

STATE OF GEORGIA
TIER 2 TMDL IMPLEMENTATION PLAN **REVISION _1_**
 Upper Chickasawhatchee Creek
 Flint River Basin
 City of Dawson, City of Sasser,
 Terrell County Commissioners

I. INTRODUCTION

Total Maximum Daily Load (TMDL) Implementation Plans are platforms for evaluating and tracking water quality protection and restoration. These plans have been designed to accommodate continual updates and revisions as new conditions and information warrant. In addition, field verification of watershed characteristics and listing data has been built into the preparation of the plans. The overall goal of the plans is to define a set of actions that will help achieve water quality standards in the state of Georgia.

This implementation plan addresses the general characteristics of the watershed, the sources of pollution, stakeholders and public involvement, and education/outreach activities. In addition, the plan describes regulatory and voluntary practices/control actions (*management measures*) to reduce pollutants, milestone schedules to show the development of the management measures (*measurable milestones*), and a monitoring plan to determine the efficiency of the management measures.

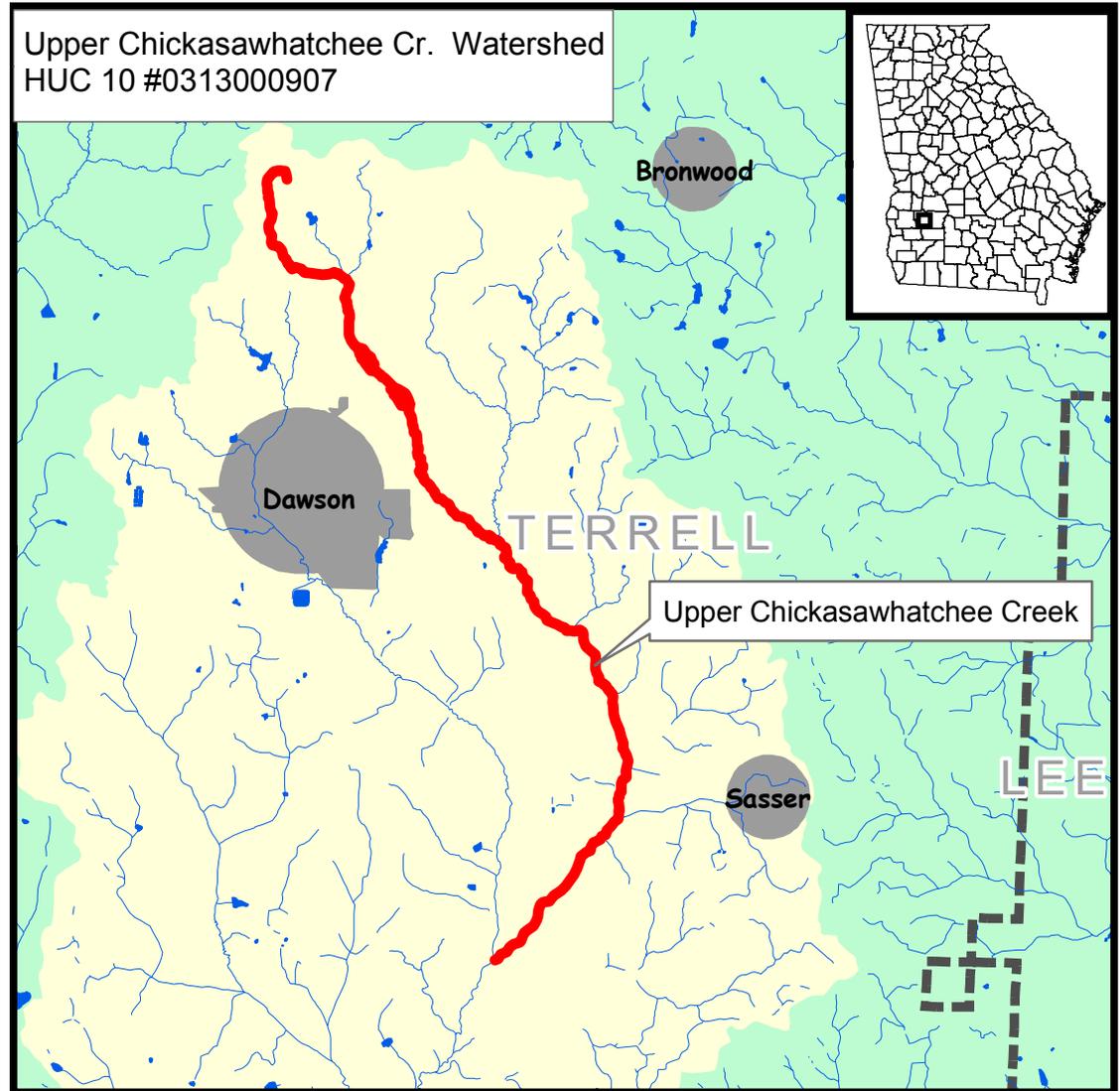


Table 1. IMPAIRMENTS

IMPAIRED STREAM SEGMENT	IMPAIRED SEGMENT LOCATION	IMPAIRMENT
Upper Chickasawhatchee Creek	Terrell County	Biota (sediment)

II. GENERAL INFORMATION ABOUT THE WATERSHED

Write a narrative describing the watershed, HUC 10# 0313000907. Include an updated overview of watershed characteristics. Identify new conditions and verify or correct information in the TMDL document using the most current data. Include the size and location of the watershed, political jurisdictions, and physical features which could influence water quality. Describe the source and date of the latest land cover/use for the watershed. Describe and quantify major land uses and activities which could influence water quality. See the instructions for more information on what to include.

