



Steele Creek Area Plan

**Citizen Advisory Group Meeting
Charlotte Police and Fire Training Academy**

September 17, 2009

6:00 p.m.

1. Welcome and Introductions
2. Revised Vision Statement
3. Natural Environment Discussion (continued)
4. Natural Environment Policies
5. Wrap-up and Next Steps





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VISIONING



Option 1

The vision for the Steele Creek area is to create a unique and sustainable community that is a great place to live, work, and recreate, while preserving the community's character by incorporating natural and historic features into new development.

The community will implement this vision through the following actions:

- Protecting the Catawba River, McDowell Nature Preserve, natural features, and historic places;*
- Providing a balanced mixture of land uses with enhanced public facilities **that include quality schools**;*
- Developing a safe, accessible and efficient transportation system for pedestrians, bicyclists, transit users, and motorists;*
- Encouraging community design that recognizes the natural environment; and*
- Creating an interconnected network of parks, greenways, and open space amenities.*



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NATURAL ENVIRONMENT



Opportunities

- Protection of open space
- Preservation of tree canopy
- Protection of Catawba River and watershed(s)

Constraints

- Loss of open space
- Pollution of the Catawba River
- Air Quality



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AIR QUALITY

Land Use and Air Quality: “Developing” Healthy Air for Our Region



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Air Pollution Affects Us ALL

Health

Ecology

Economy

Some groups are more likely to be affected



- **People with heart or lung disease**
 - Conditions make them vulnerable
- **Older adults**
 - Greater prevalence of heart and lung disease
- **Children**
 - More likely to be active
 - Breathe more air per pound
 - Bodies still developing



2004: Mecklenburg County Designated Non-Attainment

6A FRIDAY, APRIL 16, 2004 • • •

FROM PAGE ONE

THE CHARLOTTE OBSERVER | www.charlotteobserver.com

Charlotte region slapped for air quality

Ozone from 1A

nomic Development Commission. "It will certainly make (industries) less likely to look at an area ... just because of the time to permit and the questions concerned."

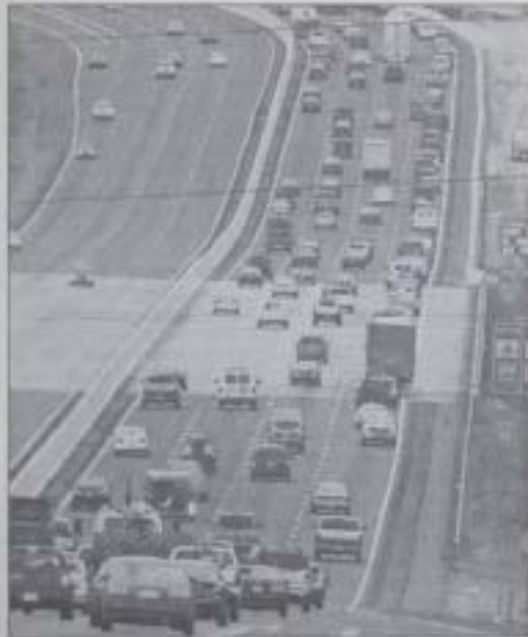
York County residents living in the Fort Mill and Rock Hill areas will soon need to take their cars and trucks in for regular emission testing. York would become the first S.C. county to mandate the tests, which Charlotte began more than two decades ago.

Charlotte Mayor Pat McCrory and the S.C. politicians had vigorously lobbied EPA over whether to include York.

The county's ozone readings meet the standard. But more than 30,000 vehicles a day commute into Mecklenburg from York County, contributing to Charlotte's pollution.

York County Manager Al Greene said he was glad part of the county would be left out. But he worries that, for areas on the list, the label could scare away businesses.

"It's certainly a disappoint-



ENTRANCE - STAFF FILE PHOTO

Some York County commuters may have to have their vehicle emissions tested, for the first time, because of the region's smog.

What Happens Next

June 15: Ozone designations go into effect.

June 2005: Counties submit transportation "conformity" plans.

June 2007: State ozone-cutting plans, including local measures, submitted to EPA.

June 2008: Deadline for Charlotte-area counties to meet the ozone standard.

If the counties fail, federal highway and transit money for right-of-way acquisition or construction for which bids haven't been let could be withheld.

At potential risk is \$6 billion, the total cost of highway and transit construction projects in the region over the next two decades, the Charlotte Department of Transportation says. Mecklenburg's interstate and rapid-transit construction could be affected, said Norm Steinman, CDOT's manager of planning and design.

Atlanta ran afoul of conformity in the late 1990s, when environmental groups filed a series of lawsuits.

FOR POOR AIR QUALITY

Nearly 500 counties receive EPA citations

By JONAH FREELPRIN
Associated Press

WASHINGTON — Nearly 500 counties, mostly in California and the eastern third of the country, were cited Thursday as having too much smog-causing pollution.

Despite having some of the toughest air pollution requirements, California still has the worst air, the EPA said.

The Los Angeles basin was designated as having severe air pollution, the only one in the category. The area has until 2023 to come into compliance with the federal ozone standard.

Three California regions — Riverside County, San Joaquin Valley and Sacramento — were listed with serious pollution, the fourth-worst designation, and given until 2013 to comply.

Other areas with marginal or moderate pollution problems have until either 2007 or 2010 to

States That Meet Ozone Standard

Alaska, Florida, Hawaii, Idaho, Iowa, Kansas, Minnesota, Mississippi, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Vermont, Washington and Wyoming.

of cleaner-burning gasoline.

"Many communities will find it difficult to eventually meet such standards without jeopardizing local economic growth," said Jeffrey Marks of the National Association of Manufacturers. He said more than half of the country's manufacturing capacity is in areas that do not meet the air standards.

Some environmentalists and health advocates said the EPA

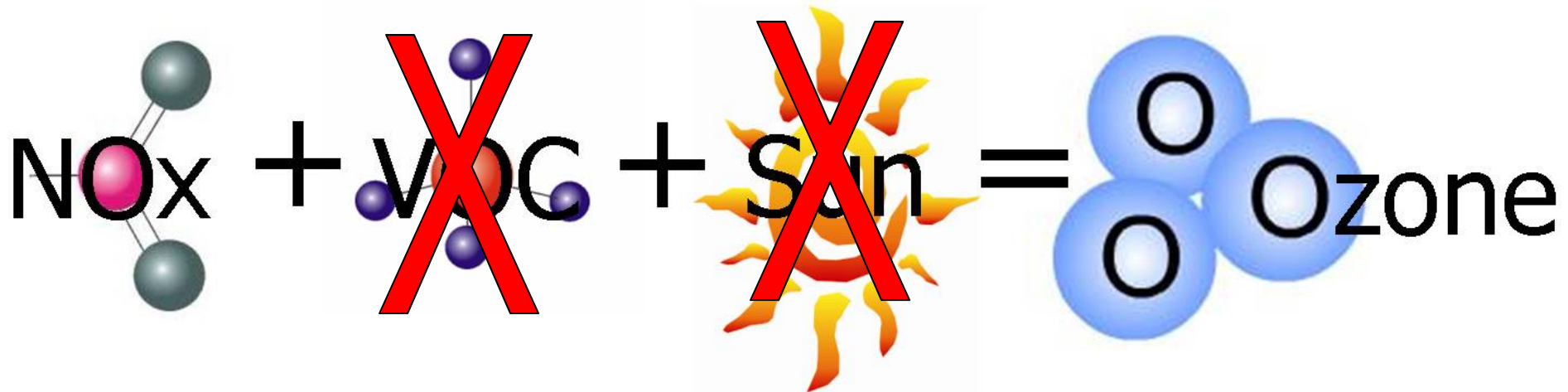
We exceed federal health standards for ozone too frequently.



