



Management of an Aged and Evolving MS4

City of
Dunwoody
Georgia



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History of Dunwoody Stormwater

- City established December 2008
- Utility established March 2009
- No data provided from predecessor
- MS4 Requirements / GASB Statement 34
- Adopted a system needing **significant maintenance**







BMP Who, What, When, Where?

- First challenge of many municipalities
- Inventory can be a helpful component of MS4
 - Make the inventory a tool not just a regulatory requirement

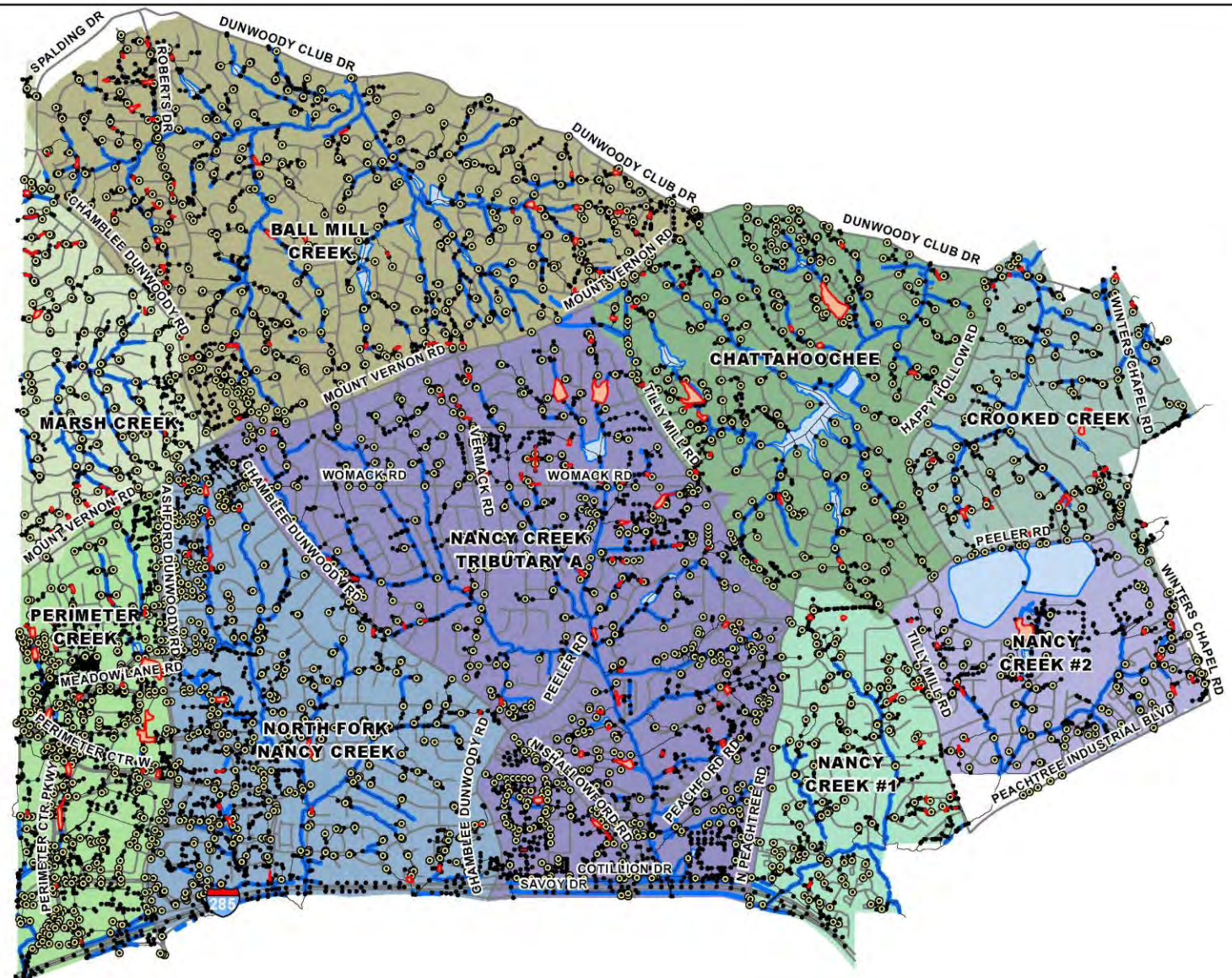
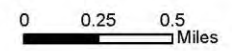
**City of Dunwoody
Stormwater Infrastructure**