The Upper Chickasawhatchee Creek (HUC10# 031000907) is located in Terrell County, just north of Dawson, Georgia. The creek is in the lower portion of the Flint River watershed. The segment is approximately 20 miles long and the watershed covers approximately 20,500 acres.

According to the SWGRDC land use survey of 2003, the predominant land uses in this watershed are agricultural (11254 acres) and silvicultural (7372 acres).

A limited amount of residential properties are located just S.E. of Dawson, along the Creek Corridor. Land area coverage for this area has been consistent with very little change over the last 20 years. Residential growth is expected in the southern portion of Terrell County over the next 20 year planning period.

The Upper Chickasawhatchee Creek is listed for not meeting water quality standards for Biota (sediment). The Georgia Environmental Protection Division will address nonpoint source solution through a watershed protection strategy.



Ploughed Field north of Sasser Herod Rd, about 1 kilometre from Chickasawatchee Creek Bed.



Ploughed Field south of Herod Sasser Rd between Dawson and Sasser, ½ kilometre from Chickasawatchee Creek bed. Note Treeline, this is a forested plantation that sweeps downhill and encompasses creek.

Upper Chickasawhatchee Creek
COMPLETE THE FOLLOWING TABLES FOR AND NARRATIVES ABOUT EACH IMPAIRED STREAM IN THE WATERSHED.

STREAM SEGMENT NAME	LOCATION	MILES/AREA	DESIGNATED USE	PS/NS
Upper Chickasawhatchee Creek	Terrell County GA	20 miles, 20, 500 acres	Fishing	PS

III. SOURCES AND CAUSES OF STREAM SEGMENT IMPAIRMENT LISTED IN TMDLs

After reviewing the TMDLs written for this stream, complete the following tables with **the information found in the TMDLs**. List each parameter for which the stream segment is impaired and the water quality standard violated. See the instructions for the water quality standards. Describe the sources and causes of each violation identified in the TMDLs.

