

Little Lick Creek Watershed Plan

Technical Team Meeting 3
Wednesday, May 25, 2005

Agenda

2:00 Welcome & announcements

2:10 Update: Water Monitoring

2:25 Findings: Upland Site Reconnaissance

2:45 Subwatershed characterization (continued)*

5-minute break

3:30 Critical Lands Protection Analysis*

4:00 Adjourn

* Decision Item

Stream Monitoring Update

Progress Update: Fieldwork

Subwatershed data:

1) *Stream Assessment—Jan. 24-28*

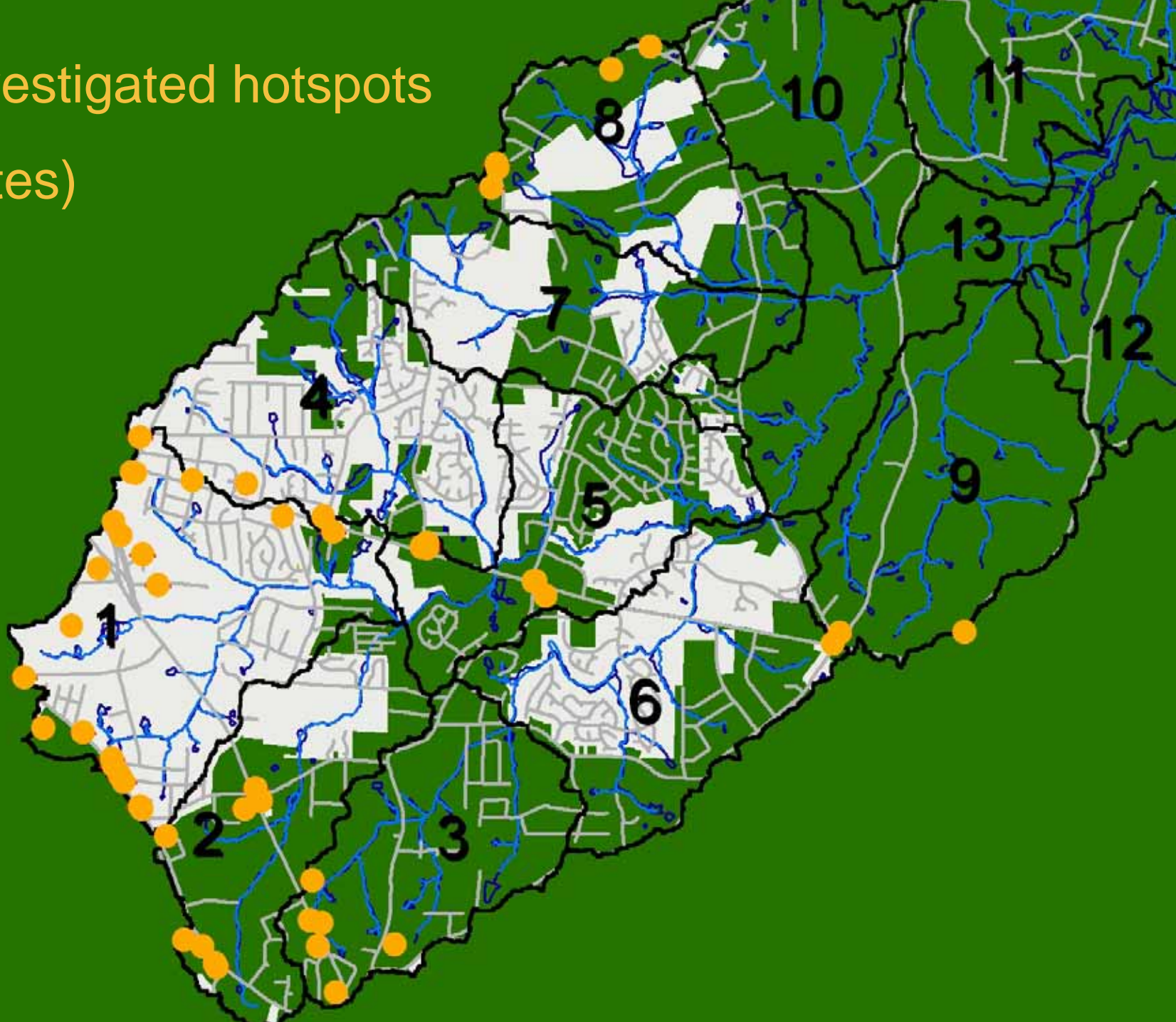
2) *Upland Sites Reconnaissance—March 14-18*

