



Cross-Connections

Where does all the water go?

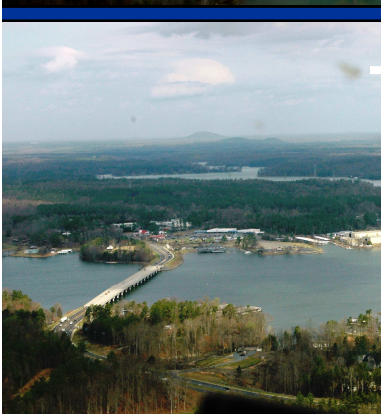
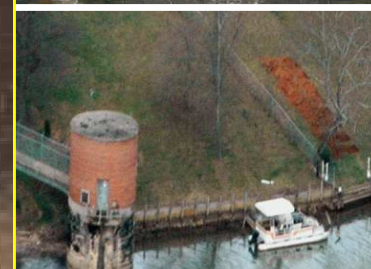
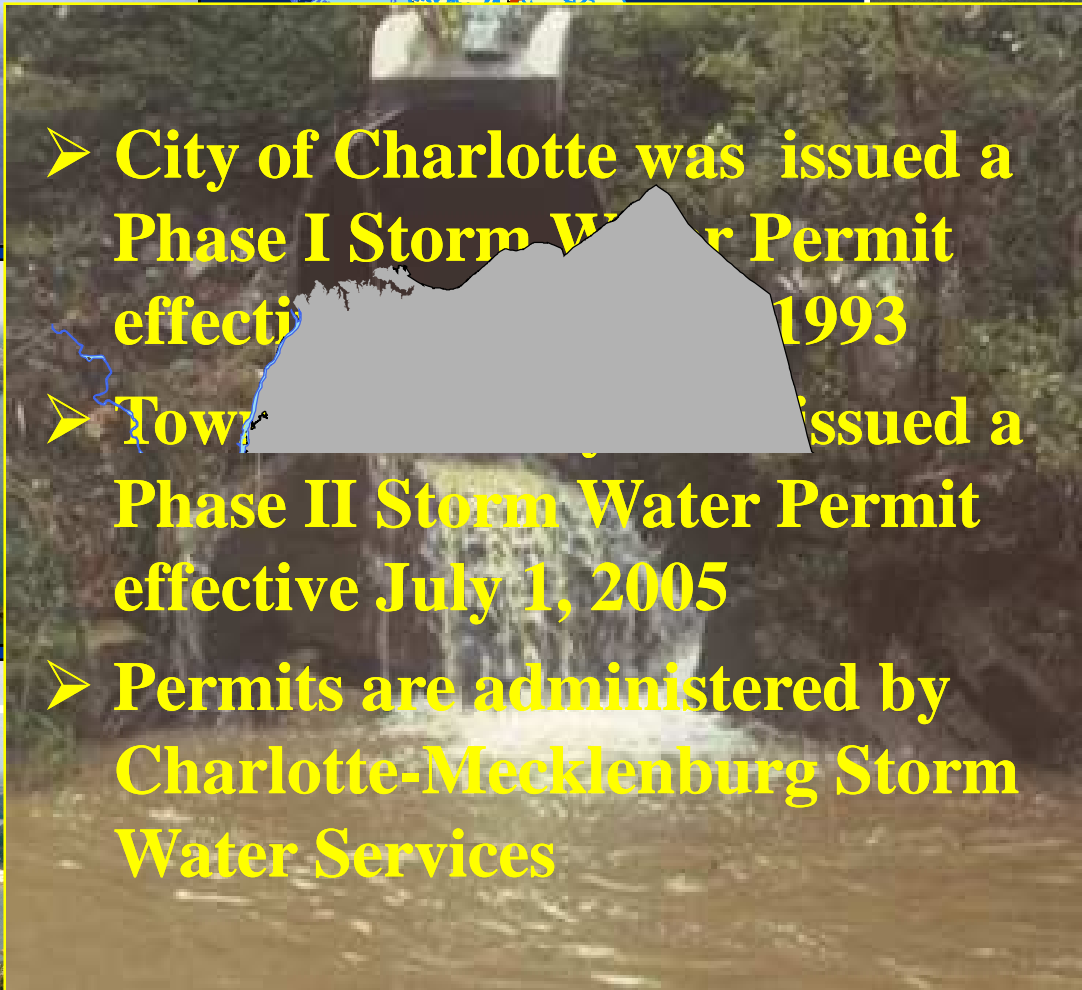
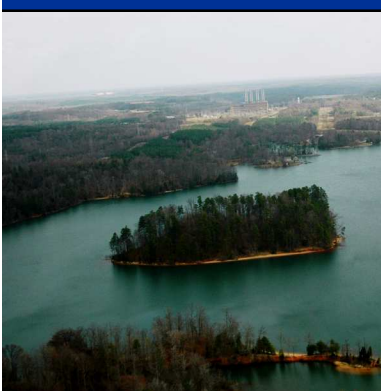
1. Waters of Mecklenburg
2. Program Activities
3. Examples of Cross -Connections

Mountain Island Lake ends where Lake Wylie begins.

