



Project Prioritization Criteria

How do we choose?

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





How Are Opportunities Being Identified?

- BMP Inventory and Site Identification
 - Stream Assessment
-

- Riparian Areas
- Land Preservation Opportunities
- Better Site Design
- City Street Maintenance Procedures

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov



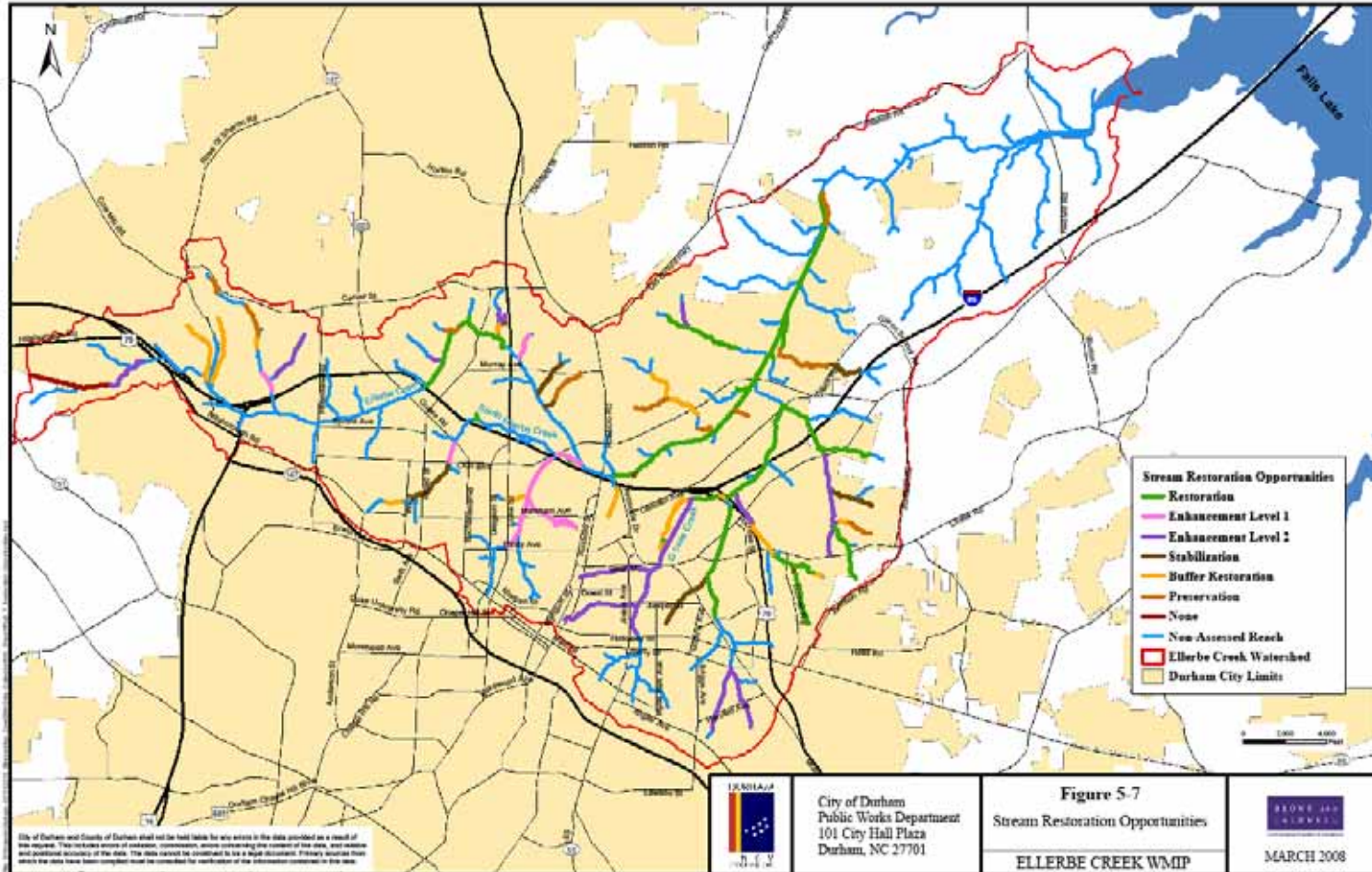


What Opportunities Have Been Identified?

