



Northeast Creek and Crooked Creek Watershed Improvement Project



*Public Works
Engineering And Stormwater
Services
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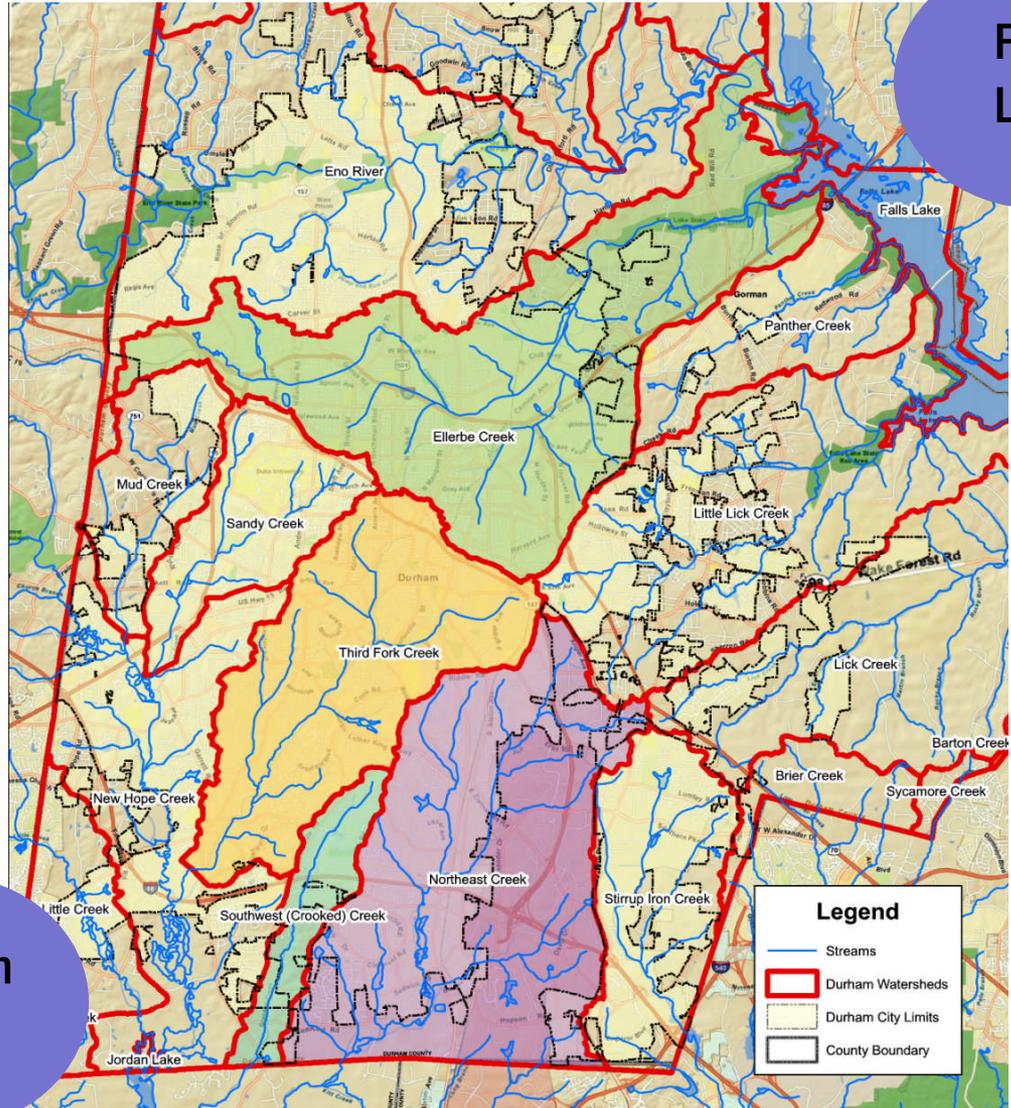
Sandra.Wilbur@durhamnc.gov

