

GEORGIA STORMWATER MANAGEMENT MANUAL

2016 EDITION

VOLUMES 1 & 2

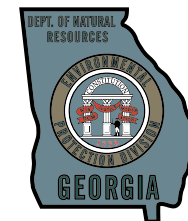
The revision of this Manual was facilitated by the Atlanta Regional Commission and was a collaborative effort led by the following agencies:

American Rivers
Atlanta Regional Commission
Chatham County – Savannah Metropolitan Planning Commission
City of Atlanta
City of Cornelia
City of Garden City
City of Johns Creek
City of Roswell
City of Savannah
City of Statesboro
City of Valdosta
Council for Quality Growth
Douglasville/Douglas Co. Water & Sewer Authority
Georgia Department of Transportation
Georgia Environmental Finance Authority
Georgia Environmental Protection Division
Georgia Industry Environmental Coalition
Gwinnett County
Mercer University
The Conservation Fund
United States Environmental Protection Agency
University of Georgia

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Foreward

Preface

Stormwater management has entered a new phase in the state of Georgia that recognizes the need for more innovative policies and practices. The requirements for National Pollutant Discharge Elimination System (NPDES) municipal and industrial permits, Total Maximum Daily Loads (TMDLs), watershed assessments and the desire to protect and increase the quality of human life, property, and aquatic habitats has brought home the pressing need to manage both stormwater quantity and quality from our developed and developing areas.

This Manual will continue to help Georgia move forward with a comprehensive approach to stormwater management that integrates drainage design, stormwater quantity, and water quality considerations and views stormwater as an important resource and opportunity for our communities. Building on the previous version, the goal of this Manual continues to be to refine and promote a consistent and effective approach of stormwater management throughout Georgia.

Acknowledgements

This Manual is the culmination of a collaborative effort between the Atlanta Regional Commission (ARC), the Georgia Environmental Protection Division, Georgia Environmental Finance Authority, cities, counties, and other organizations throughout the state of Georgia. These documents reflect the hard work, time and contributions of many individuals.

The cities, counties, and other organizations involved in this Manual update that helped guide this effort via the Technical Advisory Group (TAG), include:

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Chatham County – Savannah Metropolitan Planning Commission
City of Atlanta
City of Cornelia
City of Garden City
City of Johns Creek
City of Roswell
City of Savannah
City of Statesboro
City of Valdosta
Council for Quality Growth
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Georgia Department of Transportation
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University of Georgia

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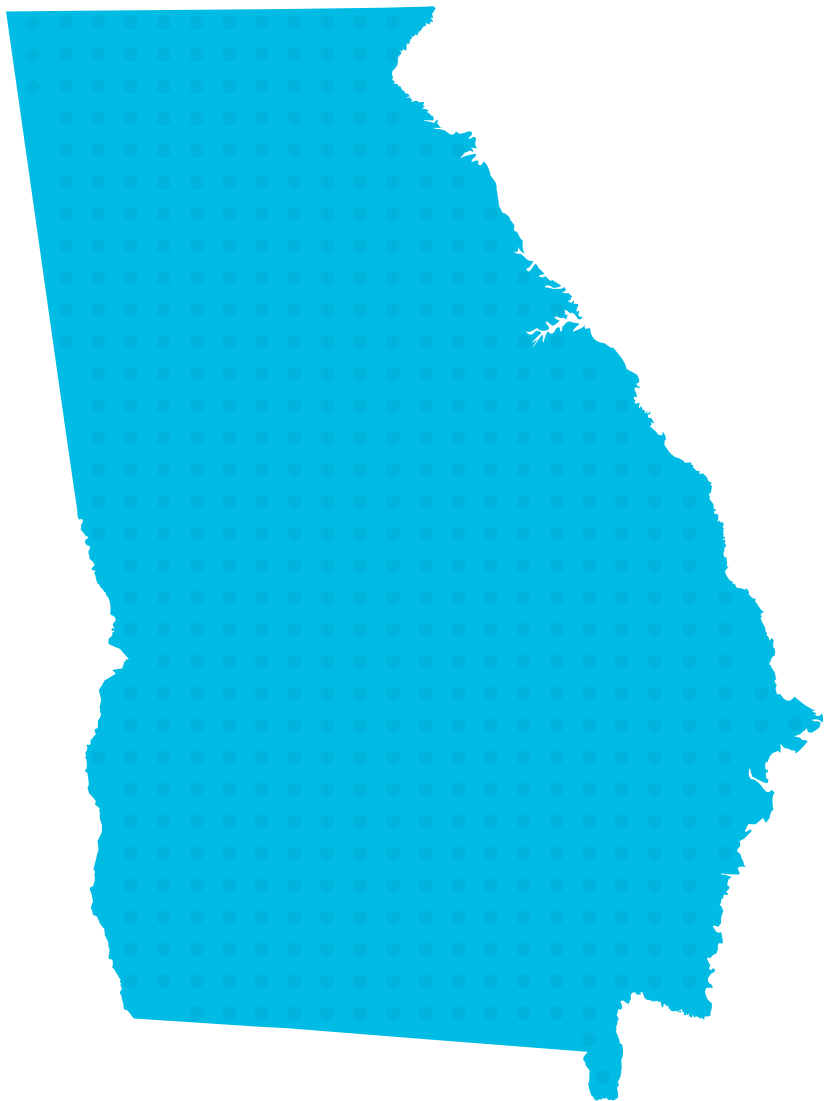
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[Click here for Volume 1: Local Government Guide](#)