Table 2. SOURCES OF IMPAIRMENT AS INDICATED IN TMDLs

PARAMETER 1	WQ STANDARD	SOURCES OF IMPAIRMENT	NEEDED REDUCTION FROM TMDL
Biota (sediment)	All Waters shall be free from material related to municipal, industrial, or other discharges which produce turbidity, color, odor or other objectionable conditions which interfere with legitimate water uses.	Row Crop Agriculture Grazing Silviculture Roads Urban Development	0 Total allowable load is 1.1 tons/acre/year. Currently UCC has loading of 0.75 tons/acre/year.

IV. IDENTIFICATION AND RANKING OF POTENTIAL SOURCES OR CAUSES OF IMPAIRMENT

INVESTIGATE AND EVALUATE the sources of impairment for each parameter listed in Table 2. Write a narrative describing efforts made or procedures used to verify the significance and extent of the sources or causes of each impairment listed in the TMDLs. Include:

- Involvement of stakeholder group
 - Field surveys
 - Review of land cover data
 - Evaluation of sources
-
-

On August 19, 2004, in Camilla, Georgia a stakeholders meeting was held to discuss the TMDL process and solicit input on potential causes of pollution along the stream corridor. Committee members and individuals present discussed the need for additional testing, better land management practice, and enforcement of Part V Environmental requirements in the GA Planning Act might help reduce some sediment within the impacted area. Unfortunately, representatives from Terrell County and Dawson could not be present.

RDC staff conducted a visual field survey along portions of the stream segment. EPA notes “the majority of the sediment problems are probably due to historic landuse patterns.” (TMDL Sediment in the Flint River Basin, p.21).

To the extent possible, identify sources and quantify the extent of pollution in the stream segment for each of the parameters listed in Table 2 and evaluate the likely impact on the parameter load to the stream. This should follow research performed and described in preceding narrative and should correct or add information to the TMDLs. **The SOURCES SHOULD BE RANKED** from those having the most impact to those having the least impact. The estimated extent of contribution can be expressed as the area of the watershed effected, the stream miles effected, or the number of activities contributing to the problem. The magnitude of contribution should be estimated to be large, moderate, small, or negligible.

Table 3. CONCLUSIONS MADE OF POTENTIAL SOURCES OF STREAM SEGMENT IMPAIRMENT

PARAMETER 1	POTENTIAL SOURCES	ESTIMATED EXTENT OF CONTRIBUTION	ESTIMATED MAGNITUDE OF CONTRIBUTION	COMMENTS
Biota (sediment)	Row Crop Agriculture	92 %	Large	The decreasing number of farms and corresponding decrease in number of acres under the plow will, when combined to increased adoption of BMPs sufficiently diminish overall turbidity.
Biota (sediment)	Roads	3 %	Small	runoff
Biota (sediment)	Pasture/Grasses/wetland	2 %	Small	runoff
Biota (sediment)	Silviculture	.24 % Maximum run off occurs during harvest when BMPs are ignored or underused.	Neglible	runoff

V. STAKEHOLDERS

PUBLIC INVOLVEMENT AND THE ACTIVE PARTICIPATION OF STAKEHOLDERS is essential to the process of preparing TMDL implementation plans and improving water quality. Stakeholders can provide valuable information and data regarding their community, impaired water bodies, potential causes of impairments, and management practices and activities which may be employed to reduce the impacts of the causes of impairment.

Describe outreach activities to advise and engage stakeholders in the TMDL implementation plan preparation process. Describe the stakeholder group employed or formed to address the impaired segments in the watershed. Summarize the results of the number of attendees and meetings and describe major findings, recommendations, and approvals.

An initial meeting was held with August 19, 2004 to determine possible sources of pollution and to solicit input on preventive and corrective measures for the area. RDC Staff sent out individual notices to Advisory Board Members, other interested parties, and local government officials. A notice was sent out to local area papers to invite the general public to attend the meeting. Seven concerned citizens attended the meeting. Additional input was gathered from the RDC Environmental Committee at their regularly scheduled meeting. Members and citizens present at both of these meetings felt additional testing should be conducted. GIS mapping allowed members and others present at the meeting to look at the impacted segment, within the broader context of each watershed.