*Upland Subwatershed and Site
Reconnaissance (USSR)*

Findings:

Hotspot Site Investigations

All investigated hotspots
(50 sites)



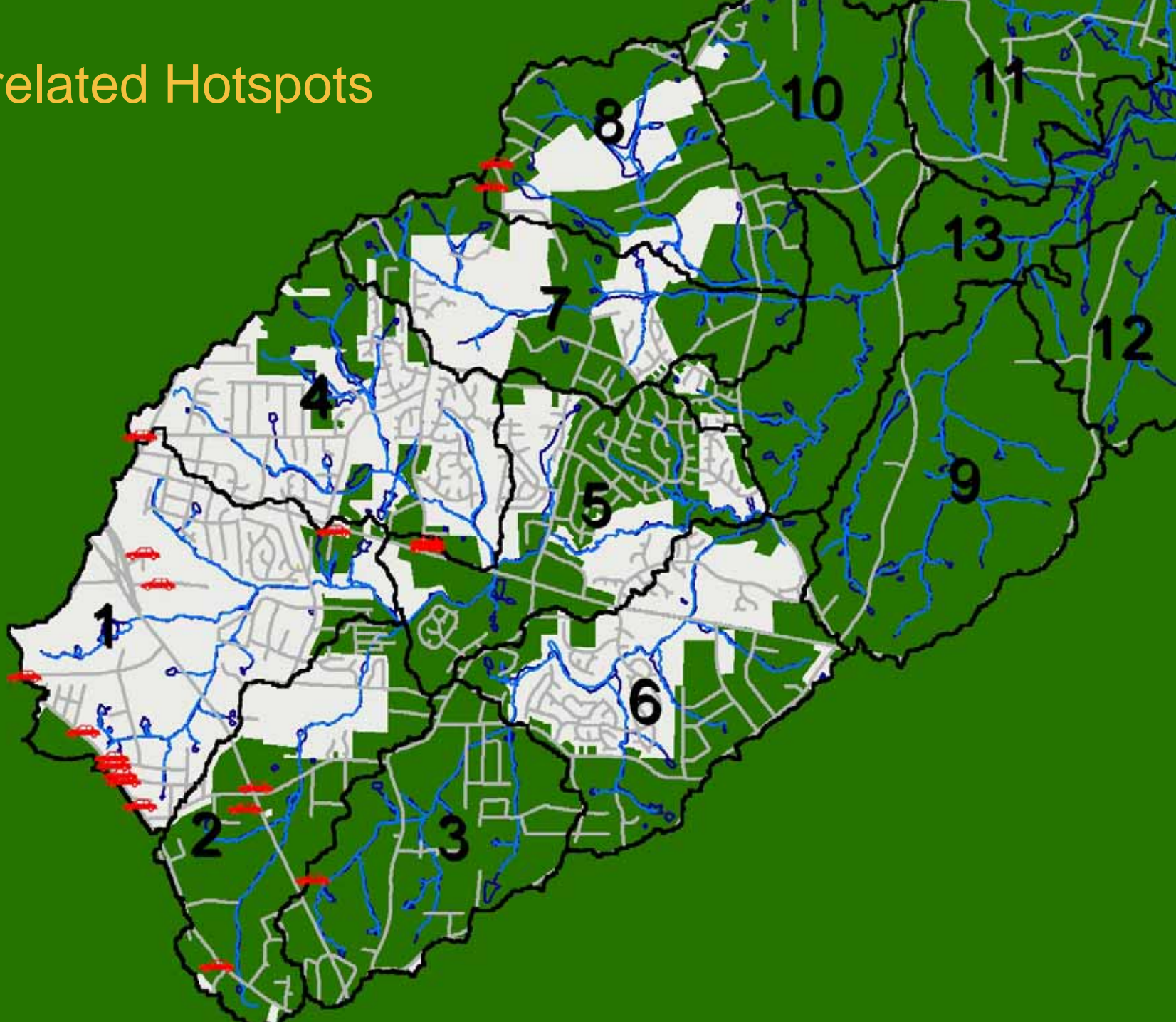
Vehicle Maintenance and Repair







Auto-related Hotspots



Gas Stations





HESS

500

1203

PERFORMANCE

Outdoor Materials Storage





Restaurants





111024

С В Ъ
О И Г Л
С В Е А С Е

СВР - 111024
1-800-477-1222
NO PETROLEUM
NO FLAMMABLES

