

Section 12: IMPLEMENTATION PLAN

INTRODUCTION

The implementation actions for the Wastewater Management Plan are a blueprint for State, regional and local wastewater providers in the 15-county Metro Water District to follow. The broad roles for these entities are summarized below.

ROLES

Local Wastewater Providers

- Own and operate local wastewater systems that manage, collect and treat
- Plan and construct wastewater infrastructure
- Participate in the Metro Water District including coordination with the Water Supply and Water Conservation Management Plan and Watershed Management Plan
- Participate in regional efforts for water resources management related to implementation of this Plan

Local Governments

- Coordinate Local Comprehensive Land Use Plans with local wastewater master plans
- Plan for long-term use of septic systems or decentralized systems if the future land use plan indicates growth that is not served by a local wastewater provider

Metro Water District

- Promote inter-jurisdictional collaboration for water resources management
- Serve as a forum and clearinghouse for regional issues, such as septic system management
- Present a regional voice for water resources management
- Provide local jurisdictions with support and guidance for implementing this Wastewater Management Plan

Georgia EPD

- Issue wastewater discharge permits in accordance with this Wastewater Management Plan
- Continue regulatory functions over wastewater collections and treatment
- Support regional planning

Georgia Environmental Facilities Authority

- Support the Wastewater Management Plan through increased funding participation

IMPLEMENTATION SCHEDULES

Four separate implementation schedules are included in this Section, one for local wastewater providers, one for local governments, one for the Metro Water District, and one for State agencies. It should be noted that local wastewater providers are only responsible for implementing management measures identified on the local implementation schedule and are not responsible for Metro Water District or State-level tasks. Local wastewater providers should use this implementation schedule in combination with Appendix B, County-Level Summaries, which provides greater detail on new wastewater facility construction, decommissioned facilities, or expansion projects. The implementation schedules in this Section outline the programmatic requirements of this Wastewater Management Plan.

The reference page numbers provide the location of the full description of each measure in the Wastewater Management Plan where additional implementation guidance may be found. New program implementation or creation of a program is indicated differently than ongoing implementation in the implementation schedule. The distinction provides a quick snapshot for the level of intensity of implementation on an annual basis.

Tasks in the implementation schedule are outlined individually for the first few years of the Wastewater Management Plan, considered the short-term. The action items for implementation in the calendar years 2012 to 2015 are considered medium-term and the action items for the 2015 to 2035 time-frame are considered long-term recommendations. The schedule for medium-term and long-term tasks may be adjusted during updates every 5-years, following an adaptive management approach.

TABLE 12-1
Local Wastewater Provider Implementation Plan

Note: Additional implementation items related to each county are included in Appendix B, County Level Summaries.

Category	#	Implementation Action Item	2009	2010	2011	2012 - 2015	2015 - 2035	Ref. Pages
Planned Wastewater Treatment Facilities	6	Perform capital improvements in accordance with Metro Water District Wastewater Management Plan						6-1 to 6-10
Wastewater Collection System Inspection and Maintenance	7.1	Sewer System Inventory and Mapping						7-2 to 7-3
	7.2	Sewer System Asset Management						7-4
	7.3	Sewer System Inspection Program						7-5 to 7-7
	7.4	Sewer System Maintenance Program						7-8 to 7-9
	7.5	Sewer System Rehabilitation Program						7-10 to 7-11
	7.6	Capacity Certification Program						7-12 to 7-14
	7.7	Grease Management Program						7-15 to 7-16
	7.8	Sewer System Overflow Emergency Response Program						7-17 to 7-18
	7.9	Sewer System Inspection and Maintenance Training						7-19
Septic systems and decentralized systems	8.4	Provide local government with acceptable parameters for septage disposal at facilities	■					8-9 to 8-10
	8.5	Coordinate with local government on the development of a private wastewater system ordinance	■					8-11 to 8-12
Local Wastewater Master Plans	9.1	Develop local wastewater master plans and update every 5 years at a minimum.	■			■		9-2 to 9-4
	9.2	Establish policies for connections to public sewer	■					9-5 to 9-6
Local Education Program	12	Develop and implement a local wastewater education and public awareness program	■					12-8 to 12-10
■ Active Implementation			..... Ongoing Implementation/ Program Maintenance					