Date: 2/13/2018

Legend

- Catch Basin (2,955)
- Structure (11,323)
- Conveyance
- Stream
- Detention Pond (228)
- Lake
- Street

- Dunwoody Basin**
- Ball Mill Creek
 - Chattahoochee
 - Crooked Creek
 - Marsh Creek
 - Nancy Creek #1
 - Nancy Creek Tributary A
 - North Fork Nancy Creek
 - Perimeter Creek





Inventory evolving with maintenance needs

- MS4 Requirements require that the system is inspected periodically
- Revise Inspection Protocol if Needed
- Sights on BMPs and Standardized Condition Assessments

Assessment Standardization



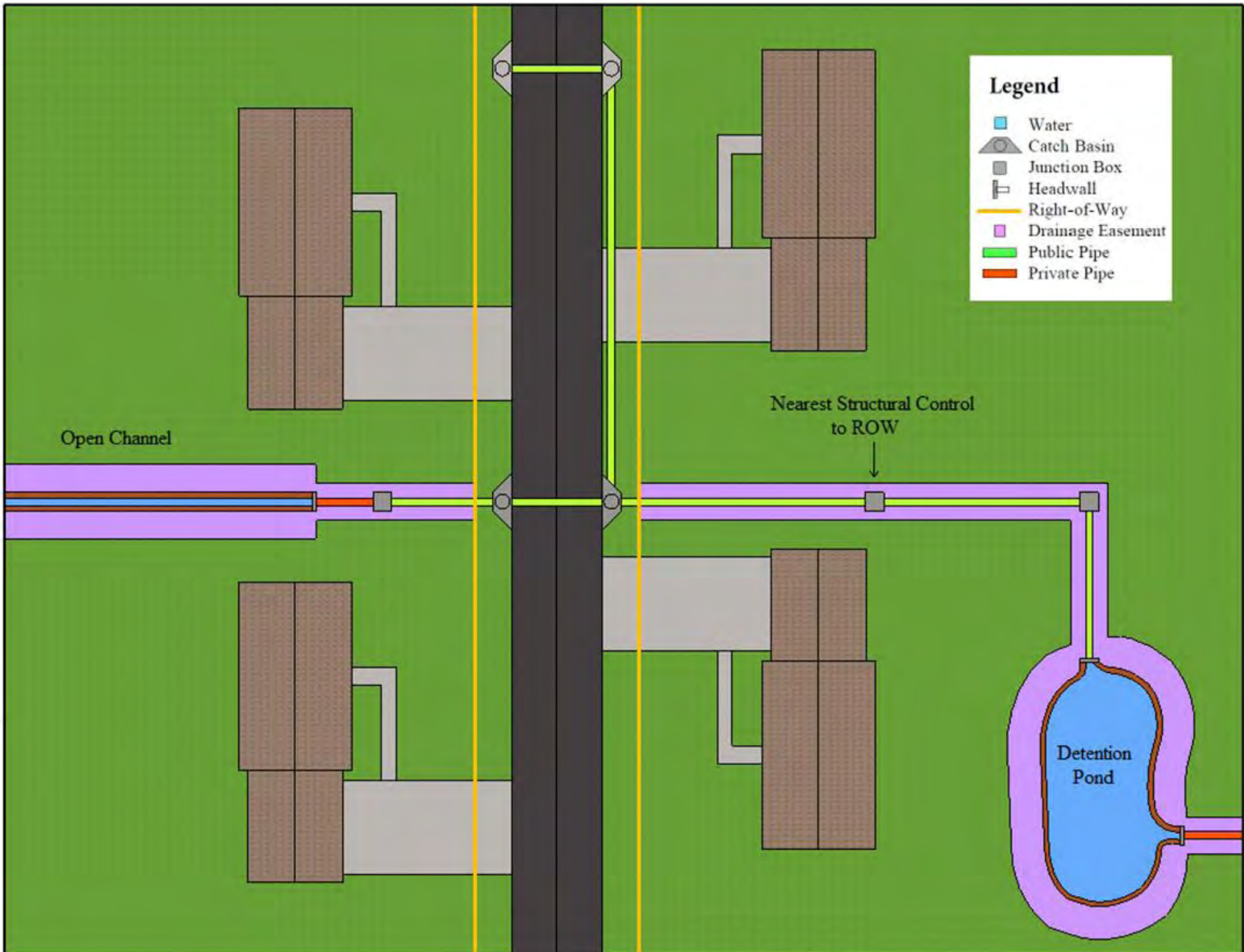
Ownership Determinations

- Public vs Private
 - Controversial in residential areas
 - Variability among jurisdictions
 - Should correspond to a rate study
- Final plat review
- History of operations
 - If you touch it, you own it
- Be consistent – Have a defined process

Extent of Service Document

- Create a Document
- Approve by Council
 - What are adjoining MS4s doing?
- Update as Needed
- Website





Legend

- Water
- Catch Basin
- Junction Box
- Headwall
- Right-of-Way
- Drainage Easement
- Public Pipe
- Private Pipe

Open Channel

Nearest Structural Control
to ROW

Detention
Pond





New Phase 2 MS4 Permit Pond Inventory Requirements (Georgia)

- Annual update of inventory for public facilities
- Annual update of inventory for private since 2008 GSMM deadline
- Permittee choice for ponds that predate GSMM deadline

New Phase 2 MS4 Permit Pond Maintenance Requirements

- Detailed Operation and Maintenance Procedures for Public Structures
 - Maintenance activities to be reported annually
- Detailed Operation and Maintenance Procedures for private structures completed post 2012 (previous MS4 Permit)
 - Permittee must either perform maintenance or
 - Permittee must have finalized maintenance agreement
 - Summary of maintenance agreements required in annual report