Dumpsters

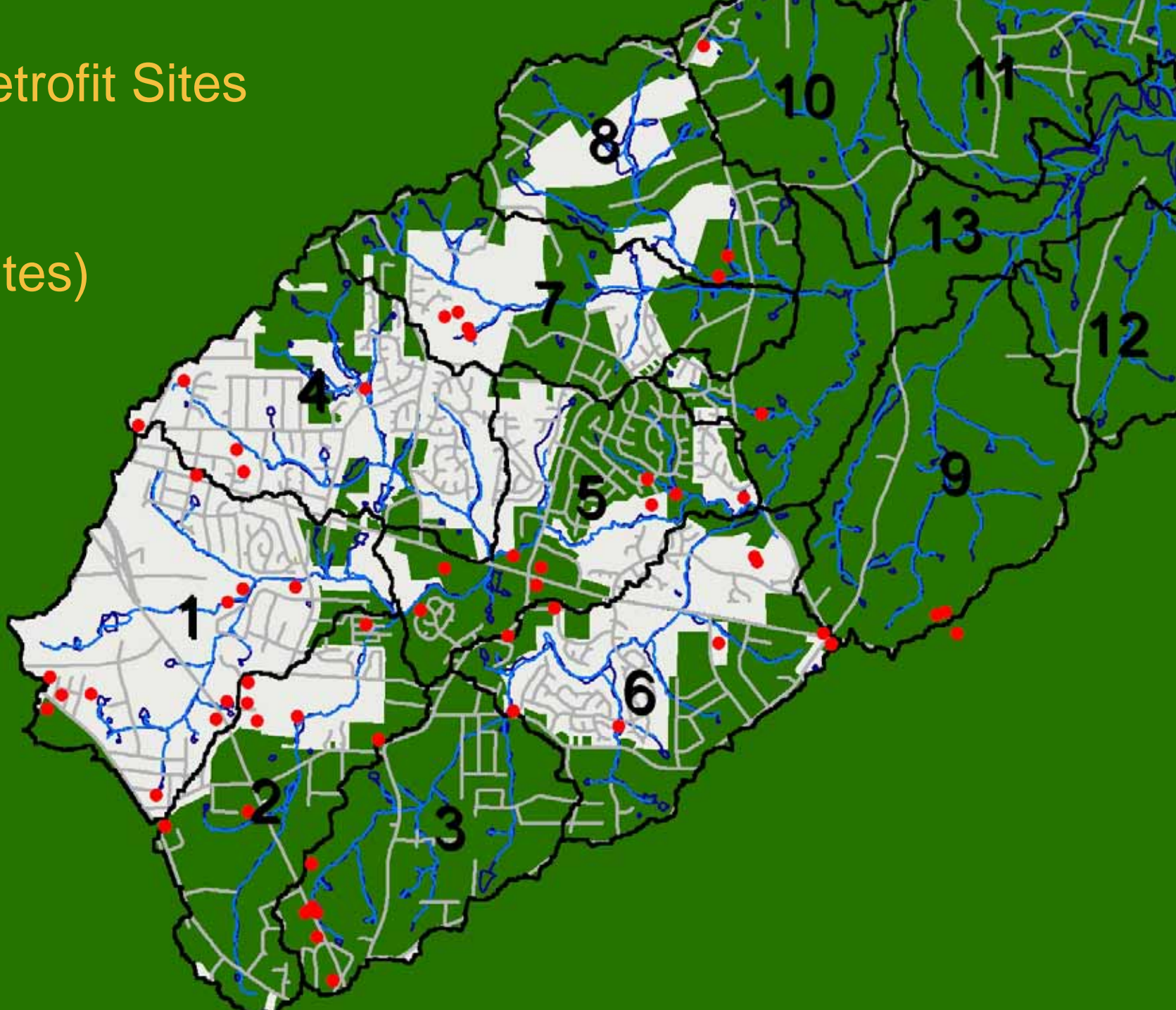


Findings:

Retrofit Inventory

All Retrofit Sites

(60 sites)



Residential Areas

- Use on-lot stream buffers and rain gardens in older neighborhoods.

Residential Areas

- Preserve existing forests and wetlands as filter areas.



Residential Areas

- Convert existing dry ponds to wet ponds or stormwater wetlands.



Residential Areas