Public Works Department

101 CITY HALL PLAZA
 DURHAM, NC 27701
 P 919.560.4326
 F 919.560.4316

Sandra.Wilbur@durhamnc.gov



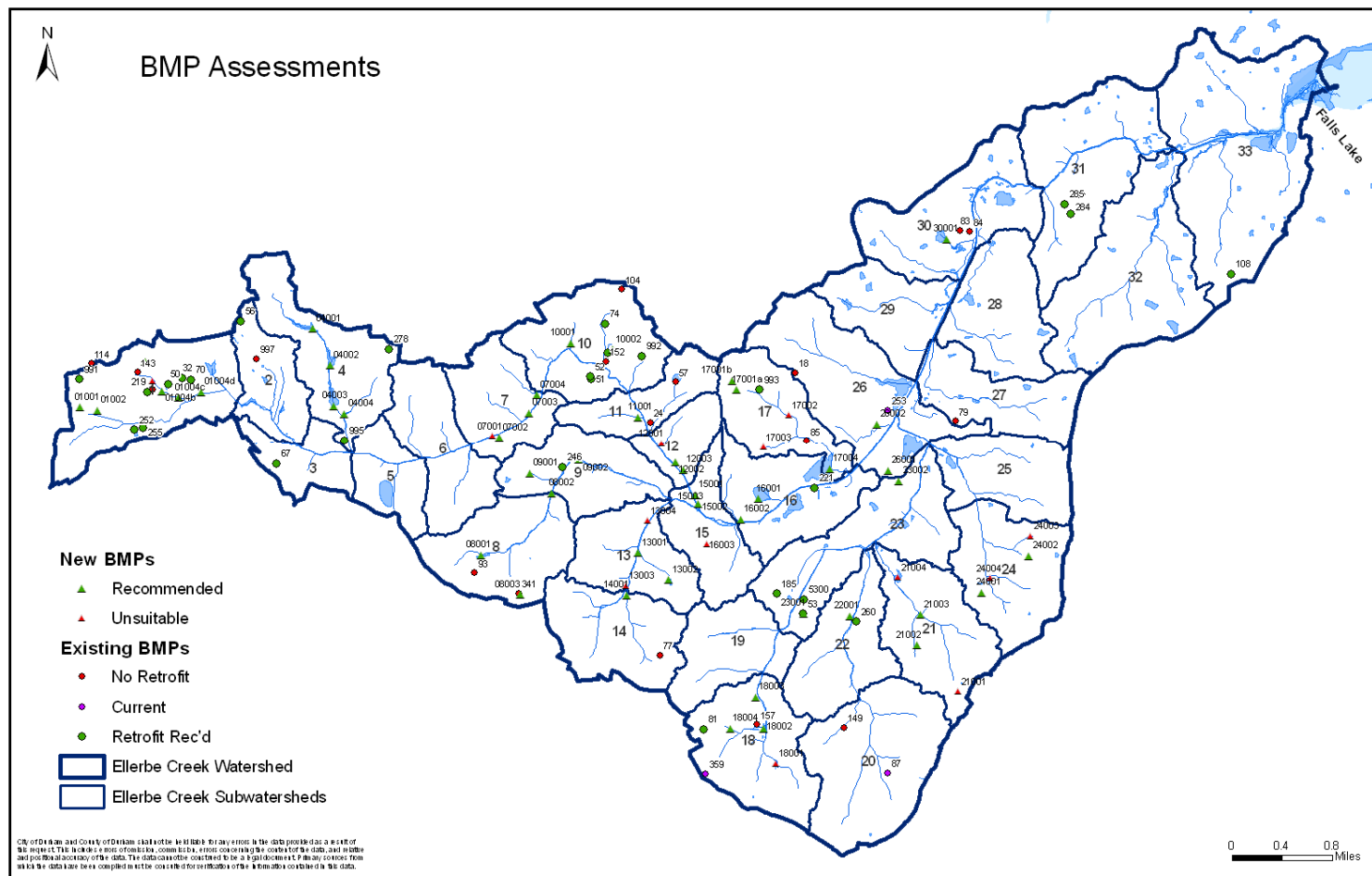


What Opportunities Have Been Identified?

Public Works Department

101 CITY HALL PLAZA
 DURHAM, NC 27701
 P 919.560.4326
 F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Objectives of Prioritization Criteria

- Select a single method for evaluating the entire range of watershed improvement projects
- Incorporate criteria analyses into watershed-wide project database
- Allow interactive evaluation of individual projects and alternative watershed improvement plans

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Initially Proposed Prioritization Criteria

- Water Quality Treatment
- Hydrologic Controls
- Public Acceptance
- Habitat and Biological Integrity
- Implementation Issues
- Public Safety and Public Property

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Criteria: Water Quality Treatment and Hydrologic Controls

Water Quality Treatment

- Economic efficiency of pollutant removal
- Five water quality measures examined

Hydrologic Controls

- Channel and property erosion and flood protection
- Adequate water quality treatment volume

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Criteria: Public Acceptance and Biological Integrity

Public Acceptance

- Provides direct benefits to landowners
- Generally acceptable in setting

Habitat and Biological Integrity

- Enhances natural hydrologic cycle
- Protects or improves stream ecology

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Criteria: Implementation and Public Safety

Implementation Issues

- Property Ownership
- City Program Compatibility
- Adverse Environmental Impacts
- Relative Ease of Operations and Maintenance