Unfortunately representatives from Terrell County and the Cities of Sasser and Dawson were unable to attend this meeting.

The next step will be to hold additional public meetings and educate local stakeholders about the TMDL process and gain greater input on better land management practices.

Area Newspapers who carried Public Meeting Notification:

**Albany Herald
Athens Herald
Valdosta Times Local
Columbus Ledger
Moultrie Observer
Cairo Messenger
Camilla Enterprise
Pelham Journal
Sylvester Local
Bainbridge Post Searchlight
Dawson News
Donalsonville News
Thomasville Times**

Lee County Ledger
Early County News
Miller County Liberal

Advertising Copy Text ran:

**Meeting Concerning Clean Water, August 19, 2004
(TMDL Regional Advisory Group)**

The TMDL Regional Advisory Group (on Clean Water) will meet on Thursday, August 19th 2004 at the Southwest Georgia Regional Development Center in Camilla. The meeting will be held from 3:00 p.m. to 5 p.m. Both new and established members are encouraged to attend. The group is intended to provide technical support for implementation plans for polluted stream segments in addition to modifying the Regional TMDL Implementation Plan. Therefore, it is important that the various stakeholder groups in this region have proper representation. It is hoped that these meetings will help stakeholders form relationships and make connections with others in the region.

List the watershed or advisory committee members of the stakeholder group for this segment in the following table.

Table 4. COMMITTEE MEMBERS

NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
David Burke	Oil Dri Corp				229-574-4271	davidburke@oildri.com
David Dixon	Miller Brewing Company				229-420-5096	David.Dixon@mbco.com
Ron Dudley	Stevenson & Palmer Engineering				229-883-0332	
Greg Findley	Georgia Forestry Commission				229-533-380	gfindley@gfc.state.ga.us
John Fisher	Spring Creek Water Safety Task Force				229-246-9739	
Tynik (Nikki) Fox	Dougherty Co. Environmental Health Dept.				229-438-3942	tfox@gdph.state.ga.us
David Hamilton	City of Albany				229-438-3942	Davidhamilton31707@yahoo.com
Alan Isler	Georgia Forestry Commission				229-533-3580	aisler@gfc.state.ga.us

Mel Jones, Jr.	Public Health Division, District Health				229-430-4129	mfjones@gdph.state.ga.us
Roger King	City of Moultrie				229-890-5432	
Nancy O'Quinn	UGA/REDP				229-386-7376	noquinn@arches.uga.edu
Susan Reyher	Dougherty Co. Environmental Health Dept.				229-438-3943	smreyher@gdph.state.ga.us
Burt A Spence	Mitchell Co. Environmental Health Dept.				229-336-2055	BA.Spence@gdph.state.ga.us
Roger Thighpen	Georgia Pacific Corp.				229-327-5029	rgthigpe@gapac.com
Russell Toning	Georgia Soil & Water Conservation Commission					rtonning@gaswcc.org
Rob Weller	GAWRD				229-886-1451	Rob.Weller@mail.dnr.state.ga.us
Rebecca Winn	International Paper					Rebecca.Winn@ipaper.com
RDC Staff						
Paul Forgey	Planning Director SW GA RDC				229-522-3552	pforgey@swgrdc.org

In Appendix A, list the names, addresses, telephone numbers, and e-mail addresses for local governments, agricultural or commercial forestry organizations, significant landholders, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

I. MANAGEMENT MEASURES AND ACTIVITIES

Describe any management measures or activities that have been put into place or will be put into place including regulatory or voluntary actions or other controls by governments or individuals that specifically apply to the pollutant that will help achieve water quality standards. Include who will be responsible for the measure, how it will be funded, the status, the date it will be or was initiated, and a short description of how effective the measure is or will be.