- Construct stormwater controls for apartment complexes and mobile home communities.



Bentwood Apartments (SR-4-5)

Residential Areas

- Construct stormwater controls for apartment complexes and mobile home communities.



SR-4-1 Rochelle Manor



SR-4-3 Salvone Apartments

Commercial, Institutional and Public Lands

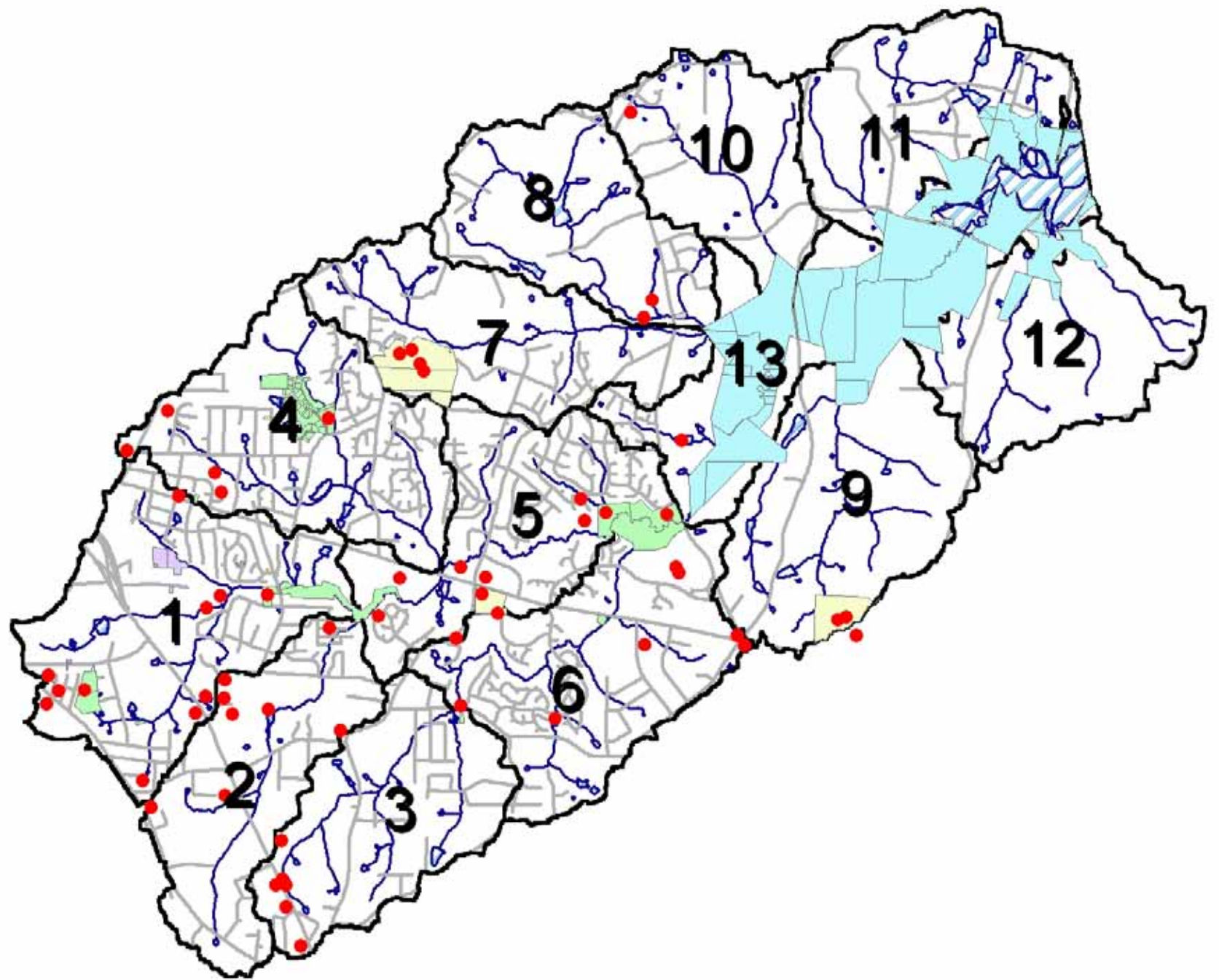
- Address commercial areas on-site controls and pollution source control measures.