Sandra Wilbur, PE, City of Durham Public Works Department

Presented to Durham City Council Work Session
July 21, 2011



Falls
Lake



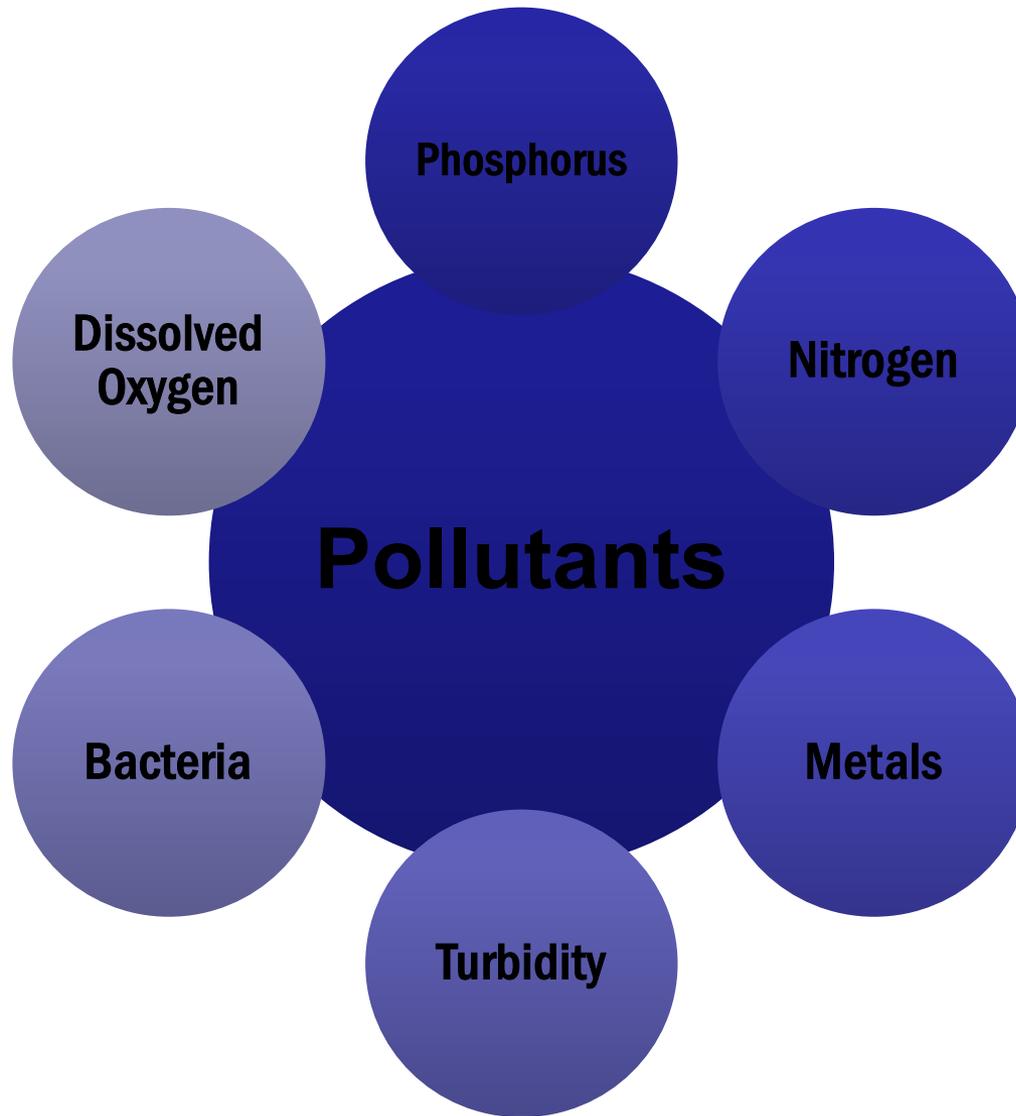
Jordan
Lake

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Schedule of activities



Activities	Dates
Initial Public Meeting	June 1, 2011
Stormwater BMP Assessments Field Work	July 2011
Stream Condition Inventory Field Work	September - October 2011
Pilot Study Area and Watershed Scale Water Quality Analyses	August 2011 – April 2012
Public Meeting #2	October 2011
Critical Area Protection Plan	December 2011
Riparian Area Management Plan	March 2012
Draft Watershed Improvement Plan	March - May 2012
Public Meeting #3	April 2012
Final Watershed Improvement Plan	August 2012

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Public Meeting

What are Stormwater Control Measures?

Stormwater Control Measures (or SCMs) is a general term that describes both **devices** and **activities** that control the quantity and quality of the stormwater that flows off our land and into our streams.