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Ground-level Ozone Formation

Combustion
Solvents

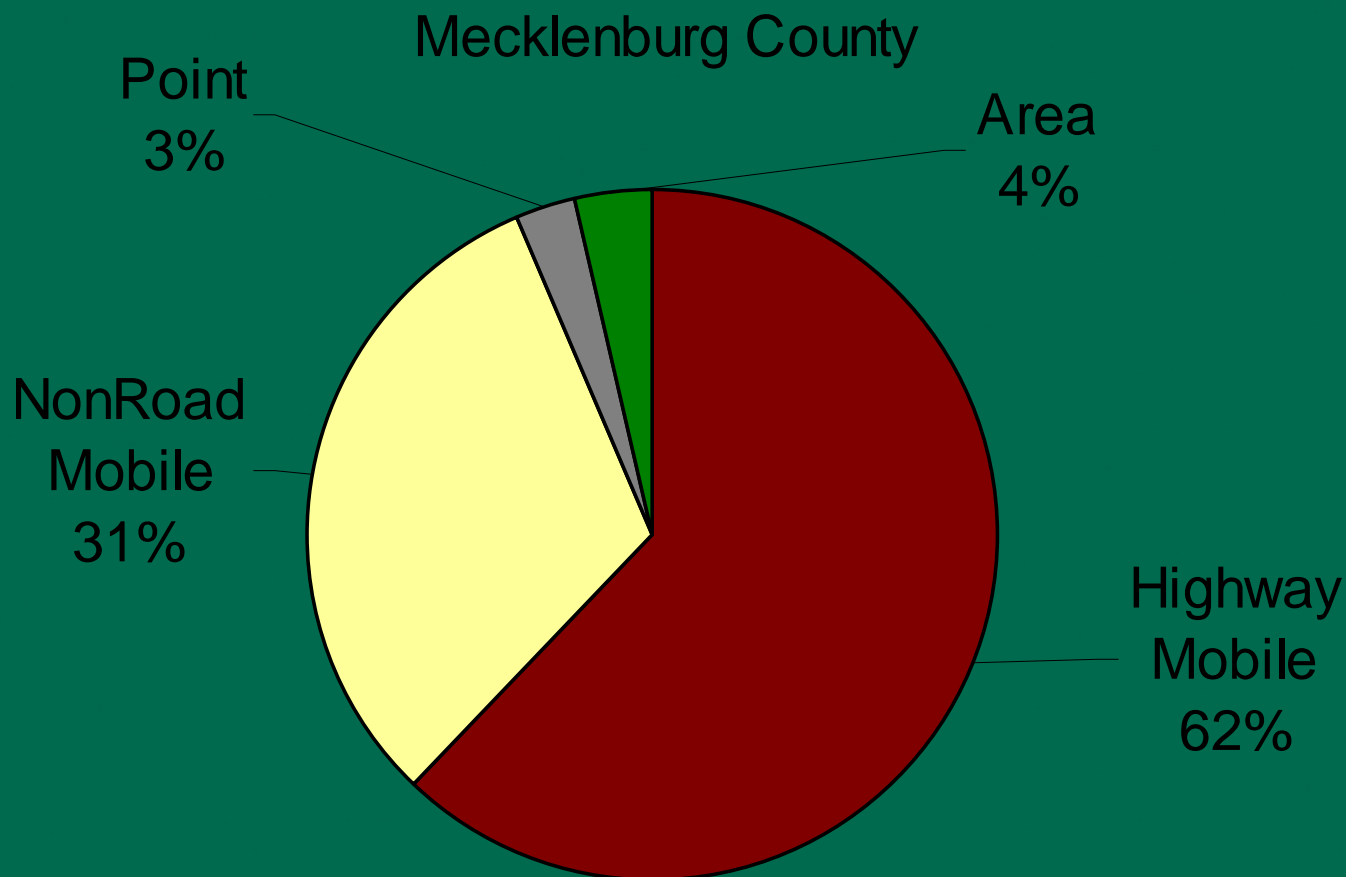


Combustion

Weather

Our NOx comes mostly from vehicles

2006 NOx Emissions





**Vehicle Miles Traveled
(VMT)**



NOx emissions



Ozone

Improving Air Quality = Reducing VMT

Getting people out of their cars is TOUGH!



Land-Use Planning Can Help Reduce VMT (Get People Out Of Their Cars!)



Ways to help people get out of their cars

- **Provide Alternative Methods of Traveling**
 - Sidewalks
 - Bicycle Lanes
 - Close access to transit stations
- **Design Well-connected Roads**
- **Promote Multi-Use Development**
 - Convenient and close shopping, restaurants, and parks
 - Live, Work and Play



Air Quality Summary

- **Ground-level Ozone:**
 - Biggest air pollution problem in Mecklenburg
- **Mobile Sources:**
 - Largest contributor of ozone-forming pollution
- **Land Use Planning:**
 - Help people get out of their Cars



Information Sources

www.AirNow.gov

www.EnviroFlash.info

www.AirAware.org

<http://AirQuality.CharMeck.org>



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Air Quality

***A Local Service and Regulatory Program
Helping you breathe easy...for life***

<http://airquality.charmeck.org>

704-336-5430

CharMeck311

CHARMECK.ORG



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AIR QUALITY - TRANSPORTATION

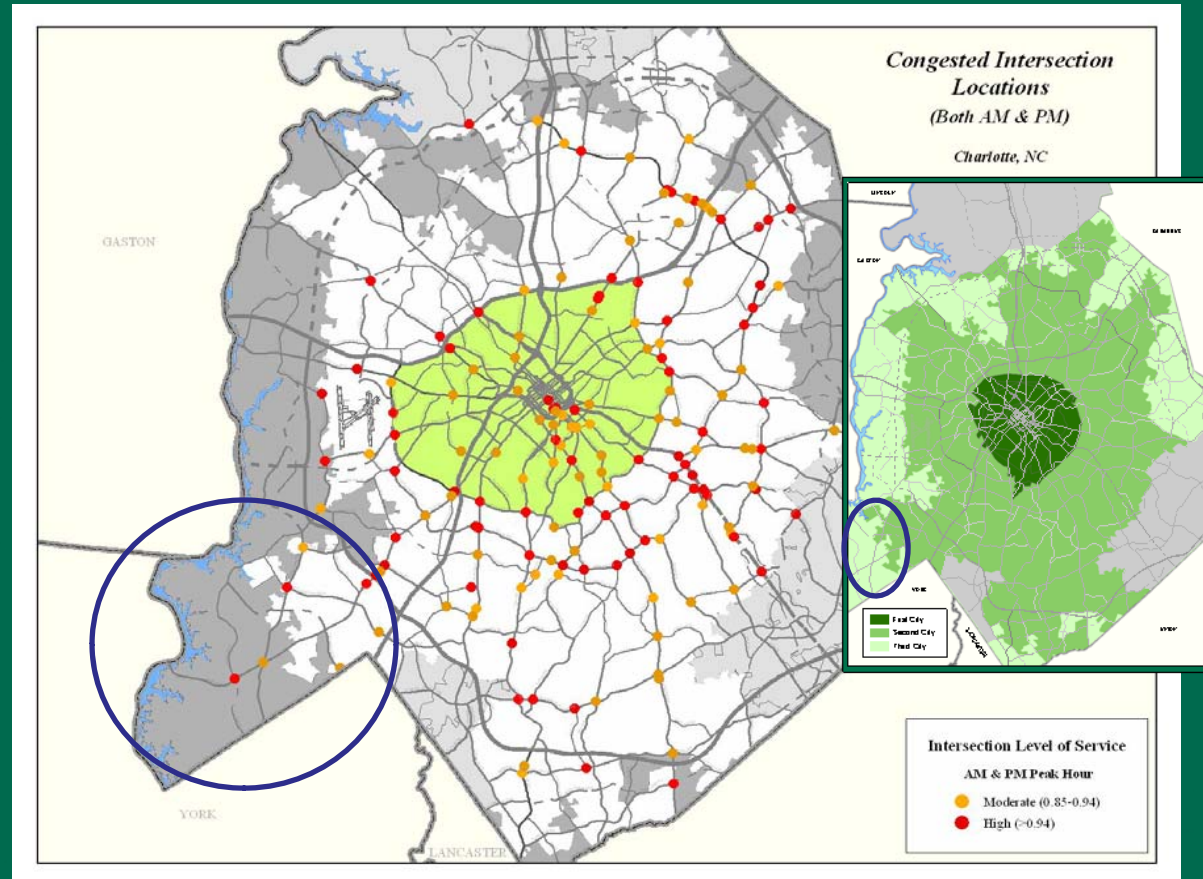
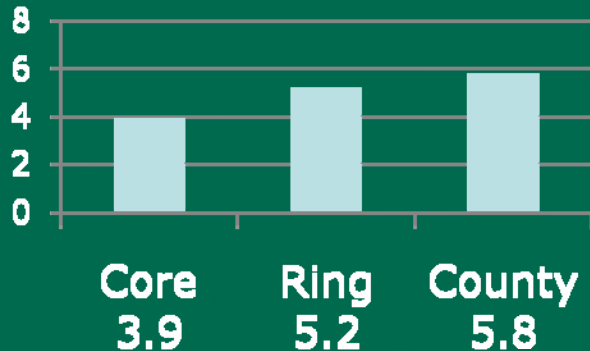