[Click here for Volume 2: Technical Handbook](#)



GEORGIA STORMWATER MANAGEMENT MANUAL

2016 EDITION

VOLUME 1: LOCAL GOVERNMENT GUIDE

Volume 1: Local Government Guide

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1. Introduction

1.1 Objective of the Manual

The objective of the Georgia Stormwater Management Manual is to provide guidance on the latest and best post-construction stormwater management practices available to Georgia communities to minimize the negative impacts of increasing stormwater runoff and its associated pollutants. Building on the previous version, this updated Manual will help Georgia communities take a comprehensive approach to stormwater management that integrates drainage design, stormwater quantity, and water quality considerations. The goal is to provide an effective tool for local governments and the development community to reduce both stormwater quality and quantity impacts and protect downstream areas and receiving waters.

Stormwater management has entered a new phase in the state of Georgia that recognizes the need for more innovative policies and practices. The requirements for NPDES municipal and industrial permits, TMDLs, watershed assessments and the desire to protect human life, property, aquatic habitats and the quality of life in our communities has brought home the pressing need to manage both stormwater quantity and quality from our developed and developing areas.

1.2 Organization of the Manual

The Georgia Stormwater Management Manual is organized as a three volume set, with each volume published as a separate document. You are currently reading Volume 1 of the Manual.

Volume 1 of the Manual, the *Local Government Guide to Stormwater Management*, is designed to provide guidance for local jurisdictions on the basic principles of effective urban stormwater management. Volume 1 covers the environmental, economic and social problems resulting from urban stormwater runoff and the need for local communities to address urban stormwater quantity and quality through recommended stormwater management standards and local stormwater programs. It also provides an overview of integrated stormwater management and technologies and tools for implementing stormwater management programs.

Volume 2 of the Manual, the *Technical Handbook*, provides guidance on the techniques and measures that can be implemented to meet a set of recommended stormwater management standards for new development and redevelopment. Volume 2 is designed to provide the site designer or engineer, as well as the local plan reviewer or inspector, with all of the information on best management practices (BMPs) required to effectively address and control both water quality and quantity on a development site. This includes guidance on site planning, better site design practices, hydrologic techniques, criteria for the selection and design of stormwater BMPs, and drainage system design, as well as construction and maintenance information.

Volume 3, the *Pollution Prevention Guidebook*, is a separate compendium of stormwater pollution

prevention practices for use by local jurisdictions, businesses and industry, and local citizens. Volume 3, the *Pollution Prevention Guidebook* can be found at the following website: www.gastormwater.com

1.3 Users of This Volume

Volume 1 of the Manual is primarily intended to provide guidance for local government officials and staff on implementing stormwater management programs. The audience for Volume 1 also includes public agencies, such as Regional Commissions, and other organizations concerned with land use, development, and stormwater runoff management.

Other interested parties and the general public may also find Volume 1 helpful because it describes how managing stormwater improves water quality and quantity, helps protect the State's valuable natural resources and contributes to other social and economic benefits. Traditional urban stormwater management had unintended negative environmental, economic, and social consequences, including deteriorating water quality, reduced stream base flows, unstable stream banks, lakes filling with sediment, and flooding. Adoption of new comprehensive management strategies using low impact development (LID) concepts will reduce these negative impacts of stormwater runoff. These LID concepts help reduce runoff from new and re-development sites by using BMPs that encourage infiltration, evapotranspiration, and or harvest and use of stormwater runoff onsite.