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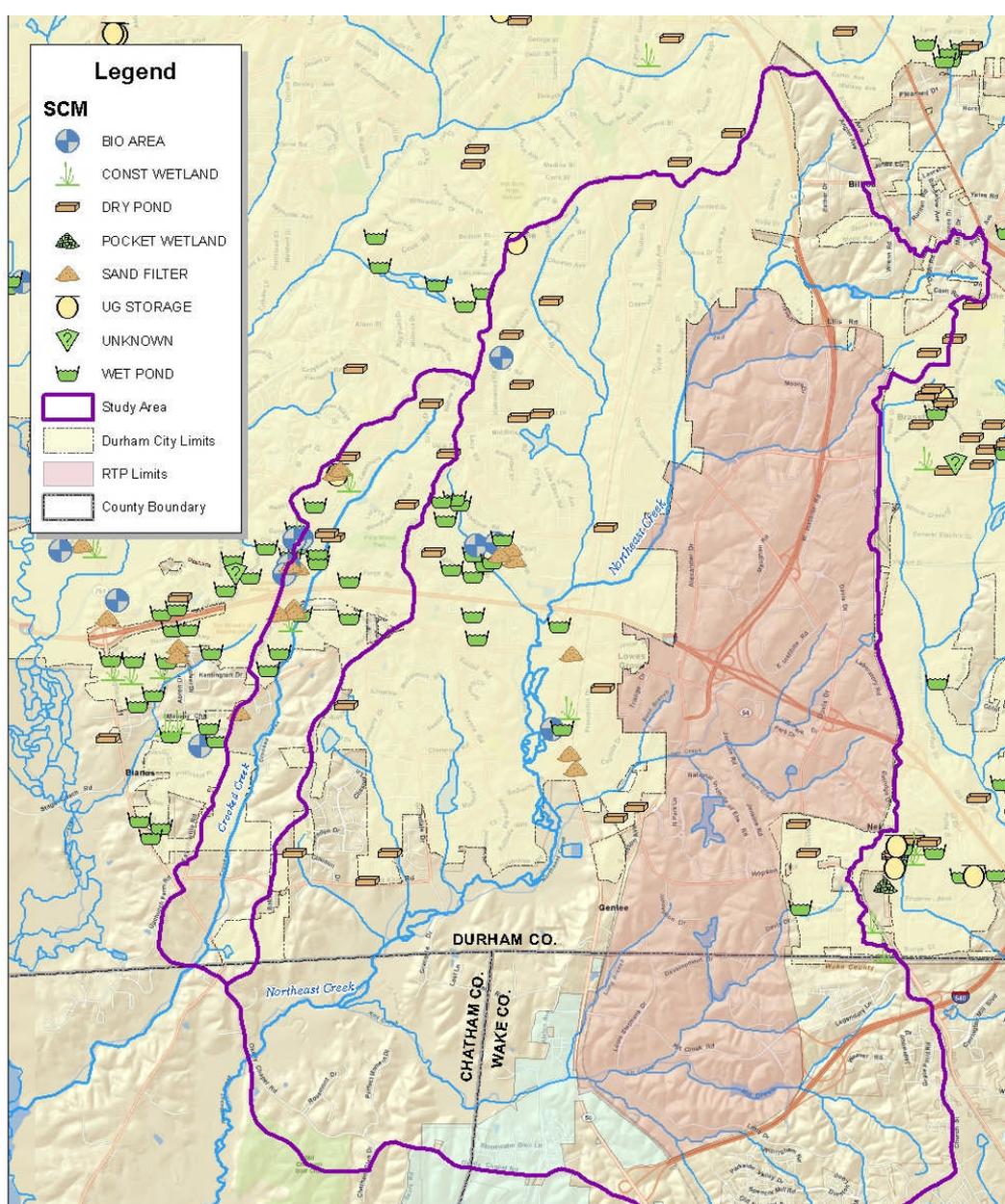
Field Activities





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Opportunities to Improve Existing Stormwater Control Measures