Air Quality - Transportation

“Tale of 3 Cities”

- 1st City (Core)
- 2nd City (Ring)
- 3rd City (County)

**Average Mileage of
Non-Work Trips**

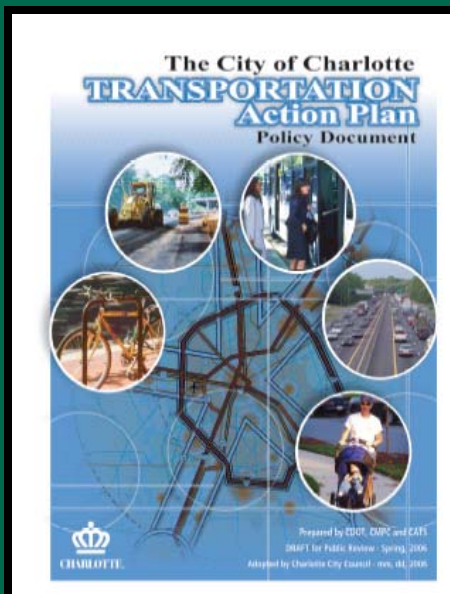


Residents in this area travel almost 50% further for basic trips...this negatively impacts air quality and increases congestion.



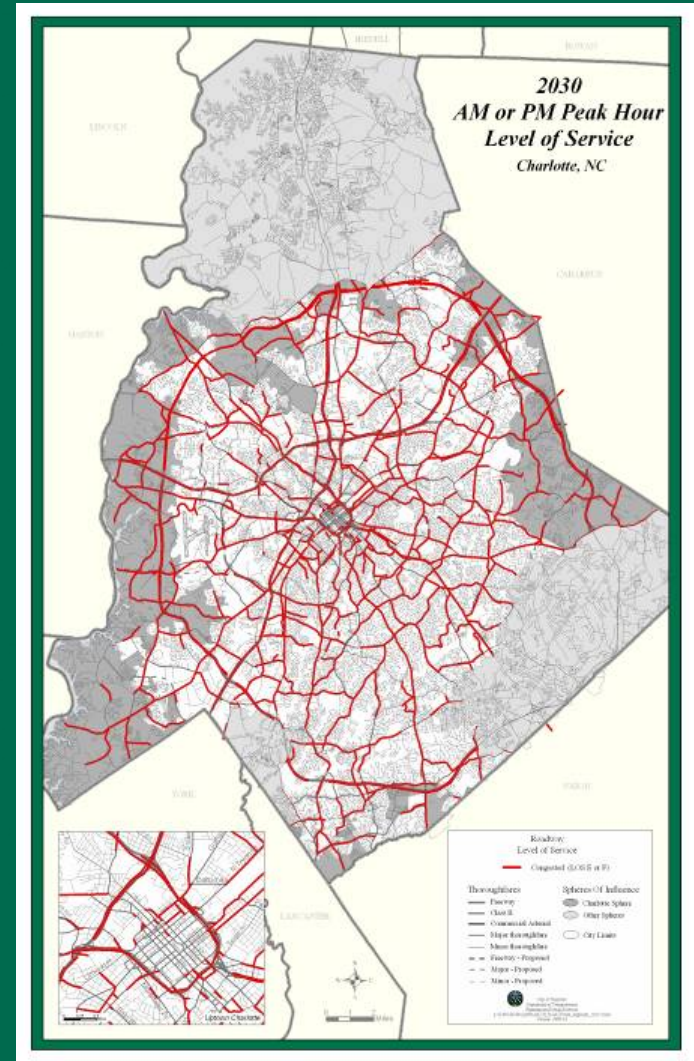
Transportation Goals

- Reduce congestion – by improving roads
- Improve Air Quality
- Reduce Vehicle Miles of Travel (VMT)
- Increase transit, walking, bicycling
- Improve connectivity



% of thoroughfares operating at LOS E/F in the peak hour:

- **29%** in 2005
- **34%** in 2010
- **47%** in 2020
- **64%** in 2030

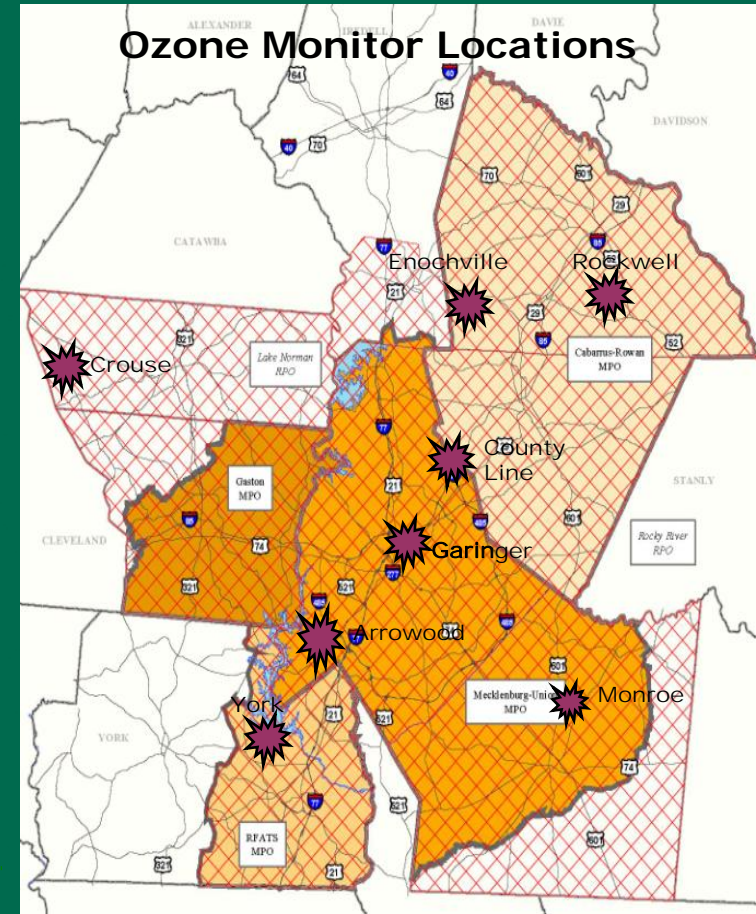
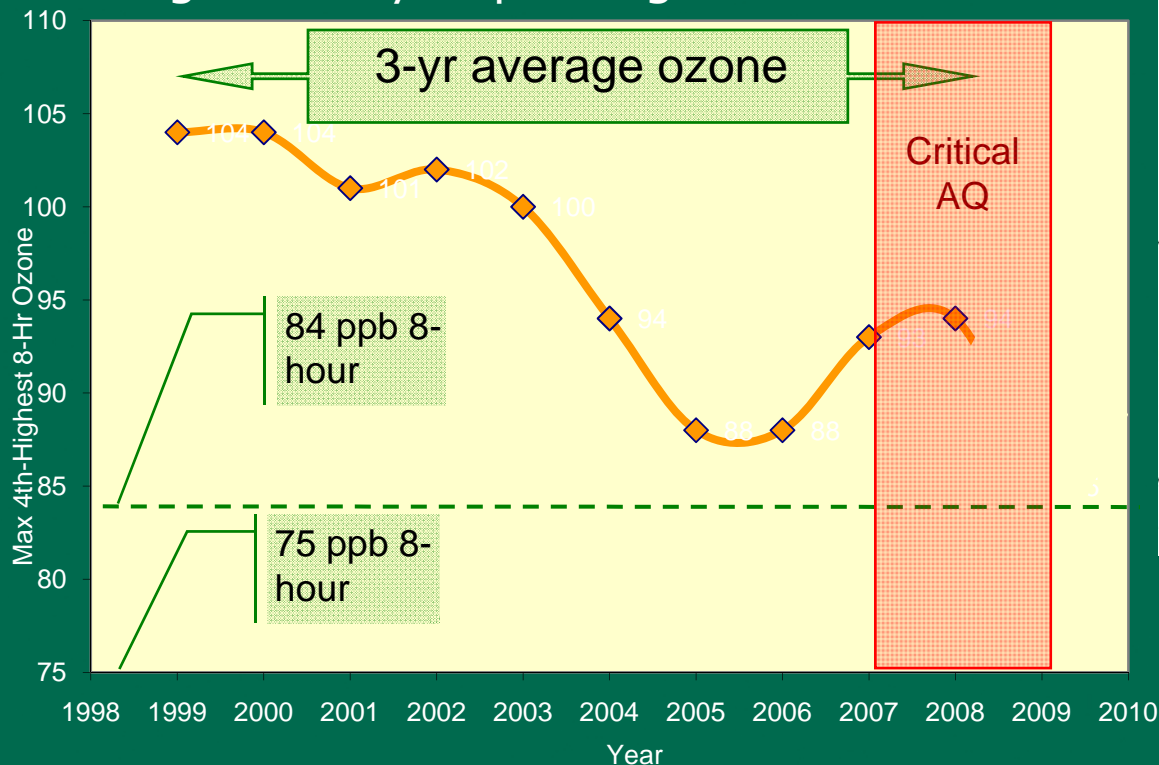




Air Quality - Transportation

How does VMT impact air quality?