SR-5-3 Oak Crossing shopping Center



SR-3-2 Hess Station



Commercial, Institutional and Public Lands

- Retrofit the three public schools as demonstration/education sites.



Commercial, Institutional and Public Lands

Outreach to churches to maintain and enhance
sheet flow off parking lots.



Commercial, Institutional and Public Lands

Treat larger drainage areas in City of Durham parks.



SR-1-1 Birchwood Park basketball courts



SR-1-4 The low spot depicted in CR Wood Park (right) may be a historic pond.

Subwatershed Characterization

Subwatershed Characterization

Last Meeting:

Refined subwatershed characterization

Today:

Summarize fieldwork findings by subwatershed

Subwatershed 1

Stream Assessed (LF):	3.73
Total Stream (LF):	6.69
% Assessed:	0.52
Range of Reach Scores:	69-109
Mean Reach Score:	88

Buffer Restoration	4
Homeowner Education	1
Inspection and Enforcement	6
Maintenance	5
Stream Repair	1
Trash Clean-up	6
TOTAL	23

RETROFITS	
Church Outreach	6
Commercial	1
Large Scale	2
Residential	2
(existing facility)	2
TOTAL	11

Total # Hotspots =	20
Severe	0
Potential	3
Confirmed	3
Not a Hotspot	4
Not Assessed	9

Vehicle Operations	10
Gas Station	0
Outdoor Storage	2
Restaurant	1
Dumpster Maintenance	1
Other	6

Subwatershed 2

Stream Assessed (LF):	17697
Total Stream (LF):	18274
% Assessed:	97%
Range of Reach Scores:	31-129
Mean Reach Score:	98

Buffer Restoration	6
Homeowner Education	1
Inspection and Enforcement	6
Maintenance	4
Stream Repair	1
Trash Clean-up	3
TOTAL	21

RETROFITS	
Church Outreach	2
Commercial	2
Large Scale	0
Residential	4
(repair/inspect)	2
(apartments/mobiles)	2
TOTAL	8

Total # Hotspots =	8
Severe	1
Potential	0
Confirmed	3
Not a Hotspot	2
Not Assessed	2

