present in the watershed (e.g., X numbers of dairy cattle feedlots needing upgrading, including a rough estimate of the number of cattle per facility; Y acres of row crops needing improved nutrient management or sediment control; or Z linear miles of eroded streambank needing remediation)."*

First we review TMDLs, and then we rank contamination sources.