<u>PONDS</u>	Public		Private	
	Permittee	Other	Residential	Commercial
Pre-2008				
Inventory	X	X	<i>optional</i>	<i>optional</i>
Maintenance Agree.	n/a	X		
Inspection	X	X		
Maintenance	X	X		
2008-2012				
Inventory	X	X	X	X
Maintenance Agree.	n/a	X	<i>optional</i>	<i>optional</i>
Inspection	X	X	X	X
Maintenance	X	X	<i>optional</i>	<i>optional</i>
Post-2012				
Inventory	X	X	X	X
Maintenance Agree.	n/a	X	X	X
Inspection	X	X	X	X
Maintenance	X	X	X	X

New Phase 2 MS4 Permit GI / LID Requirements

- Develop GI/LID Program
- Site Feasibility Evaluation Procedures
- Maintenance Procedures
 - Inspection (Who and When)
 - Maintenance (Who and When)
 - Documentation Methods
- Submit by February 15, 2020



GI / LID Inspection and Maintenance Requirements

- Requirement Begins 2020
- Applies to all GI / LID since 2012
 - Comply with submitted GI / LID Program
- Complete and report annually on permittee owned structures
- Implement submitted GI / LID program on private facilities

GI/LID	Public		Private	
	Permittee	Other	Residential	Commercial
Pre-2008				
Inventory	<i>optional</i>	<i>optional</i>	<i>optional</i>	<i>optional</i>
Maintenance Agree.				
Inspection				
Maintenance				
2008-2012				
Inventory	<i>optional</i>	<i>optional</i>	<i>optional</i>	<i>optional</i>
Maintenance Agree.				
Inspection				
Maintenance				
Post-2012				
Inventory	X	X	<i>optional</i>	X
Maintenance Agree.	n/a	<i>not specif.</i>		<i>not specif.</i>
Inspection	X	X		X
Maintenance	X	X		X



Maximizing use of existing ponds

- Existing stormwater management facilities can be used to accomplish municipal projects
 - Intersection Projects (2)
 - Multiuse Paths / Sidewalks (3)
 - Parks Facilities (2)
- Typically requires maintenance, expansion and/or modification
- Smaller footprint and lower impact



Assisted Living Pond

St. Barnabus Pond

Analysis Point



Questions?