Vehicle Operations	3
Gas Station	2
Outdoor Storage	3
Restaurant	
Dumpster Maintenance	
Other	

Subwatershed 3

Stream Assessed (LF):	11649
Total Stream (LF):	27264
% Assessed:	43%
Range of Reach Scores:	67-109
Mean Reach Score:	93

Buffer Restoration	2
Homeowner Education	0
Inspection and Enforcement	9
Maintenance	1
Stream Repair	3
Trash Clean-up	5
TOTAL	20

RETROFITS	
Church Outreach	0
Commercial	6
Large Scale	0
Residential	0
(repair/inspect)	0
(apartments/mobiles)	0
TOTAL	6

Total # Hotspots =	6
Severe	0
Potential	3
Confirmed	1
Not a Hotspot	0
Not Assessed	2

Vehicle Operations	0
Gas Station	1
Outdoor Storage	2
Restaurant	2
Dumpster Maintenance	0
Other	1

Subwatershed 4

Stream Assessed (LF):	17816
Total Stream (LF):	36718
% Assessed:	49%
Range of Reach Scores:	61-125
Mean Reach Score:	90

Buffer Restoration	0
Homeowner Education	2
Inspection and Enforcement	11
Maintenance	29
Stream Repair	5
Trash Clean-up	5
TOTAL	52

RETROFITS	
Church Outreach	0
Commercial	1
Large Scale	0
Residential	4
(protection)	1
(apartments/mobiles)	3
TOTAL	5

Total # Hotspots =	3
Severe	1
Potential	0
Confirmed	0
Not a Hotspot	2
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	2
Restaurant	0
Dumpster Maintenance	0
Other	1

Subwatershed 5

Stream Assessed (LF):	21294
Total Stream (LF):	25615
% Assessed:	83%
Range of Reach Scores:	38-137
Mean Reach Score:	83

Buffer Restoration	4
Homeowner Education	3
Inspection and Enforcement	4
Maintenance	5
Stream Repair	6
Trash Clean-up	2
TOTAL	24

RETROFITS	
Church Outreach	1
Commercial	2
Large Scale	0
Residential	5
(protection)	2
(apartments/mobiles)	1
(on-lot)	1
TOTAL	8

Total # Hotspots =	6
Severe	0
Potential	0
Confirmed	4
Not a Hotspot	2
Not Assessed	0

Vehicle Operations	2
Gas Station	1
Outdoor Storage	0
Restaurant	1
Dumpster Maintenance	1
Other	1

Subwatershed 6

Stream Assessed (LF):	16842
Total Stream (LF):	30464
% Assessed:	55%
Range of Reach Scores:	83-109
Mean Reach Score:	95

Buffer Restoration	0
Homeowner Education	1
Inspection and Enforcement	2
Maintenance	1
Stream Repair	3
Trash Clean-up	0
TOTAL	7

RETROFITS	
Church Outreach	1
Commercial	2
Large Scale	0
Residential	3
(existing facility)	2
TOTAL	6

Total # Hotspots =	1
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	1
Not Assessed	0

Vehicle Operations	0
Gas Station	1
Outdoor Storage	0
Restaurant	0
Dumpster Maintenance	0
Other	0

Subwatershed 7

Stream Assessed (LF):	9006
Total Stream (LF):	28120
% Assessed:	32%
Range of Reach Scores:	103-127
Mean Reach Score:	115

Buffer Restoration	1
Homeowner Education	0
Inspection and Enforcement	3
Maintenance	0
Stream Repair	0
Trash Clean-up	0
TOTAL	4

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	0
Residential	1
Institutional	4
TOTAL	5

Total # Hotspots =	0
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	0
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	0
Restaurant	0
Dumpster Maintenance	0
Other	0

Subwatershed 8

Stream Assessed (LF):	25165
Total Stream (LF):	28515
% Assessed:	88%
Range of Reach Scores:	86-148
Mean Reach Score:	115