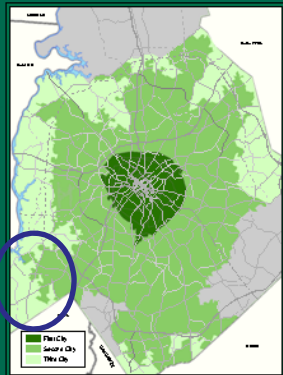
- Largest source of air pollution
- Better fuel-efficient vehicles
- But increased vehicle travel
- As result, air quality not significantly improving



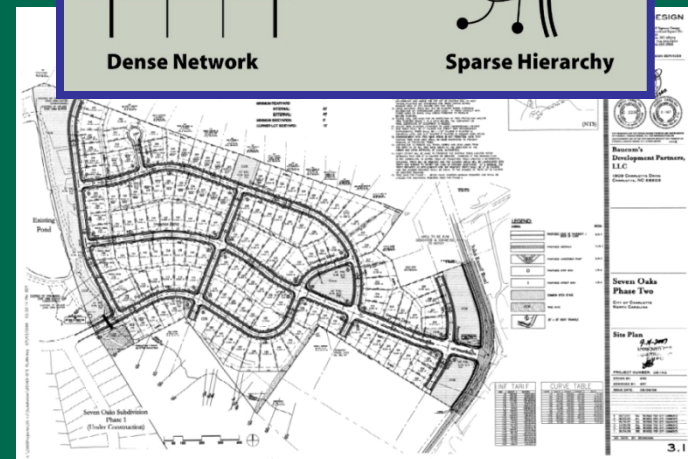


Importance of Connectivity

- Travel choices and route options
- Shorter trips (reduced VMT)
- Reduces need to widen intersections and thoroughfares
- Connected streets make it easier to walk, cycle and use transit



Connectivity Index		
Core	Ring	Study
1.45	1.19	1.16





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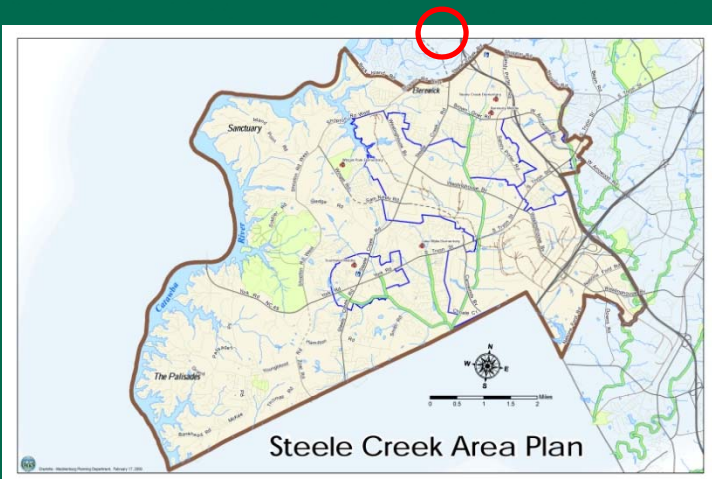
Park and Recreation



❖ Berewick Park

❖ Winget Park

❖ Ramblewood



- Joint-Use Rec. Center w/ CMS
- Joint-Use Playgrounds
- Athletic Field Areas (TBC 2010)



❖ Berewick Park

❖ Winget Park

❖ Ramblewood



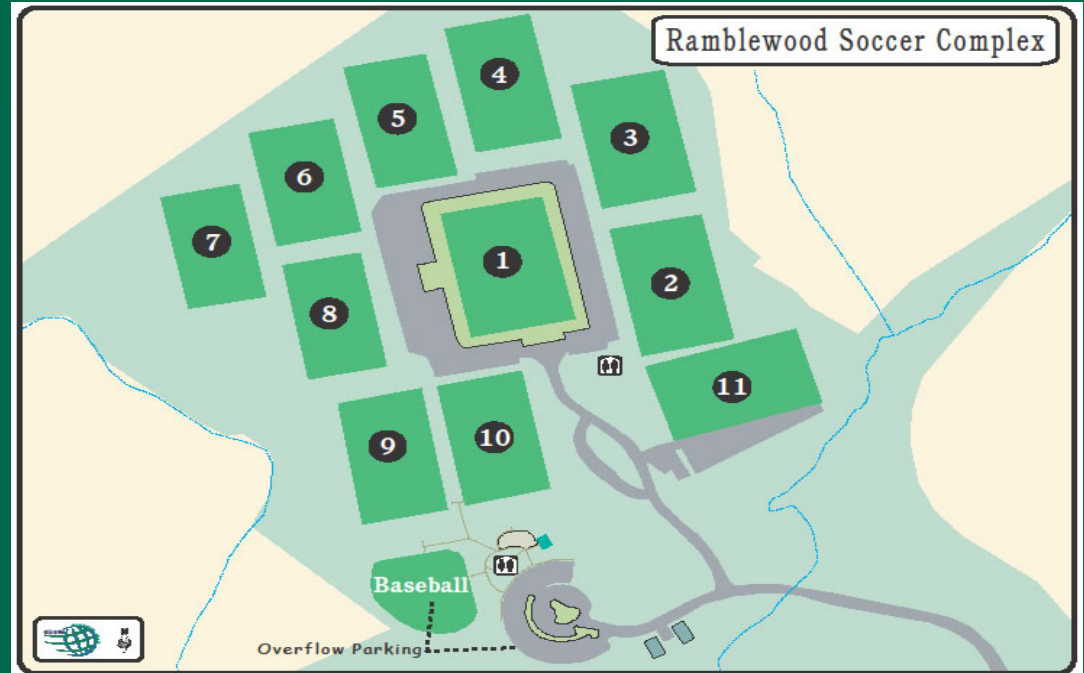
- Soccer Fields (4)
- Baseball Field
- Basketball Courts (3)
- Playground
- Open Space / Trails