TABLE 12-2
Local Government Implementation Plan

Category	#	Implementation Action Item	2009	2010	2011	2012 - 2015	2015 - 2035	Ref. Pages
Septic Systems and Decentralized Systems	8.1	Septic System Planning	██████████	██████████	.....	.....	.....	8-3 to 8-4
	8.2	Septic System Critical Area Management	.....	.....	.....	.....	.....	8-5 to 8-6
	8.3	Septic System Maintenance Education	.....	.....	.....	.....	.....	8-7 to 8-8
	8.4	Septic Tank Septage Disposal	██████████	██████████	.....	.....	.....	8-9 to 8-10
	8.5	Private Decentralized Wastewater Systems Ordinance	██████████	██████████	.....	.....	.....	8-11 to 8-12
	8.6	Septic System Coordination	██████████	██████████	.....	.....	.....	8-13 to 8-14
██████████ Active Implementation Ongoing Implementation/ Program Maintenance								

TABLE 12-3
Regional Agency Implementation Plan

Category	Implementation Action Item	2009	2010	2011	2012 - 2015	2015 - 2035	Ref. Pages
Wastewater Management Program Evaluation	Work with the TCC to develop metrics for evaluating the Wastewater Management Plan implementation	■	■	.....	.....	.....	10-4
Program Assistance	Assist with program design, coordinate implementation as needed, monitor and report compliance and revise program as needed.	.....	.....	.....	.....	.....
Education and Public Awareness	Continue to support local education efforts with regional education programs	.....	.....	.....	.....	.....	12-1 to 12-10
	Investigate enhancing wastewater messages with new recommended topics	.....	.....	.....	.....	.....	12-1 to 12-10
■ Active Implementation Ongoing Implementation/ Program Maintenance							

TABLE 12-4
State Agency Implementation Plan

Category	Implementation Action Item	2009	2010	2011	2012 - 2015	2015 - 2035	Ref. Pages
Georgia Environmental Protection Division (Georgia EPD)							
Administrative Actions	Review permit re-reviews based on the original submittal date	■	.....				10-1
	Consolidate permit cycles	■	.....				10-1
	Consolidate and standardize reporting	■	.....				10-2
	Consolidate wastewater permit storage	■	.....				10-2
	Encourage return of highly treated wastewater	.....					10-2
	Consider modifications to the existing anti-degradation policy	■	.....				10-2
	Consider incentives for wastewater providers who improve water quality	■	.....				10-2
	Require decentralized systems in the Metro Water District to comply with the same requirements as municipal wastewater permittees, such as the completion of a watershed assessment and management plan	■	.....				10-2
	Track the approximate flow of private systems so that their impact can be more readily understood on water quantity and quality	■	.....				10-3
County Boards of Health							
Recommended Legislative and Regulatory Changes	Environmental Health professionals should participate in annual meetings with local governments and wastewater utilities	■	.....				10-3
	Environmental Health professionals should work with the local jurisdictions to identify these critical areas and support the additional management measures that local jurisdictions require in these critical	■	.....				10-3
	Consider amending current law to allow establishment of maintenance requirements for non-mechanical wastewater systems	■	.....				10-3
	Create a database for septic system permits, repairs, and failures	.....	■	.....			10-4
	Develop a program to enforce or correct mistakes made by installers, pumpers, and soil classifiers	.....	■	.....			10-4
	Develop clear definitions and guidelines on proper labeling of extra rooms on building plans	■	.....				10-4
Georgia Department of Community Affairs (Georgia DCA)							
Recommended Legislative and Regulatory Changes	The new Comprehensive Land Use Plan review audit checklist should be updated as needed to encourage coordination between land use planning and water supply planning in accordance with this Wastewater Management Plan	■	.....				10-3
	The Department of Community Affairs should consider adding additional minimum planning requirements related to future growth on septic systems	■	.....				10-3
 Active Implementation Ongoing Implementation/ Program Maintenance							