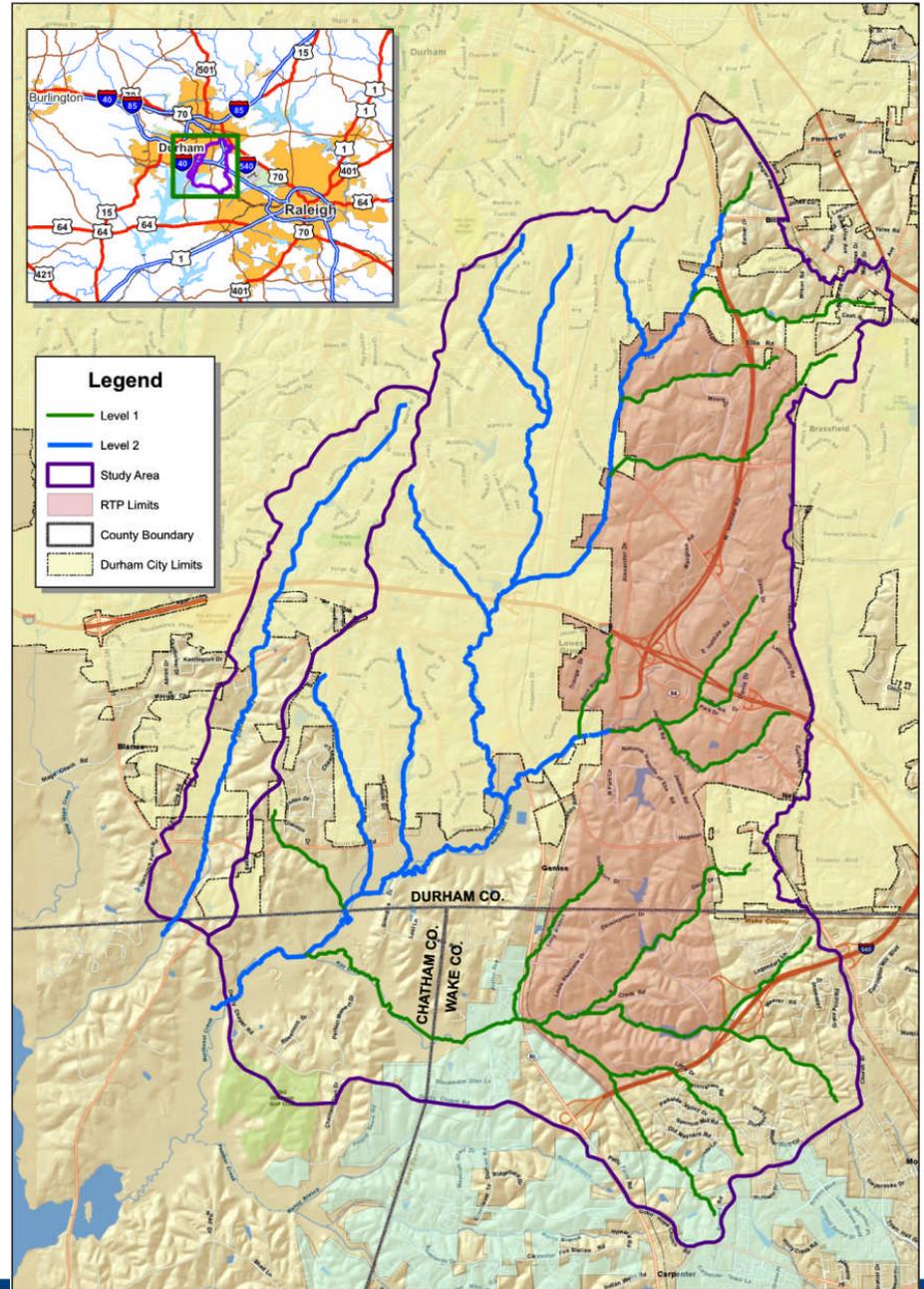


What's next?