❖ Berewick Park

❖ Winget Park

❖ **Ramblewood**

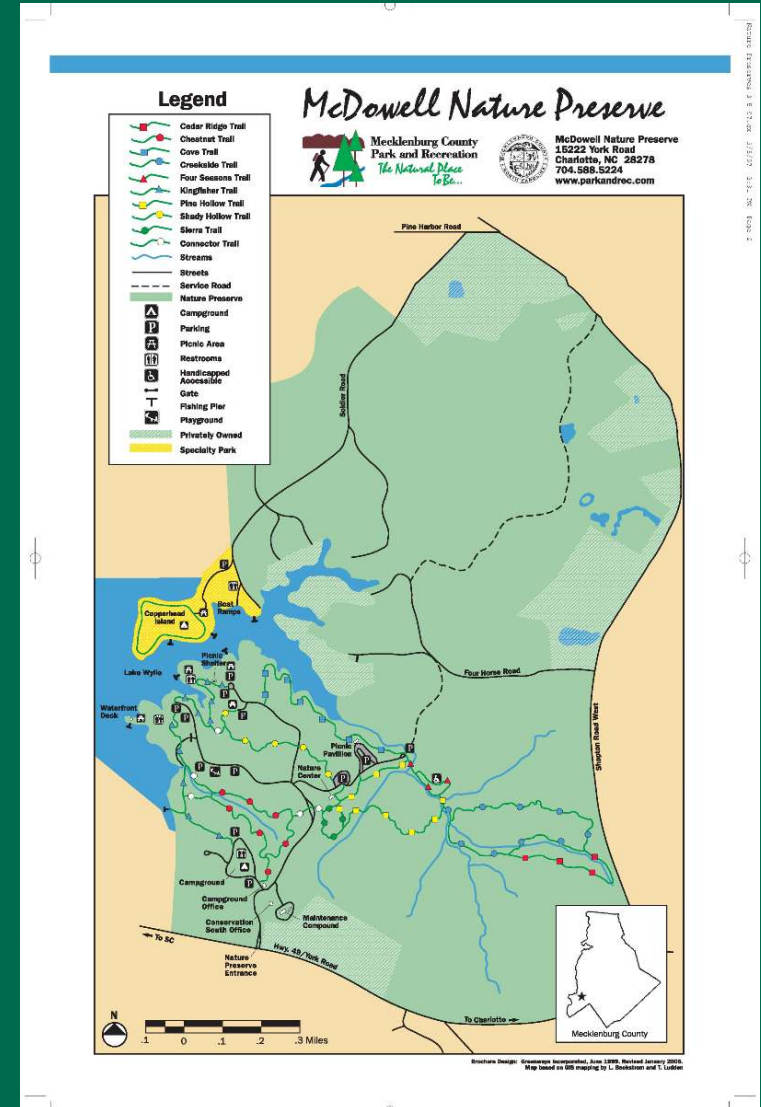


- Soccer Fields (11)
- Baseball Field
- Basketball Courts (2)
- Playground



❖ McDowell Nature Preserve

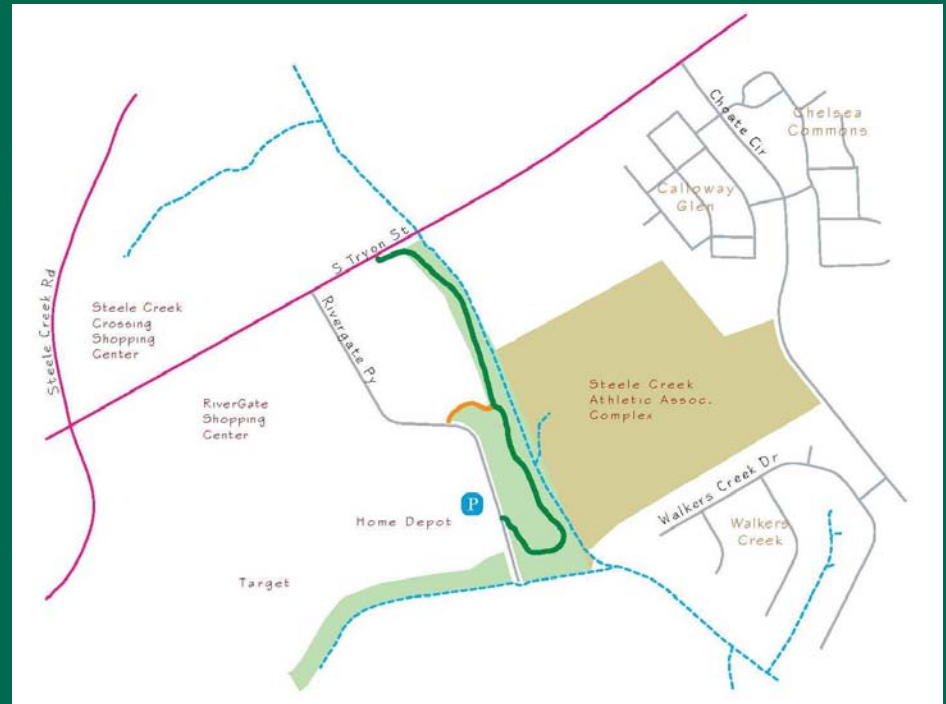
- 1,115 preserved acres
- 150 acre Piedmont Prairie
- 56 Campground Sites
- 7 miles of Hiking Trails
- Nature Center





❖ Walkers Branch Greenway

- ½ Mile Trail through Rivergate Community



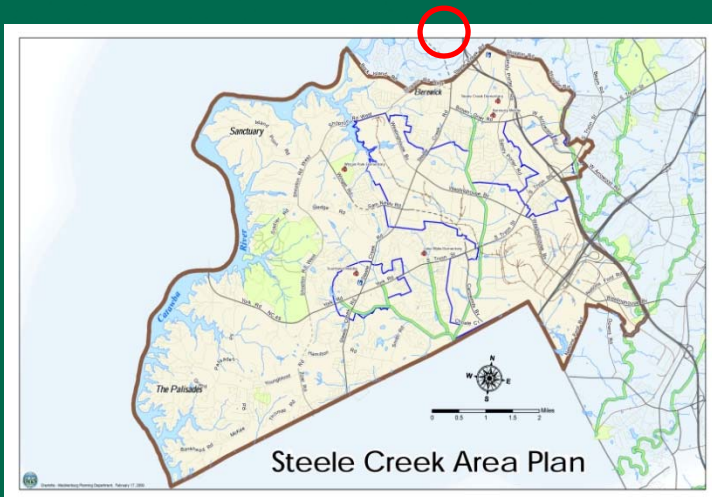


- ❖ Berewick Park
- ❖ Winget Park
- ❖ Palisades Park
- ❖ Capps Property



LandDesign.

BEREWICK DISTRICT PARK
MASTER PLAN



- Adopted Master Plan:
 - Soccer Fields (7)
 - Baseball Fields (3)
 - Dog Park
 - Neighborhood Park Component
- Currently unfunded



- ❖ Berewick Park
- ❖ **Winget Park**
- ❖ Palisades Park
- ❖ Capps Property



- Adopted Master Plan:
 - Baseball Fields (3)
 - Tennis Courts (up to 8)
 - Trails and picnic areas
 - Protect Schweinitz Sunflower population
- 2008 Funding (\$2m)



- ❖ Berewick Park
- ❖ Winget Park
- ❖ **Palisades Park**
- ❖ Capps Property

PROPOSED PARK COMPONENTS

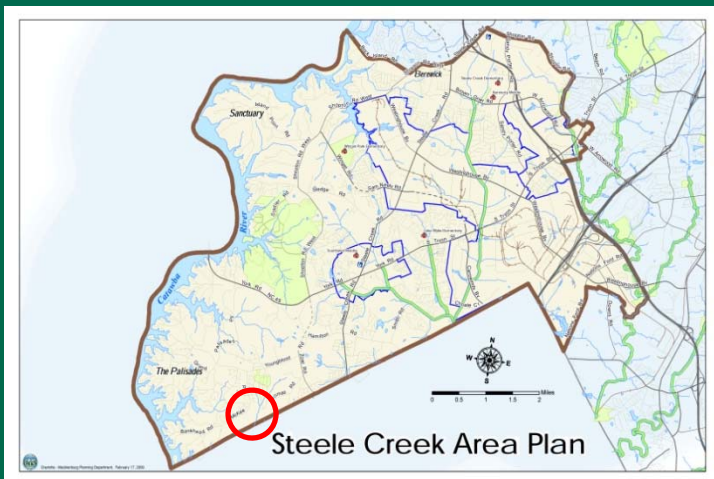
1. Parking, Playground Access
2. Park Pavilion
3. Park Picnic Sites (3)
4. Small Loop Trail (8 ft wide, asphalt, 0.75 mi)
5. Large Loop Trail (8 ft wide, asphalt, 1.0 mi)
6. Future Pedestrian Connections to Neighborhoods



- Proposed Master Plan:
 - Playgrounds & Playfield
 - Picnic Shelter
 - ½ Mile Trail w/ 3 picnic sites
- 2008 Funding (\$300k)
- TBC Fall 2010