IMPLEMENTATION COSTS

Implementation of the action items within this Wastewater Management Plan will need to be accounted for in future budgets. The implementation schedules provide an overview of when programs must be implemented, and therefore when funding is required. Costs were estimated through a combination of technical literature review and actual expenditures provided by local wastewater providers in the Metro Water District. The infrastructure and programmatic costs reflect present day costs for actions. Facility and infrastructure costs will vary by community and therefore should be refined as part of local master planning. This range of costs for programmatic elements will also fluctuate at the local wastewater provider level based on the local service area issues and challenges.

TABLE 12-5
Estimated Annual Implementation Cost by Program Category

Action Number	Description	Estimated Costs (Note 1, 4)
6.0 Planned Wastewater Treatment Facilities		Cost in million dollars
6.1	Construct 19 new wastewater treatment plants	\$664
6.2	Expand 48 existing wastewater treatment plants	\$2,758
6.3	Upgrade wastewater treatment plants	\$1,326
6.4	Retire 24 existing wastewater treatment plants	\$11
6.5	Enhance reliability of WTPs and pumping stations	Note 2
6.6	Reclaim water for Lake Lanier and Lake Allatoona	Note 3
SUB-TOTAL		\$4,760
7.0 Collection System Inspection and Maintenance		Cost in million dollars
7	Collection system inspection and maintenance	\$2,296
8.0 Septic Systems and Decentralized Systems		Cost in million dollars
8	Septic systems and decentralized systems	\$6
9.0 Local Wastewater Planning		Cost in million dollars
9.1	Develop local master plans	\$2.25
10.0 State and Regional Policy Recommendations		Cost in million dollars
10	State and Regional Policy	\$0.20
11.0 Education and Public Awareness		Cost in million dollars
11.1	Local education program	\$2.3
11.1	Regional education program	\$1.2
Totals		
Local wastewater providers, governments, County Board of Health		\$7,067
Metro Water District		\$1.3
Georgia EPD		\$0.1
TOTAL		\$7,067.9

Notes:

1. Costs for planning period based on local and regional project cost data.
2. Site specific costs will be determined through local wastewater master planning.
3. Cost included in the facility construction and expansion costs above.
4. Based on year 2008 dollars.

IMPLEMENTATION FUNDING

Successful implementation of the Metro Water District Wastewater Management Plan hinges on each local wastewater provider's ability to fund the implementation actions. All local governments should develop a stable funding mechanism that will provide for complete implementation of the Wastewater Management Plan. The funding methods outlined in this Section are divided into primary and secondary funding methods. The only primary funding method appropriate for funding implementation of the required Action Items is wastewater rates. There are a number of secondary funding methods, however, that may help augment primary funding methods for specific projects or programs. A blend of funding methods is recommended to support implementation of the Metro Water District Wastewater Management Plan.

WASTEWATER RATES

Like other public utilities, local wastewater providers charge customers for services associated with wastewater management, collections, and treatment. Wastewater rates provide a stable and dedicated revenue source for implementation of the Action Items in this Wastewater Management Plan. Wastewater rates should be based on a local rate study and designed to provide a sufficient revenue stream to support program costs and facility maintenance.

GENERAL APPROPRIATIONS (GENERAL FUND)

Revenues from local taxes typically comprise the "General Fund" which funds most activities performed by local governments. Annually, the local government divides the general fund based on local priorities into budgets for police, fire, transportation and other activities. The General Fund is an existing funding source that may be used to augment local wastewater rates for special projects; such as the extension of the wastewater collection system to serve economic development purposes. The General Fund is not commonly used to fund wastewater programs in the Metro Water District.