Public Safety and Public Property

- Direct Protection of Public Safety and/or Public Property

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov



Example Criteria Matrix

Item	Max. Score
Water Quality Treatment Efficiency	40
Hydrologic Controls	5
Public Acceptance	15
Habitat and Biological Integrity	10
Implementation Issues	20
Public Safety and Public Property	10
Total Possible Score	100

Example Water Quality Treatment Efficiency Scoring Matrix

Constituent	Raw Score	Weight	Final Score
Nitrogen	0 – 5	2	0 - 10
Phosphorus	0 – 5	1	0 – 5
TSS	0 – 5	2	0 – 10
Fecal Coliform	0 – 5	2	0 – 10
BOD ₅	0 – 5	1	0 – 5



Example Projects and Application of Prioritization Criteria:

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Example Projects and Application of Prioritization Criteria:

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

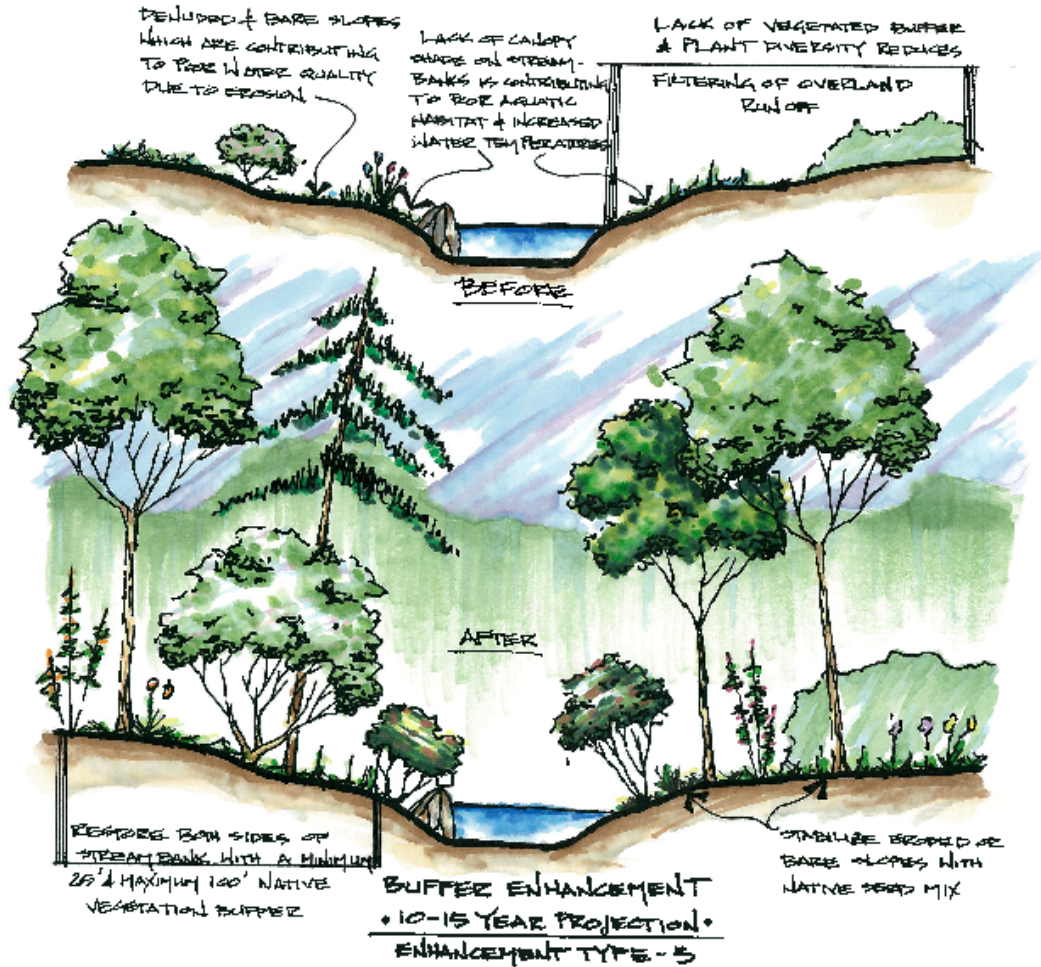
Sandra.Wilbur@durhamnc.gov



NC STATE UNIVERSITY



Example Projects and Application of Prioritization Criteria:



Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Example Projects and Application of Prioritization Criteria:

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Example Projects and Application of Prioritization Criteria:

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Project Prioritization Criteria

How Do We Choose?

- Identification and evaluation of opportunities
- Development of a meaningful project scoring system
- Construction of a watershed-wide (eventually city-wide) project database in GIS
- Implementation of an interactive watershed improvement planning (WIP) tool
- Use of the above tools during development of the City's Capital Improvement Program

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov





Questions and Discussion

Public Works Department

101 CITY HALL PLAZA
DURHAM, NC 27701
P 919.560.4326
F 919.560.4316

Sandra.Wilbur@durhamnc.gov