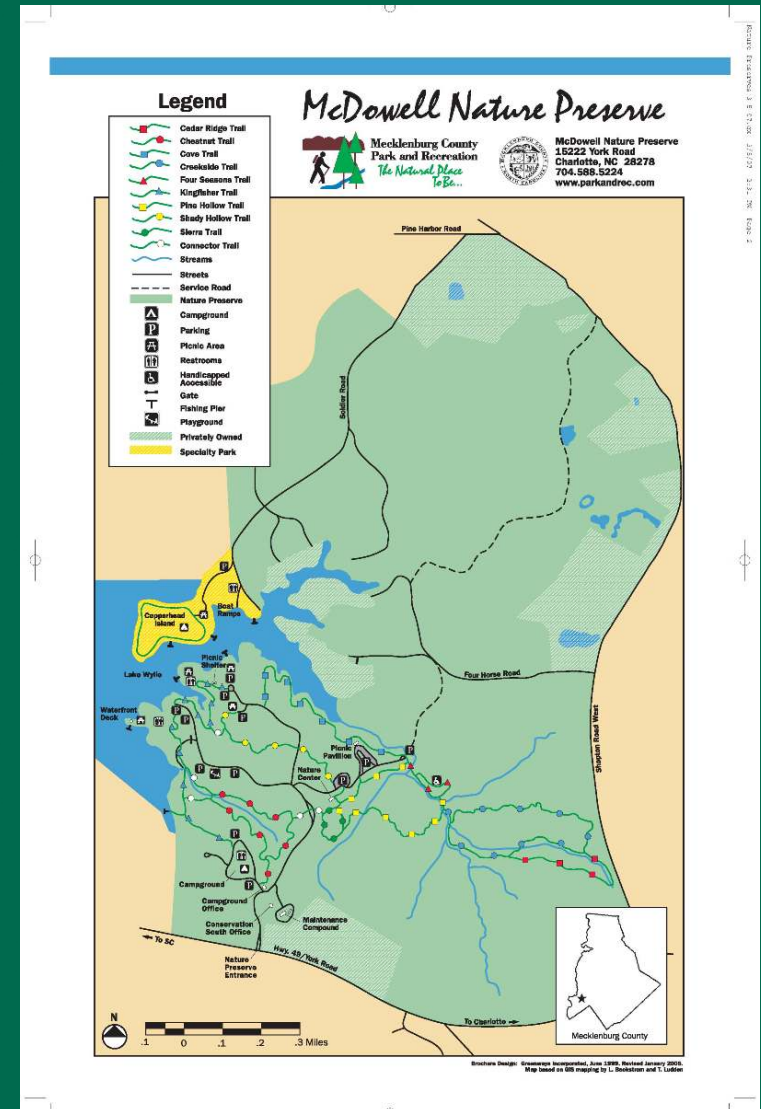
- ❖ Berewick Park
- ❖ Winget Park
- ❖ Palisades Park
- ❖ **Capps Property**



- Master Plan to be drafted
 - 67 acres, heavily wooded, moderate slope
 - Ideally sized for Community Park
- Currently unfunded



- ❖ McDowell Nature Preserve
 - Continue to monitor and identify expansion opportunities
 - Apply Management Zones Hierarchical Structure when applicable (level of preservations)





❖ Walker Branch Greenway

- 2008 Funds (\$1m)
- Extend 1/2 Mile





❖ Steele Creek Greenway

- Approx 4 mi
- 10+ yr plan





❖ Polk Ditch Greenway

- Approx 1.5 mi





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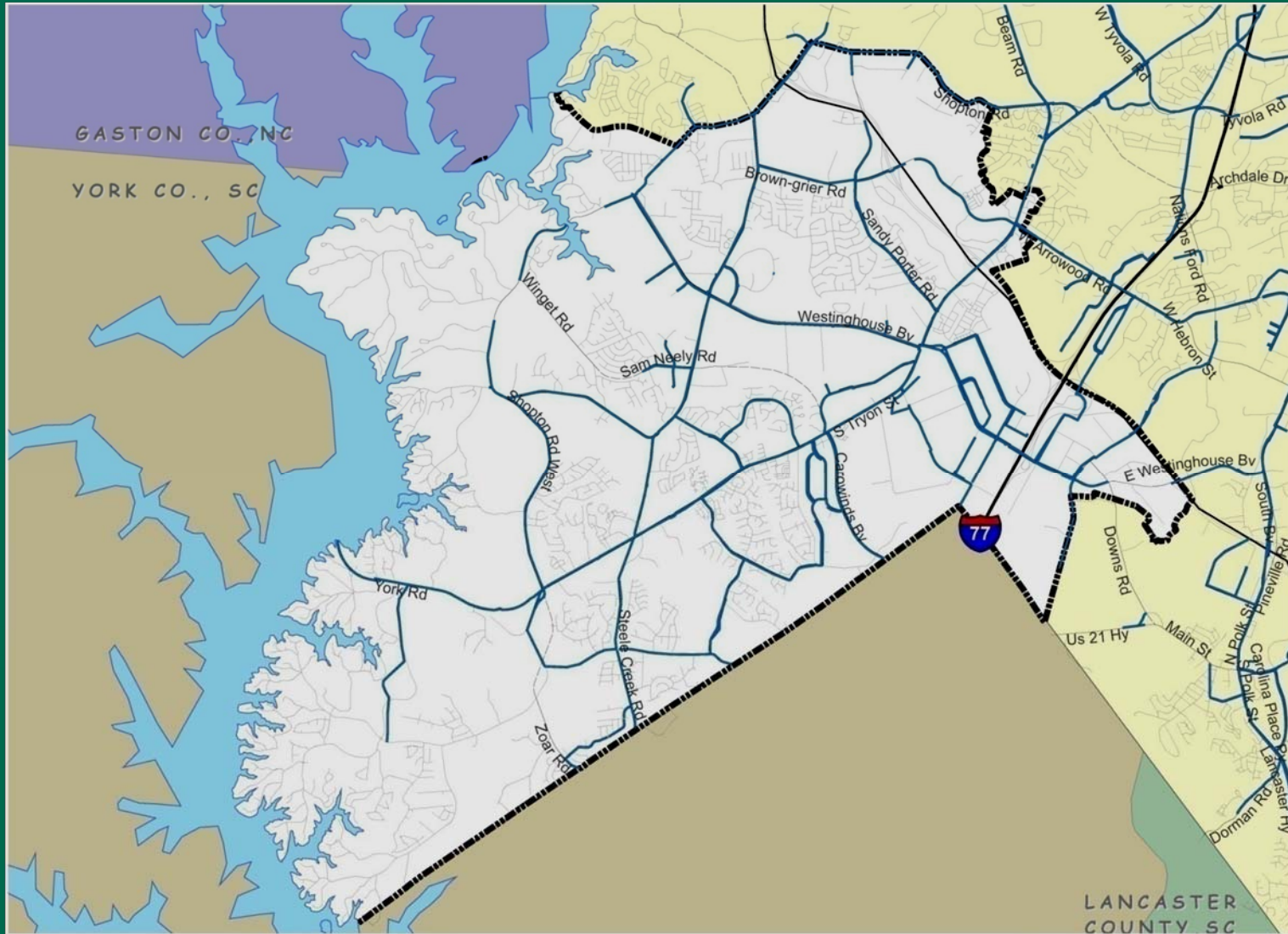