Opportunities to Stabilize and Restore Streams

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Project Evaluation Criteria



Water Quality

Habitat

Stream Protection

Community
Enhancement

Implementation

Public Safety

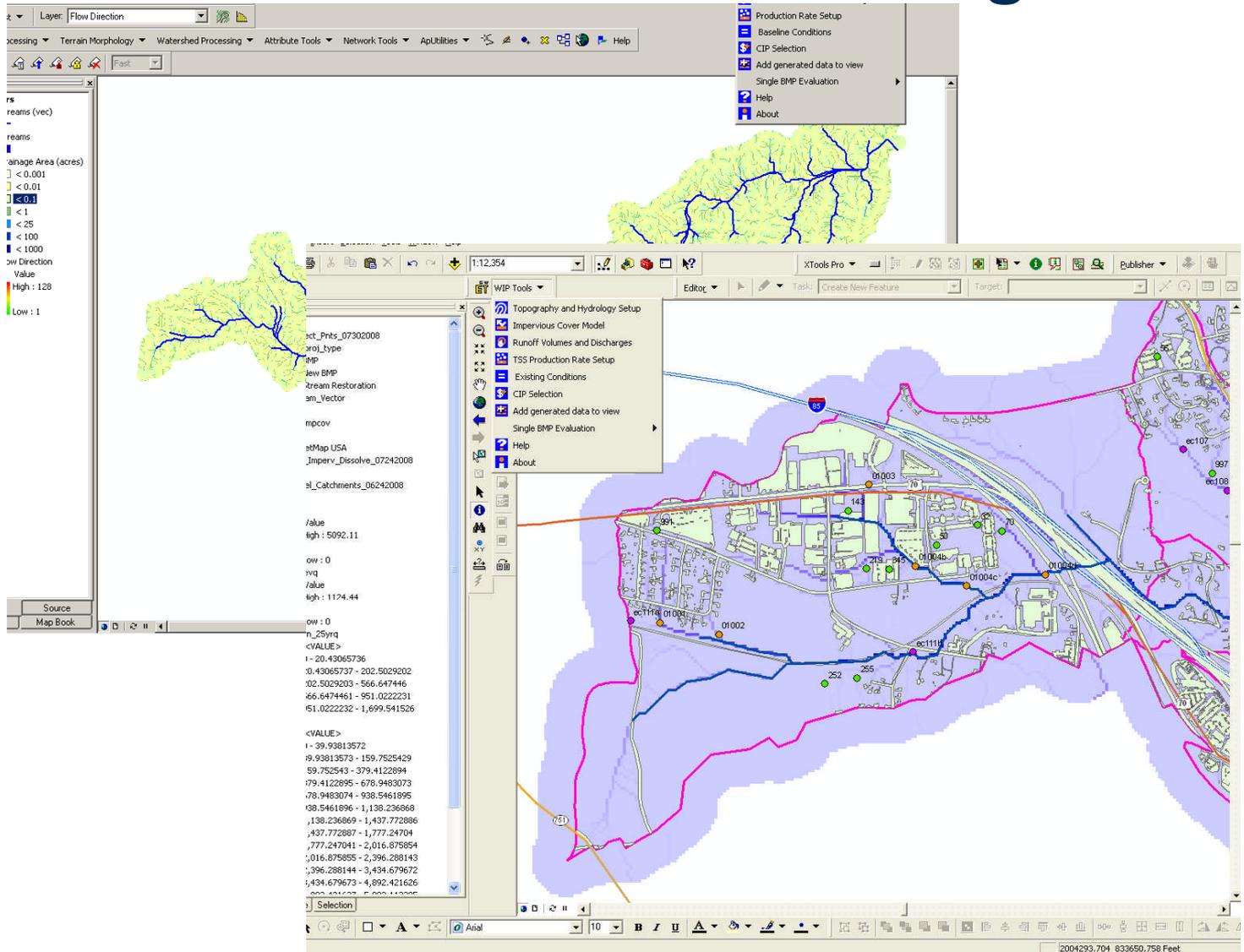


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Watershed Modeling



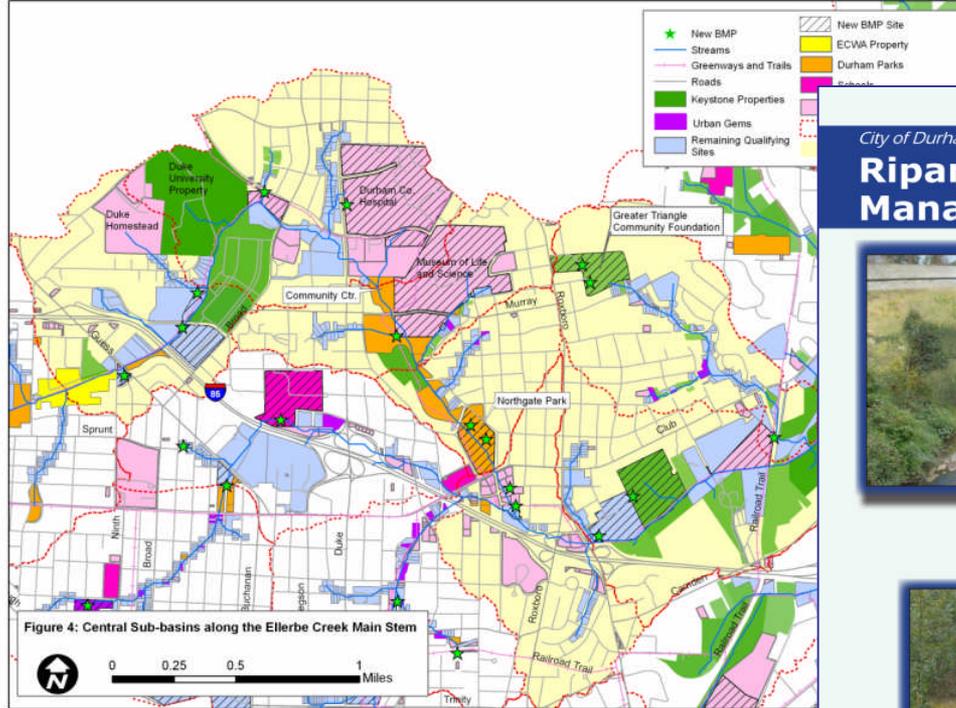
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Critical Areas and Riparian Buffers