Table 5. MANAGEMENT MEASURES AND ACTIVITIES

GENERAL MEASURES APPLICABLE TO ALL PARAMETERS

MEASURE	RESPONSIBILITY	DESCRIPTION	SOURCE OF FUNDING	STATUS	ENACTED/ IMPLEMENTED	EFFECTIVENESS (Very, Moderate, Weak)
Federal Clean Water Act Section 404 (Ag and Forestry)	EPA (Situations involving forestry are normally referred to the GFC to determine compliance with this regulation)	Requires normal ongoing agricultural and silvicultural practice to adhere BMPs and 15 baseline provisions for road construction and maintenance in and across waters of the US including lakes, rivers, perennial and intermittent streams, wetlands, sloughs in order to qualify for the exemption from the permitting process.		Current	June 6, 1988	EPA identifies silviculture as the lowest contribution source of nonpoint pollution.
GA Growth Planning Act (OCGA 12-2-8)	GA DNR, Department of Community Affairs and local units of government	Authorized GA DNR to develop minimum planning standards and procedures that local jurisdictions could adopt and enforce pertaining to the protection of river corridors, mountain tops, water supply watersheds/reservoirs, groundwater recharge areas			1991	

		and wetlands. Silvicultural activities may be exempted from permitting requirements provided the activity complies with BMPs.				
Georgia Forestry Commission Monthly BMP Assurance Examination	Georgia Forestry Commission (Matters involving enforcement are generally referred to GA EPD)	In an effort to document “reasonable assurance” that water quality will be proactively protected during regular ongoing silvicultural operations, the GCF will offer a monthly BMP assurance examination of active sites. All active or ongoing sites will be identified either through monthly air patrol flights, courthouse records, riding the roads, notification or by landowners. Sites located within watersheds of specific biota (sediment) impaired streams will be given a higher priority to identify and conduct examinations.		Current	1/1/03	EPA identifies silviculture as the lowest contribution source to nonpoint pollution
Georgia Water Quality Control Act (OCGA 12-5-20)	GA DNR EPD	Makes it unlawful to discharge excessive pollutants (sediments, nutrients, pesticides, animal waste, etc.) into waters of the State in amounts harmful to public health, safety or welfare, or to animals, birds, or aquatic life of the physical destruction of stream habitats.		Current	1964	
Georgia’s Best Management Practices	Georgia Forestry Commission (matters involving	Inform landowners, foresters, timber buyers, loggers site preparation, and		Current	1989, 1997	EPA identifies silviculture as the lowest

	enforcement are generally referred to GA EPD	reforestation contractors and others involved in silvicultural operations about commonsense, economical, effective practices to minimize nonpoint source and thermal pollution.				contribution source of nonpoint pollution
--	--	---	--	--	--	---

The purposes of monitoring are to obtain more data, to determine the sources of pollution, to describe baseline conditions, and to evaluate the effects of management and activities on water quality. Describe any sampling activities or other surveys - active, planned or proposed - and their intended purpose. Reference the development and submission of a Sample Quality and Assurance Plan (SQAP) if monitoring for delisting purposes.

Table 6. MONITORING PLAN

PARAMETER(S) TO BE MONITORED	ORGANIZATION	STATUS (CURRENT, PROPOSED, PLANNED)	TIME FRAME		PURPOSE (If for delisting, date of SQAP submission)
			START	END	
Biota (sediment)	GF EPD	Planned	2005	2006	TMDL Evaluation/Monitoring

VIII. PLANNED OUTREACH FOR IMPLEMENTATION

List and describe outreach activities which will be conducted to support this plan and the implementation of it.