UTILITIES



CMU Facts & Figures for 2009

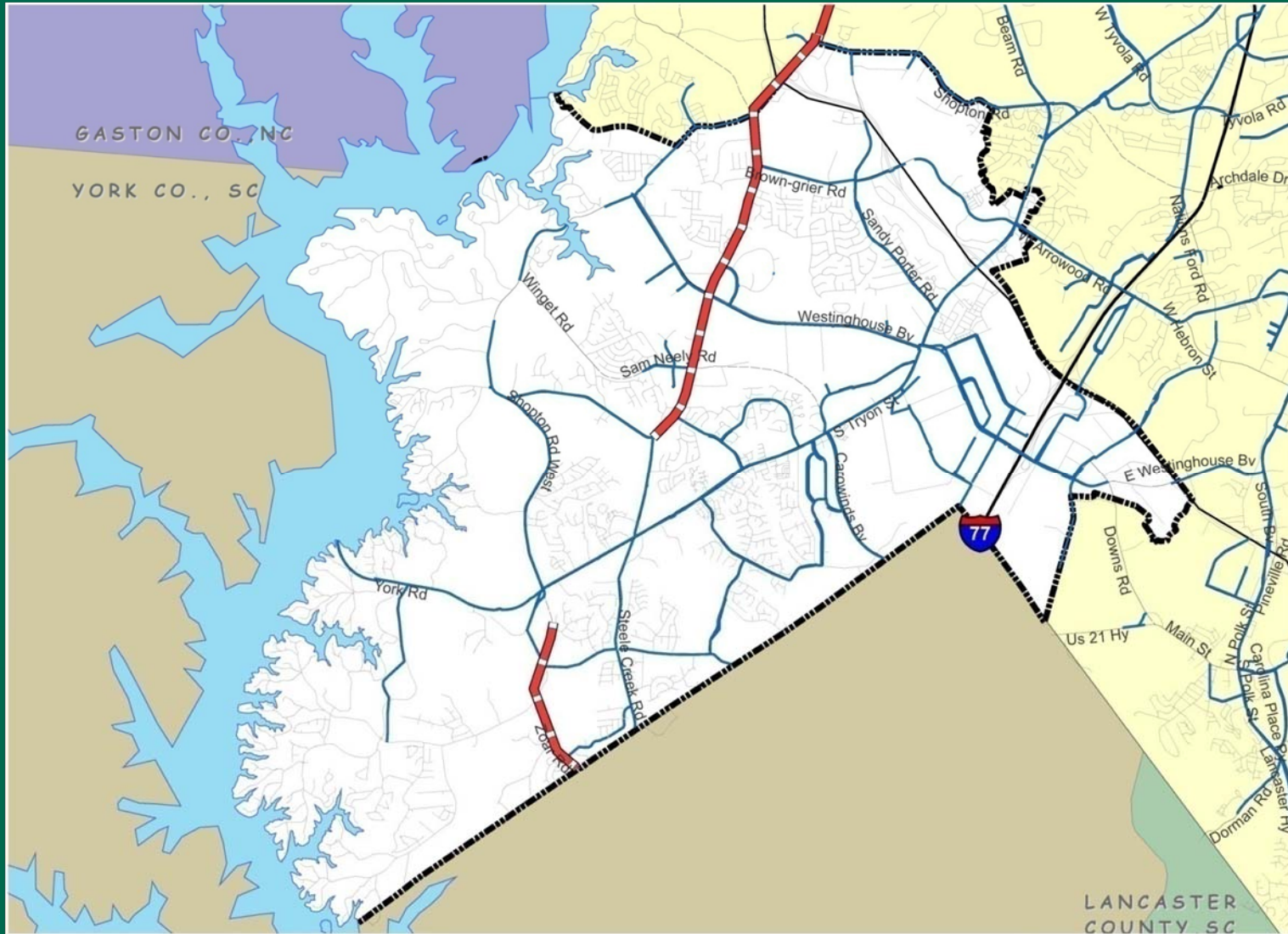
- 4,025 Miles of Water Distribution Mains
- 242 mgd of Water Treatment Capacity
- 4,028 Miles of Sewer Mains
- 123 mgd of Wastewater Treatment Capacity
- Approximately 224,000 Service Connections



Existing Water System



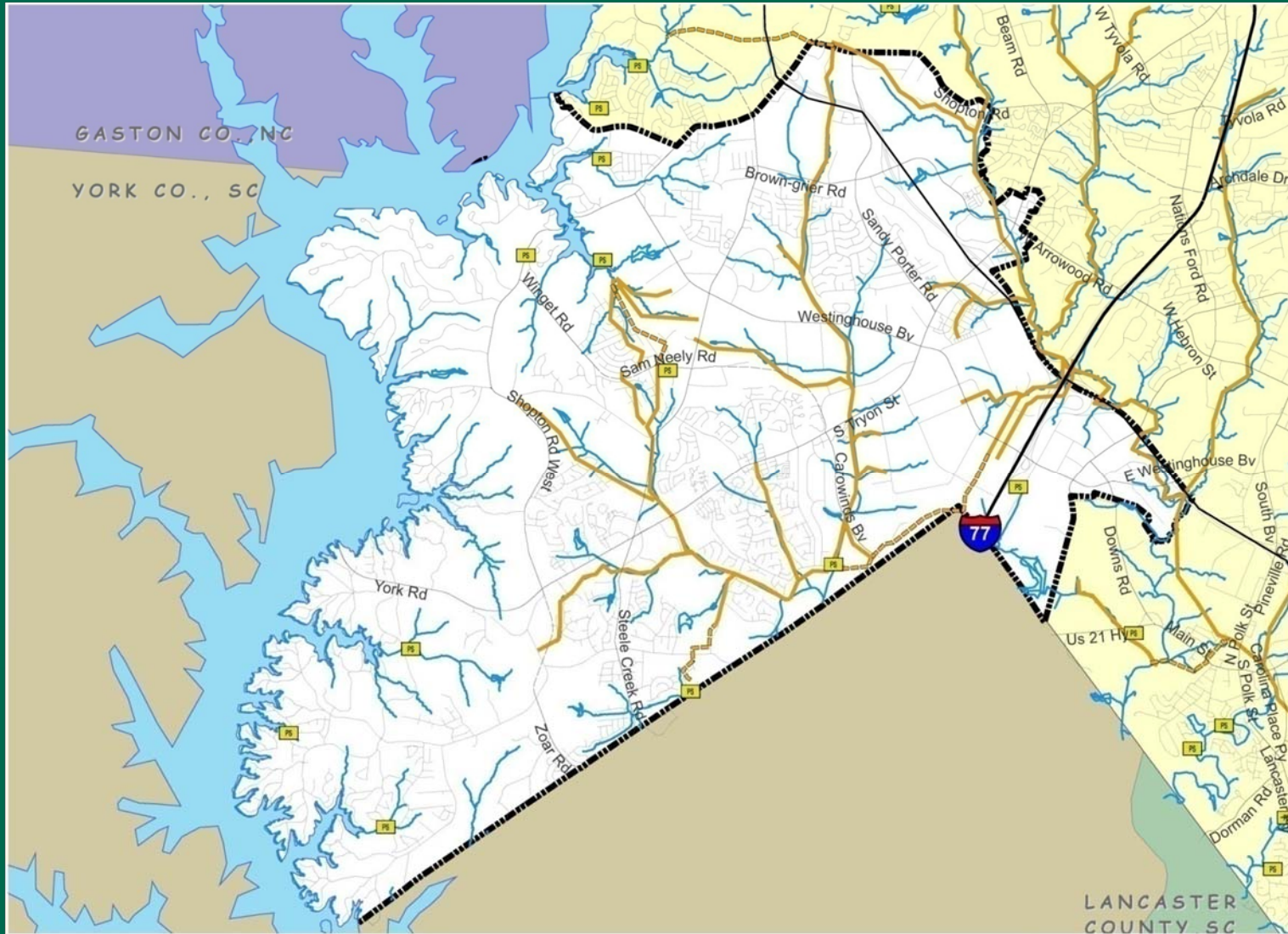
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Water System Capital Projects



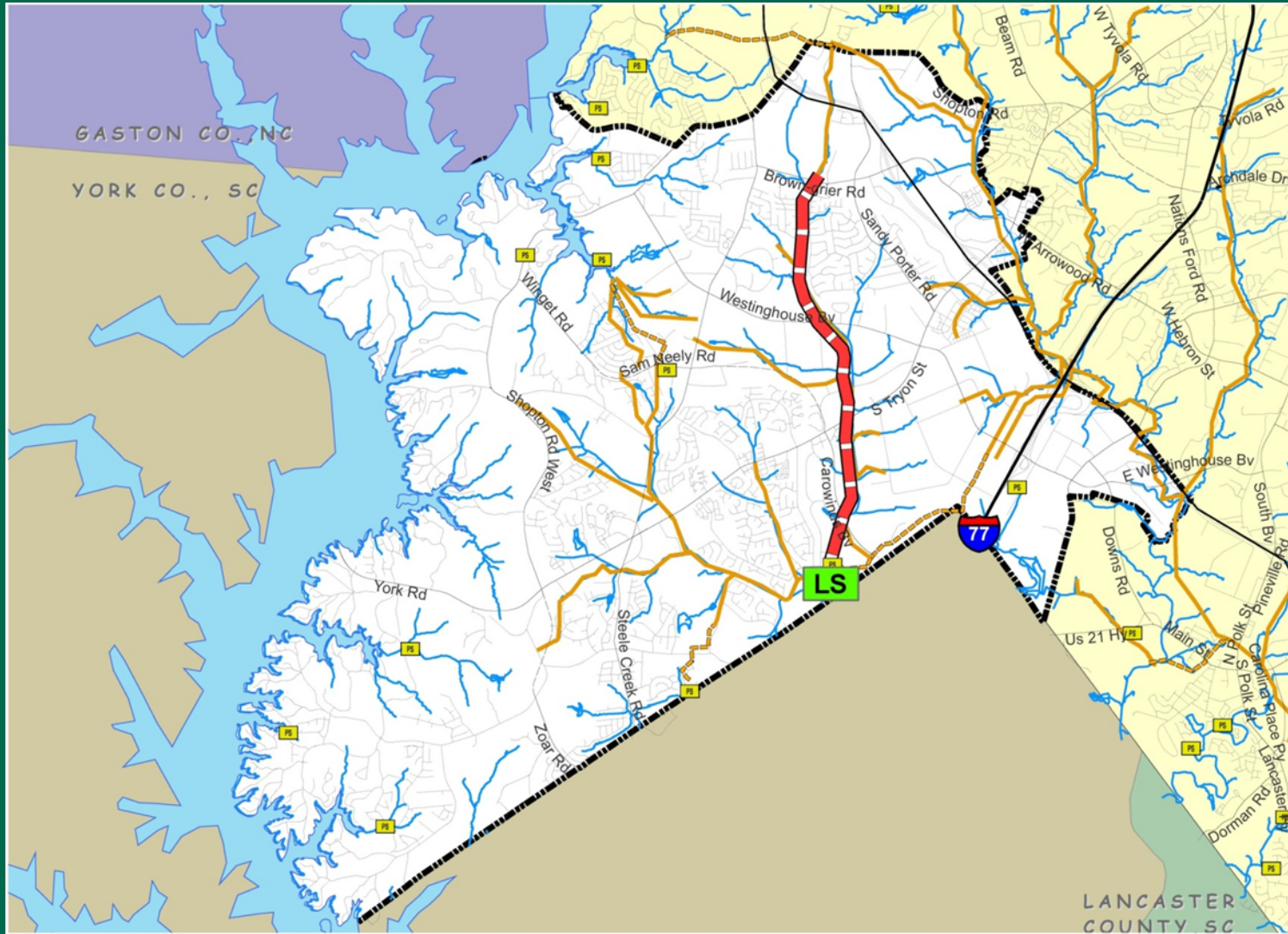
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Existing
Sewer
System