Critical Area Protection Plan



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City of Durham Watershed Improvement Program

Riparian Area Management Plan

DURHAM
 1869
 CITY OF MEDICINE

BROWN AND CALDWELL
RJG&A
 ENVIRONMENTAL CONSULTANTS
 100-201-DURHAM

September 2009



Recommendations

Ellerbe Creek WMIP - Project Description
Subwatershed: 21

Project ID: 21003
Project Type: New BMP

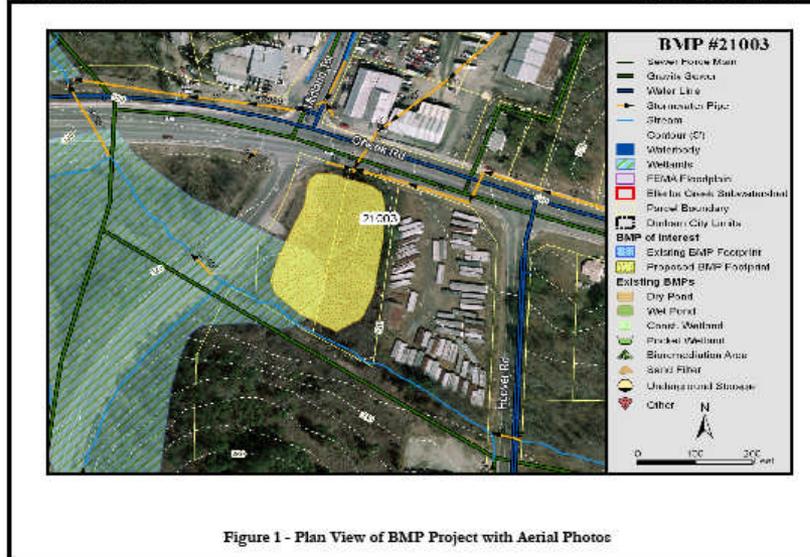
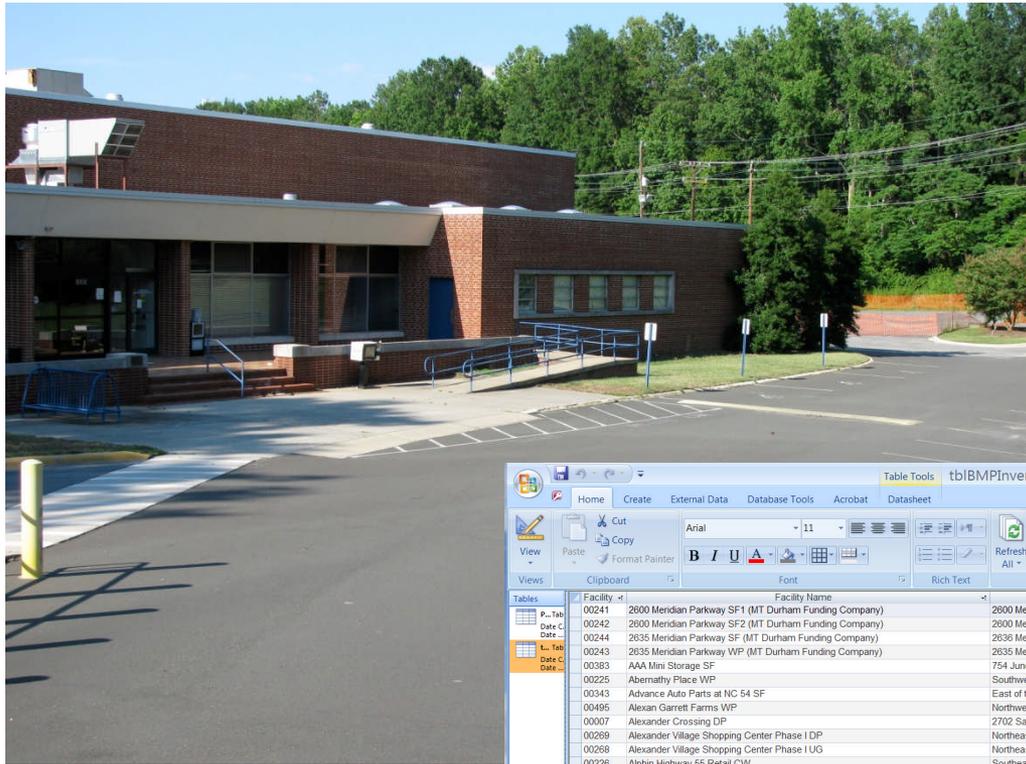