Table 7. PLANNED OUTREACH

RESPONSIBILITY	DESCRIPTION	AUDIENCE	DATE
Terrell Co.	Educational, Activities/Regulatory Controls	All	Ongoing
City of Dawson	Educational, Activities/Regulatory Controls	All	Ongoing
Terrell Co. Extension Office	Educational, Activities/Regulatory Controls	Property Owners, Businesses	Ongoing
S.W. GA RDC	Brochures, Videos, Additional Educational info.	All	Ongoing

IX. MILESTONES/ MEASURES OF PROGRESS OF BMPs AND OUTREACH

This table will be used to **track and report progress of management measures including BMPs and outreach**. Record milestone dates for:

- accomplishment of management practices or activities - outreach activities
- installation of BMPs

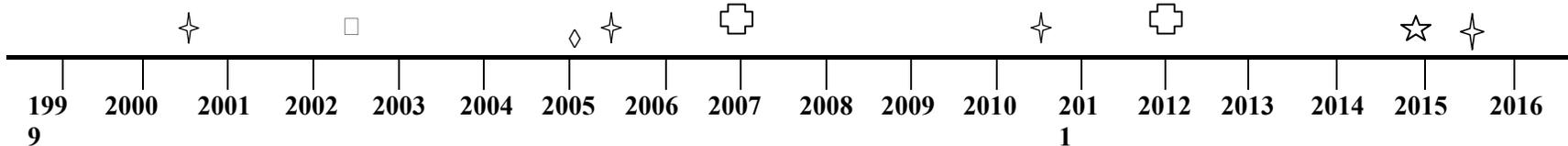
to attain water quality standards. Comment on the effectiveness of the management measure, how much support the measure was given by the community, what was learned, how the measure might be improved in the future, and any other observations made. This table can be "pulled out" of this template and used to report and track progress.

Table 8. MILESTONES

MANAGEMENT MEASURE	RESPONSIBLE ORGANIZATIONS	STATUS PROPOSED INSTALLED		COMMENT
Soil Erosion	County, City, GA EPD		1990's	Review and modify as necessary
Part V Environmental Ord.	County , City		2002	Review and modify as necessary

PROJECTED ATTAINMENT DATE

The projected date to attain and maintain water quality standards in this watershed is 10 years from acceptance of the TMDL Implementation Plan by Georgia EPD.



- Scheduled EPD basin Group Monitoring ✦
- TMDL Completed □
- TMDL Implementation Plan Accepted ◇
- Evaluation of implementation plan/water quality improvement ⊕
- Project Attainment ☆

Prepared By:	Greg Weathersby		
Agency:	SW GA RDC		
Address:	30 West Broad St.		
City:	Camilla	ST: GA	ZIP: 31730
E-mail:	gweathersby@swgrdc.org		
Date Submitted to EPD:	11/05/04	Revision: December 13, 2004 C. Maycock	

The preparation of this report was financed in part through a grant from the U.S. Environmental Protection Agency under the provisions of Section 106 or Section 604(b) of the Federal Water Pollution Control Act, as amended.

STAKEHOLDERS

APPENDIX A.

STAKEHOLDERS

List the names, addresses, telephone numbers, and e-mail addresses for local governments, agricultural or commercial forestry organizations, significant landholders, businesses and industries, and local organizations including environmental groups and individuals with a major interest in this watershed.