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Sewer System Capital Projects



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NATURAL ENVIRONMENT POLICIES

- **Goal #1: Protect the quality of the area's water supply.**
 - Identify environmentally sensitive areas such as watersheds, wetlands, streams, and address how they will be protected and/or mitigated.
 - Use best management practices to collect, treat and disperse storm water run-off.
 - Encourage development practices that minimize clearing, grading and soil compaction.

-

- **Goal #2: Encourage environmentally sensitive land development practices.**
 - Preserve tree canopy, native plants and open space by incorporating natural features into development.
 - Develop a network of green spaces that include greenways, nature preserves, parks, and open spaces and link greenways to significant areas of activity, such as retail centers, schools, and parks.
 - Encourage new development to be built to environmentally sensitive design standards.

- **Goal #3: Balance land use and transportation decisions to minimize air quality impacts.**
 - Reduce vehicle emissions by shortening trip distances and decrease trips by appropriately locating land uses and providing transportation choices for pedestrians, cyclists, transit users and motorists.

-

- Questions?





- **Citizen Advisory Group Meeting #4**
 - October 1, 2009
 - Public Facilities



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Thank You!

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GENERAL DEVELOPMENT POLICIES



- **General Development Policies (GDP)**
 - **Purpose:** Provide guidance to City Council, staff, and the general public to ensure that future growth and development is well-designed and consistent with the long-term goals of Charlotte-Mecklenburg.
- **GDP – Environment** (adopted 2007)
 - **Purpose:** Minimize the negative environmental impacts of land use and land development on our air, land, and water resources.
 - **Goal:** Protect the natural environment by preserving air quality, water quality and the tree canopy; retaining natural areas; providing open space; and minimizing impervious cover, as feasible



GDP - Natural Environment Four Guiding Principles:

- Make protection of our natural environment a priority in land use and development decisions.
- Facilitate a land use pattern that accommodates growth while respecting the natural environment.
- Promote and enable environmentally sensitive site designs.
- Consider the environmental impacts of land use and development comprehensively and strive to reconcile the various environmental concerns with each other and balance them with other land and economic development considerations.



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NATURAL FEATURES



Steele Creek Area Plan

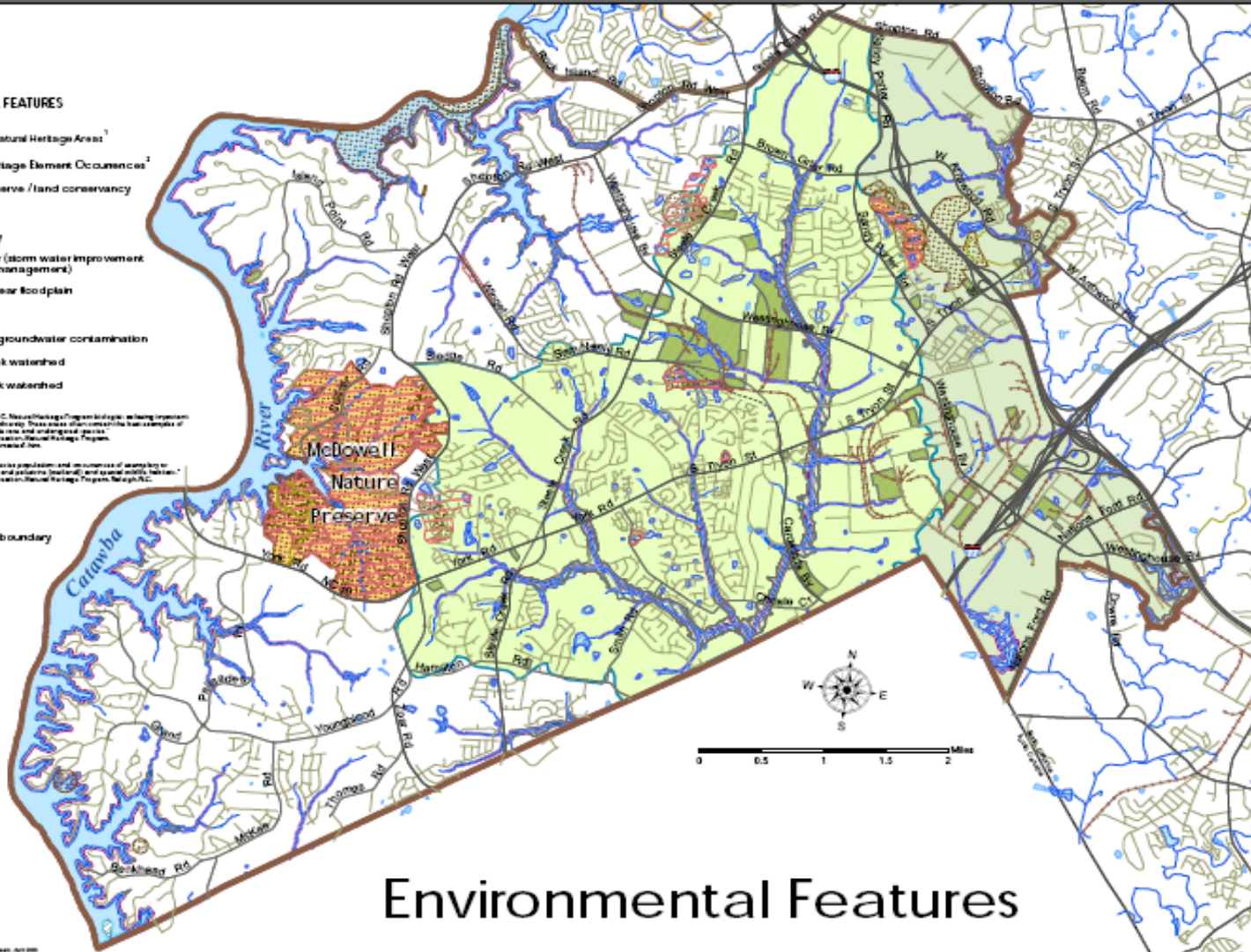
ENVIRONMENTAL FEATURES

- Significant Natural Heritage Areas¹
- Natural Heritage Element Occurrences²
- Nature preserve / land conservancy
- Stream
- Water body
- SWM buffer (storm water improvement and management)
- FEMA 100-year floodplain
- Wetlands
- Soil and/or groundwater contamination
- Steele Creek watershed
- Sugar Creek watershed

¹ Areas of land recognized by N.C. Natural Heritage Program as biologically or having important historic conservation value. Such areas often contain the best examples of natural communities and often include rare and endangered species.
N.C. DNR, Division of Parks and Recreation/Natural Heritage Program.
www.naturalheritage.org/nc/conservationof.htm

² Locations of rare and endangered species populations and occurrences of examples of unique natural communities (terrestrial and aquatic), wetlands, and special wildlife habitats.
N.C. DNR, Division of Parks and Recreation/Natural Heritage Program, Raleigh, N.C.

study area boundary



Environmental Features