Figure 1 - Plan View of BMP Project with Aerial Photos

Prioritization Criteria Scores (Total Points in Parentheses)			
Criteria	Score	Criteria	Score
Water Quality Benefits		Community Enhancement	
TN (12.5 pts)	12.5	Property Protection (5 pts)	1.0
TP (5 pts)	5.0	Property Protection Bonus	0.0
Sediment (12.5 pts)	2.5	Property Owner/Acceptance (5 pts)	1.0
Fecal Coliform (5 pts)	5.0	Acceptance Bonus	0.0
Water Quality Bonus	0.0	Public Education (10 pts)	6.0
Habitat and Biological Integrity		Implementation Issues	
Habitat/Biology (15 pts)	0.0	Property Ownership (5 pts)	2.0
Habitat/Biology Bonus	0.0	Accessibility for Construction (5 pts)	5.0
Stream Bank Protection		City Program Compatibility (2.5 pts)	1.5
Stream Bank Protection (10 pts)	6.0	Permitting/Adverse Env. Impacts (2.5 pts)	1.0
Public Safety and Public Property		Permitting Bonus	0.0
Public Safety and Property (5 pts)	0.0	Total Project Score (100 pts)	48.5
Safety Bonus	0.0		
Additional Project Information			
Total cost includes the 20-year present value of operations and maintenance.			
PINs: 0842-17-10-0638			

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Former Duke Diet and Fitness Center