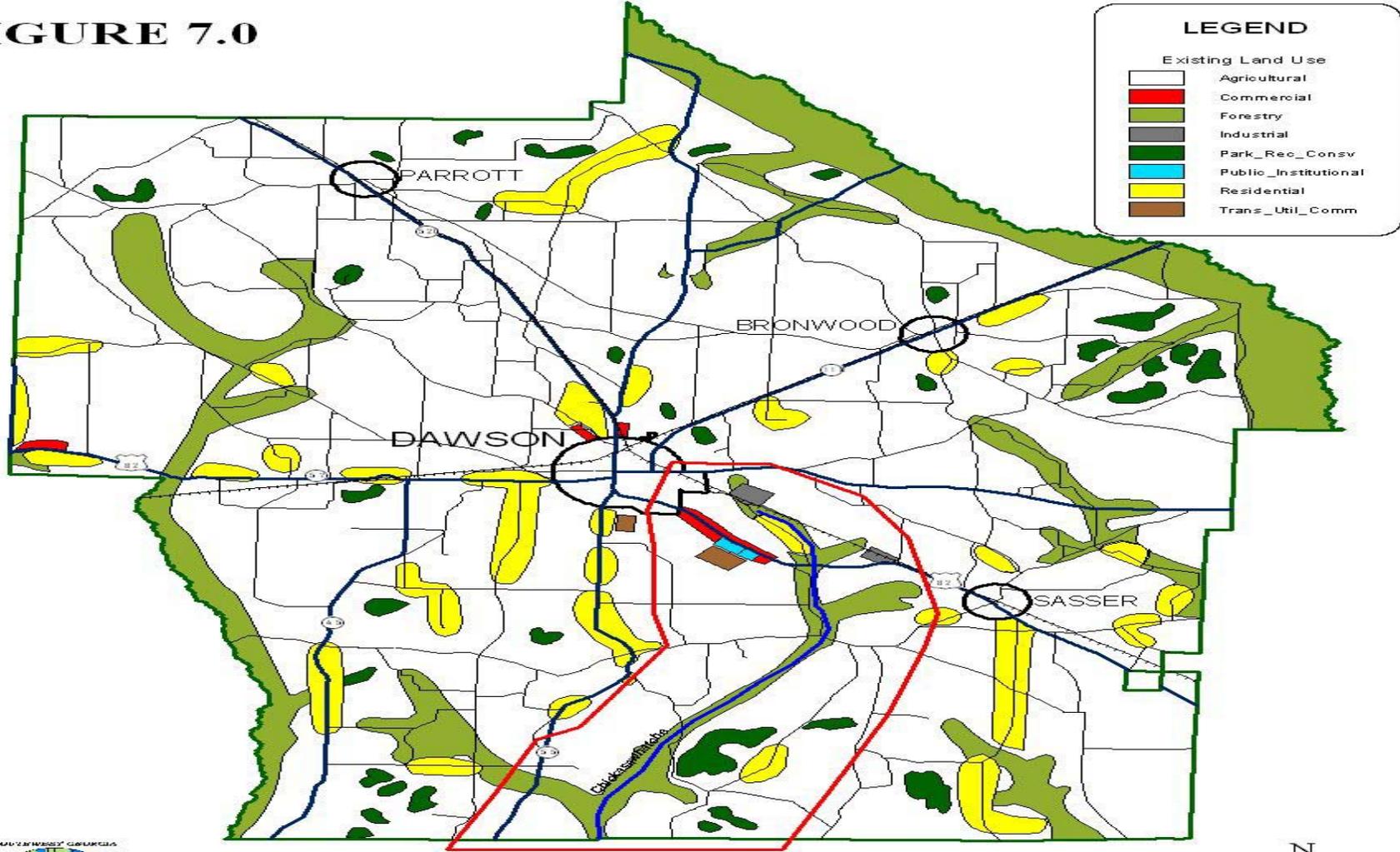
NAME/ORG	ADDRESS	CITY	STATE	ZIP	PHONE	E-MAIL
Terrell County Office of County Clerk	P.O. Box 525	Sawson	GA	39842	229-995-4476	
City of Dawson	P.O. Box 190	Dawson	GA	39842	229-995-4444	barneypl@alltel.net
Terrell Co. Health Dept.	969 Forrester Dr.	Dawson	GA	39842	229-995-2188	

APPENDIX B.

UPDATES TO THIS PLAN

Describe any updates made to this plan. Include the date, section or table updated, and a summary of what was changed and why.

FIGURE 7.0



5 0 5 Miles

HUC 10 CORRIDOR



SOUTHWEST GEORGIA REGIONAL DEVELOPMENT CENTER	GENERALIZED EXISTING LAND USE	TERRELL COUNTY
---	--------------------------------------	------------------------------------