LOANS/BONDS

Loans and bonds allow immediate expenditures on wastewater treatment projects beyond readily available local funds. Bonds are not a revenue source, but rather are a means of borrowing money for a specific purpose. Funds are typically paid over a 15-year to 20-year period with interest charges, similar to a home mortgage. Despite interest charges, loans and bonds are often a financially sound method for funding capital improvement projects. For some capital improvement projects, such as wastewater treatment plant upgrades and collections system rehabilitation, the upfront expenditure may be less than the long-term expense of damage or the possible environmental impact from procrastination.

Typically loans and bonds are used for capital improvement projects that cannot wait until local funds are available; loans and bonds are not recommended for routine operations. Repayment schedules for loans and bonds can be developed to smooth out peaks and valleys in revenue requirements and thus reduce the need for sporadic large rate increases.

General Obligation and Revenue Bonds – Debt financing of capital projects can be accomplished by issuing general obligation bonds, revenue bonds, or a combination of the two. General obligation bonds are issued based on the "taxing powers" of the local government therefore no assets are required as collateral. Revenue bonds are issued based on revenues generated by a specific revenue-generating

entity such as special service fees, special assessments, or water rates. Because revenue bonds typically exclude property tax revenues, the interest rate on revenue bonds is typically higher.

Bonds require voter approval in a referendum and are subject to local administrative policy regarding debt ceilings. Most bonds are financed over a 15-year period with interest payments based on the community's bond rating.

Georgia Environmental Facilities Authority Loans – The Georgia Environmental Facilities Authority (GEFA) provides low-interest state loans to assist local governments across the state with a number of environmental-related efforts. Loan programs administered by GEFA cover water, wastewater, solid waste, and land conservation projects. Low interest loans are available for a maximum timeframe of 20 years with population-based limits on loan amounts. GEFA loans require that a community has a good payment history for previous GEFA loans, the project has identified and secured 100% of the total project funds, and the minimum debt service coverage is 105%. There is one GEFA loan capable of supporting implementation of this Wastewater Management Plan; the Clean Water State Revolving Fund.

- The Clean Water State Revolving Loan Fund (CWSRF) is a federal loan program administered by GEFA that funds a wide variety of wastewater infrastructure and non-point source projects.

Communities in the Metro Water District that apply for a GEFA loan must demonstrate through a Georgia EPD audit that they are in compliance with this Wastewater Management Plan, as well as the Water Supply and Water Conservation Management Plan and the Watershed Management Plan.

WaterFirst – Although typically considered a voluntary recognition program, communities designated by the Georgia Department of Community Affairs (DCA) as “WaterFirst” communities receive discounts on GEFA loan interest rates. The WaterFirst Community Program is a voluntary partnership sponsored by the DCA to increase the quality of life in communities through the wise management and protection of water resources. The award program recognizes local governments that make the connection between land use and water quality, and requires thinking beyond political boundaries to recognize the inextricable links created by shared water resources. Becoming a WaterFirst community demonstrates the desire to be responsible stewards of water resources for both environmental and economic benefits today and in the future.

SERVICE FEES

Local governments have the authority to establish special taxes or service fees to address specific local challenges. Service fees include SPLOST funds, impact fees, special assessments/tax districts, and in-lieu of construction fees as outlined below.

SPLOST Funds – A Special Purpose Local Option Sales Tax (SPLOST) can be voted on and approved by communities for the purpose of funding the building and maintenance of public facilities. Cities and counties are allowed to add up to a 1% sales tax levied against the sale of goods and services with a SPLOST. A SPLOST is recommended by an elected body and voted upon by residents generally during a scheduled election. A SPLOST expires at the end of six years. If additional funds are still needed, they must be voted upon and approved again by the citizens of the community. Counties and school systems are required to provide an independent accountants' report, examining the way the funds were allocated and verify that the system receiving the funds managed those funds appropriately. SPLOST revenues are generated from sales tax versus property tax, therefore are attractive in communities with

significant commercial centers or high tourism rates. SPLOST funds are often helpful for large, community-supported capital projects such as the rehabilitation of aging collections system infrastructure.