tbBMPInventory - Microsoft Access

Facility ID	Facility Name	Facility Address	Facility Type	PIN
00241	2600 Meridian Parkway SF1 (MT Durham Funding Company)	2600 Meridian Parkway	SF	0728-02-8
00242	2600 Meridian Parkway SF2 (MT Durham Funding Company)	2600 Meridian Parkway	SF	0728-02-8
00244	2635 Meridian Parkway SF (MT Durham Funding Company)	2635 Meridian Parkway	SF	0728-02-8
00243	2635 Meridian Parkway WP (MT Durham Funding Company)	2635 Meridian Parkway	WP	0728-02-8
00383	AAA Mini Storage SF	754 Junction Road	SF	0842-04-6
00225	Abernathy Place WP	Southwest of the intersection of NC Highway 54 and Barbee Chapel Road	WP	9798-02-9
00343	Advance Auto Parts at NC 54 SF	East of the intersection of NC 54 and Hope Valley Road, 118 W. NC 54 Highway	SF	0718-01-2
00495	Alexan Garrett Farms WP	Northwest of the intersection of Durham Chapel Hill Blvd and Garrett Road	WP	0800-02-5
00007	Alexander Crossing DP	2702 Sagebrush La (Behind Lots 57 and 58)	DP	0759-03-0
00289	Alexander Village Shopping Center Phase I DP	Northeast quadrant of the TW Alexander Drive/Page Road intersection, 2301 TW Alexander Dr.	DP	0758-02-7
00288	Alexander Village Shopping Center Phase I UG	Northeast quadrant of the TW Alexander Drive/Page Road intersection, 2301 TW Alexander Dr.	UG	0758-02-7
00226	Alphin Highway 55 Retail CW	Southeast of the intersection of NC Highway 55 and Allendown Drive	CW	0738-03-0
00002	Alta Springs SF	100 Spring Meadow Drive Chapel Hill NC	SF	9798-03-9
00003	Alta Springs WP1	100 Spring Meadow Drive Chapel Hill NC	WP	9798-03-9
00004	Alta Springs WP2	100 Spring Meadow Drive Chapel Hill NC	WP	9798-03-9
00457	Alta Walk Senior Apartments CW	5705 Fayetteville Road, southeast of the intersection of Fayetteville Road and East Woodcroft Parkway	CW	0728-03-1
00224	Aluminum Company of NC	1335 Hamlin Road	SF	0843-01-0
00033	Amberlynn Valley Townhomes WP1	South of the intersection of Gibson Road and Lynn Road	WP	0840-07-6
00034	Amberlynn Valley Townhomes WP2	South of the intersection of Gibson Road and Lynn Road	WP	0840-07-6
00563	Ample Storage - Bennett Memorial DP	4101 Bennett Memorial Road	DP	0802-01-9
00435	Arborstone LS1	North of NC Highway 98, off Chandler Road	LS	0841-02-8
00272	Arby's Restaurant at NC 54	On Highway 54 North, approximately 26 miles south of Slater Road	DP	0747-03-4
00005	Ashfield Place DP (Surety not required; eliminated)	Off of Guess Road and Ashfield Drive, on the south side of the site (south of Lots 164 and 165)	DP	0825-03-0
00271	Ashfield Place Phase 3 & 4B (DP3)	East side of Guess Road at the intersection of Guess Road and Ashfield Drive	DP	0825-03-1
00448	Ashfield Place Phase 3 & 4B (DP6)	East side of Guess Road at the intersection of Guess Road and Ashfield Drive	DP	0825-03-1
00454	Ashfield Place Phase VI (DP1)	Off of Guess Road, north of its crossing with Crooked Creek, located on the western side of the proper	DP	0825-03-1
00632	Ashton Hall Ph. 5 & 6 LS #1	Mineral Springs Road and Sherron Road	LS	0850-03-0
00633	Ashton Hall Ph. 5 & 6 LS #2	Mineral Springs Road and Sherron Road	LS	0850-03-0
00629	Ashton Hall Ph. 5 & 6 WP #12 (middle)	Mineral Springs Road and Sherron Road	WP	0850-03-0
00630	Ashton Hall Ph. 5 & 6 WP #13 (small)	Mineral Springs Road and Sherron Road	WP	0850-03-0
00631	Ashton Hall Ph. 5 & 6 WP #14 (large)	Mineral Springs Road and Sherron Road	WP	0850-03-0
00390	Ashton Hall Phase 1A WP1	Frontage on Mineral Springs Road and Sherron Road (southwestern portion of the property, off of Pahn WP)	WP	0850-03-0
00391	Ashton Hall Phase 1A WP2	Frontage on Mineral Springs Road and Sherron Road (southern side of property, off of Ashton Glenn R WP)	WP	0850-03-0
00392	Ashton Hall Phase 1A WP3	Frontage on Mineral Springs Road and Sherron Road (southwestern portion of the property)	WP	0850-03-0
00393	Ashton Hall Phase 1A WP4	Frontage on Mineral Springs Road and Sherron Road (northwestern portion of the property)	WP	0850-03-0
00394	Ashton Hall Phase 1A WP5	Frontage on Mineral Springs Road and Sherron Road (northwestern portion of the property)	WP	0850-03-0
00006	Auburn Subdivision POD 5A WP3	Southeast End of Whitney La (Adj to 399 Whitney La)	WP	0728-02-6
00012	Auburn Subdivision POD 5A WP4	Behind 1148 Pebble Creek Xing	WP	0728-02-6
00011	Auburn Subdivision POD 5B WP1	Adjacent to 1311 Fairmont St	WP	0728-02-6
00010	Auburn Subdivision POD 5B WP2	Adjacent to 1337 Fairmont St	WP	0728-02-7
00008	Auburn Subdivision Pod 7 DP	Behind 9 and 11 Pinestraw Way (off E. Woodcroft Pkwy)	DP	0728-02-4
00009	Auburn Subdivision PODS 1 & 2 (Auburn Apartments/South Terrace at Auburn) WP6	Off Southwestern entrance to the south, adjacent to Pebble Creek crossing	WP	0728-02-5

Database for Reporting

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