Buffer Restoration	0
Homeowner Education	0
Inspection and Enforcement	4
Maintenance	5
Stream Repair	0
Trash Clean-up	0
TOTAL	9

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	0
Residential	2
(protection)	1
(repair/inspect)	1
TOTAL	2

Total # Hotspots =	5
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	0
Not Assessed	5

Vehicle Operations	0
Gas Station	1
Outdoor Storage	3
Restaurant	0
Dumpster Maintenance	0
Other	1

Subwatershed 9

Stream Assessed (LF):	894
Total Stream (LF):	36429
% Assessed:	2%
Range of Reach Scores:	134
Mean Reach Score:	134

Buffer Restoration	0
Homeowner Education	0
Inspection and Enforcement	0
Maintenance	2
Stream Repair	0
Trash Clean-up	0
TOTAL	2

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	0
Residential	0
Institutional	3
TOTAL	3

Total # Hotspots =	2
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	2
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	1
Restaurant	0
Dumpster Maintenance	0
Other	1

Subwatershed 10

Stream Assessed (LF):	9819
Total Stream (LF):	17868
% Assessed:	55%
Range of Reach Scores:	62-158
Mean Reach Score:	109

Buffer Restoration	2
Homeowner Education	0
Inspection and Enforcement	1
Maintenance	0
Stream Repair	3
Trash Clean-up	0
TOTAL	6

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	0
Residential	0
Institutional	1
TOTAL	1

Total # Hotspots =	0
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	0
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	0
Restaurant	0
Dumpster Maintenance	0
Other	0

Subwatershed 11

Stream Assessed (LF):	1993
Total Stream (LF):	32483
% Assessed:	6%
Range of Reach Scores:	100
Mean Reach Score:	100

Buffer Restoration	1
Homeowner Education	0
Inspection and Enforcement	0
Maintenance	0
Stream Repair	0
Trash Clean-up	0
TOTAL	1

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	0
Residential	0
Institutional	0
TOTAL	0

Total # Hotspots =	0
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	0
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	0
Restaurant	0
Dumpster Maintenance	0
Other	0

Subwatershed 12

Stream Assessed (LF):	3641
Total Stream (LF):	24755
% Assessed:	15%
Range of Reach Scores:	92-141
Mean Reach Score:	122

Buffer Restoration	0
Homeowner Education	0
Inspection and Enforcement	1
Maintenance	1
Stream Repair	0
Trash Clean-up	0
TOTAL	2

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	0
Residential	0
Institutional	0
TOTAL	0

Total # Hotspots =	0
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	0
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	0
Restaurant	0
Dumpster Maintenance	0
Other	0

Subwatershed 13

Stream Assessed (LF):	4142
Total Stream (LF):	43278
% Assessed:	10%
Range of Reach Scores:	11 to 90
Mean Reach Score:	62

Buffer Restoration	2
Homeowner Education	0
Inspection and Enforcement	1
Maintenance	1
Stream Repair	0
Trash Clean-up	0
TOTAL	4

RETROFITS	
Church Outreach	0
Commercial	0
Large Scale	1
Residential	1
(protection)	1
TOTAL	2

Total # Hotspots =	0
Severe	0
Potential	0
Confirmed	0
Not a Hotspot	0
Not Assessed	0

Vehicle Operations	0
Gas Station	0
Outdoor Storage	0
Restaurant	0
Dumpster Maintenance	0
Other	0

Progress Update: Subwatershed Assessment

For each subwatershed we have:

- 1) Assessed current and build-out land use and impervious cover*
- 2) Characterized subwatersheds*
- 3) Conducted in-stream and upland field work*
- 4) Monitored stations for water quality and habitat conditions*
- 5) Modeled current and build-out pollutant loadings*

BREAK

Critical Lands Protection Analysis

Next Steps

1. Begin process of prioritizing projects or groups of projects
2. Conduct critical lands protection analysis
3. Develop draft management strategies memorandum

Next Meeting

End of June, 2005