Sewer Surcharge Fees – Sewer surcharge fees or industrial pre-treatment fees are another method of local service fee, wherein local wastewater providers can recuperate a portion of the fees expended to handle additional flows from the food service industry or other industry users. The fees can be based on the additional strength in effluent or excessive flow rates. DeKalb County’s grease permit fees are an example of a sewer surcharge fee. The surcharges can help fund programs for proactive maintenance of the collection system and treatment facility.

Development Impact Fees – Local governments may legally assess new development projects with an impact fee located within a proposed local wastewater service area. The impact fee is calculated based on expenses incurred to provide the additional public capacity needed to serve the new growth and development and not based on the benefits received. Development impact fees to pay for wastewater projects are not common in Georgia, because the burden of proof is on the local government to accurately demonstrate the cost of the impact.

Development impact fees related to local services, including connection fees, pretreatment surcharges, and/or plan review fees, are common in the Metro Water District. These are generally one-time fees with revenues used specifically to fund salaries for personnel needed to perform the reviews and inspections required for the new development projects. These fees may be paid directly to the local wastewater provider or to the local government depending on the plan review process for each community.

Community Improvement Districts (CIDs) are a unit of government with the power to provide governmental services and facilities. CIDs are similar to authorities that are often created by special tax districts. The benefit of the CID is that they may issue tax-exempt special assessment bonds to finance facilities that provide essential governmental functions, such as wastewater-related projects. The debt is supported by the assessment power of the CID and not by the local government. CIDs are often used to support economic development activities.

In-Lieu Construction Fees – Local governments may elect to construct larger regional wastewater treatment facilities that provide benefit to new development areas as well as existing areas through a local Capital Improvement Plan. A local government might also choose to have the developer build or upgrade the whole system from their site to the plant if the new capacity would require these upgrades. A local government could also require a developer to install dry sewers in areas where septic tanks are permitted now but will be serviced by sewer at some point in the future. Local governments might also elect to charge fees to developers that did not participate in the system improvements but will benefit from the improvements.

GRANTS

A grant is a form of federal or state financial aid that does not need to be repaid and is typically based on demonstrated need. Grants typically require a local match but are a good way to leverage existing funds. While grants are helpful to extend locally-available funds, they typically are awarded on a competitive basis and involve a long lead time to secure funds. Most grants will not fund completed projects.

Community Development Block Grants (CDBG) – The CDBG grant program provides funding for projects that substantially benefit low and moderate income persons. Eligible wastewater-related projects could include collections system rehabilitation, extension of sanitary sewer service, conversion of septic systems to public sewer service, and other projects with a distinct benefit to low and moderate income persons. CDBG funds are distributed within the Metro Water District in two different manners depending on the county:

- **CDBG Entitlement Communities** receive their funds directly from the US Department of Housing and Urban Development (HUD). Jurisdictions in the Metro Water District that are currently entitlement communities include; Clayton, Cobb, DeKalb, Fulton, and Gwinnett Counties and the cities of Atlanta, Gainesville, Marietta, and Roswell. Entitlement communities develop their own programs and funding priorities. HUD determines the amount of each entitlement grant by a statutory dual formula which uses several objective measures of community needs, including the extent of poverty, population, housing overcrowding, age of housing and population growth lag in relationship to other metropolitan areas. There are a number of local requirements for communities to receive their annual funding allocations.
- **CDBG Non-Entitlement Communities** receive funds on a competitive grant basis from the Georgia Department of Community Affairs (Georgia DCA) with approximately \$36 million available for the annual competition. Counties that participate in the state-wide competitive grant process in the Metro Water District include; Bartow, Cherokee, Coweta, Douglas, Fayette, Forsyth, Hall, Henry, Paulding and Rockdale.

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