Waters of Mecklen

- City of Charlotte was issued a Phase I Storm Water Permit effective July 1, 1993
- Town of Davidson issued a Phase II Storm Water Permit effective July 1, 2005
- Permits are administered by Charlotte-Mecklenburg Storm Water Services

Our Most Precious Natural



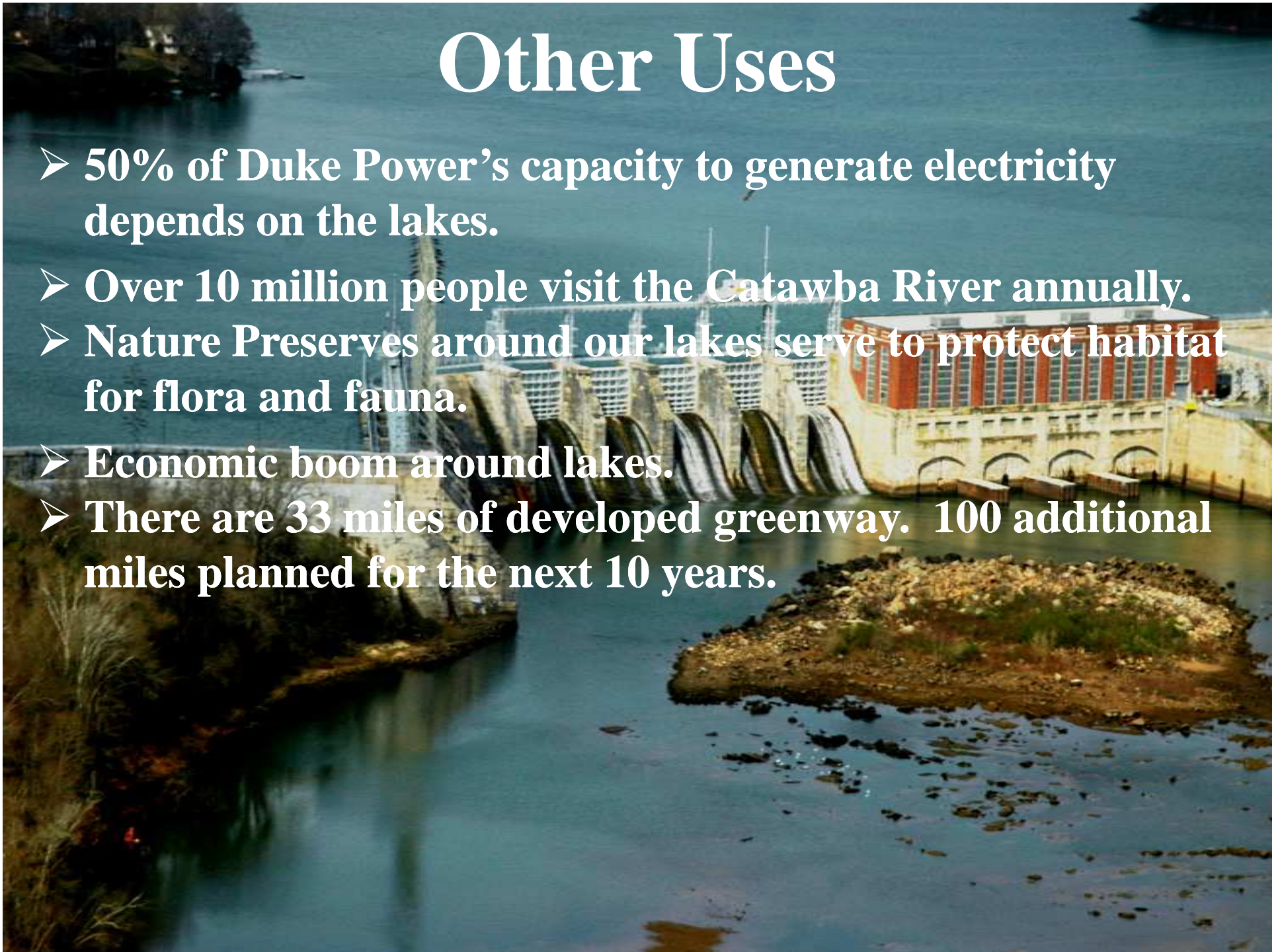
Slide 2

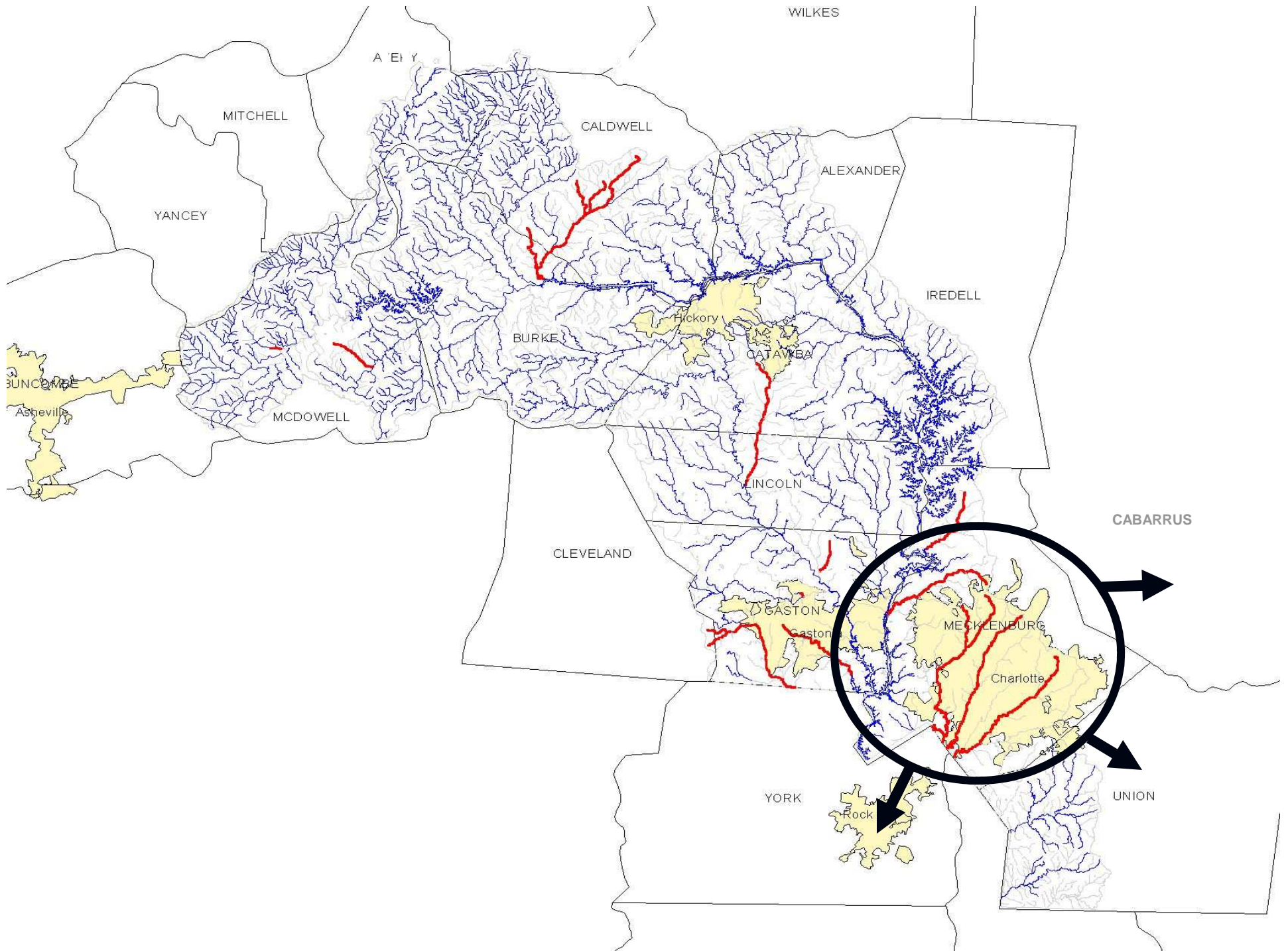
RSR2

Mecklenburg County Land Area = 526 sq. miles
Mecklenburg County Population (2006) = 827,445
CMU on Lake Norman = 25 mgd for northern Towns
CMU on MIL = 85 mgd for Charlotte and southern Towns
Mount Holly on MIL = 2 mgd for 12,671 population
Gastonia on MIL = 16 mgd for 110,000 population
Belmont on Lake Wylie = 2 mgd for 8,700 population
Rock Hill on Lake Wylie = 7 mgd for 57,000 population
Total = 137 mgd for 1,000,000 population from 6 intakes in 3 counties
rozzers, 12/2/2008

Other Uses

- 50% of Duke Power's capacity to generate electricity depends on the lakes.
- Over 10 million people visit the Catawba River annually.
- Nature Preserves around our lakes serve to protect habitat for flora and fauna.
- Economic boom around lakes.
- There are 33 miles of developed greenway. 100 additional miles planned for the next 10 years.







Ladies fishing in Little Sugar Creek – circa 1890

**Maintaining good water
quality conditions in our
streams and lakes is
essential for maintaining a
livable community.**



Swimming hole in Long Creek – circa 1910



Kids wading in Little Sugar Creek – circa 2000

Goal: Protect and restore the quality and usability of Mecklenburg County's surface water resources by:



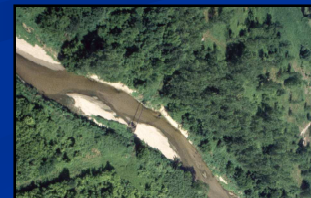
Public Education and Outreach
Public Involvement & Participation
Illicit Discharge Elimination/Monitoring



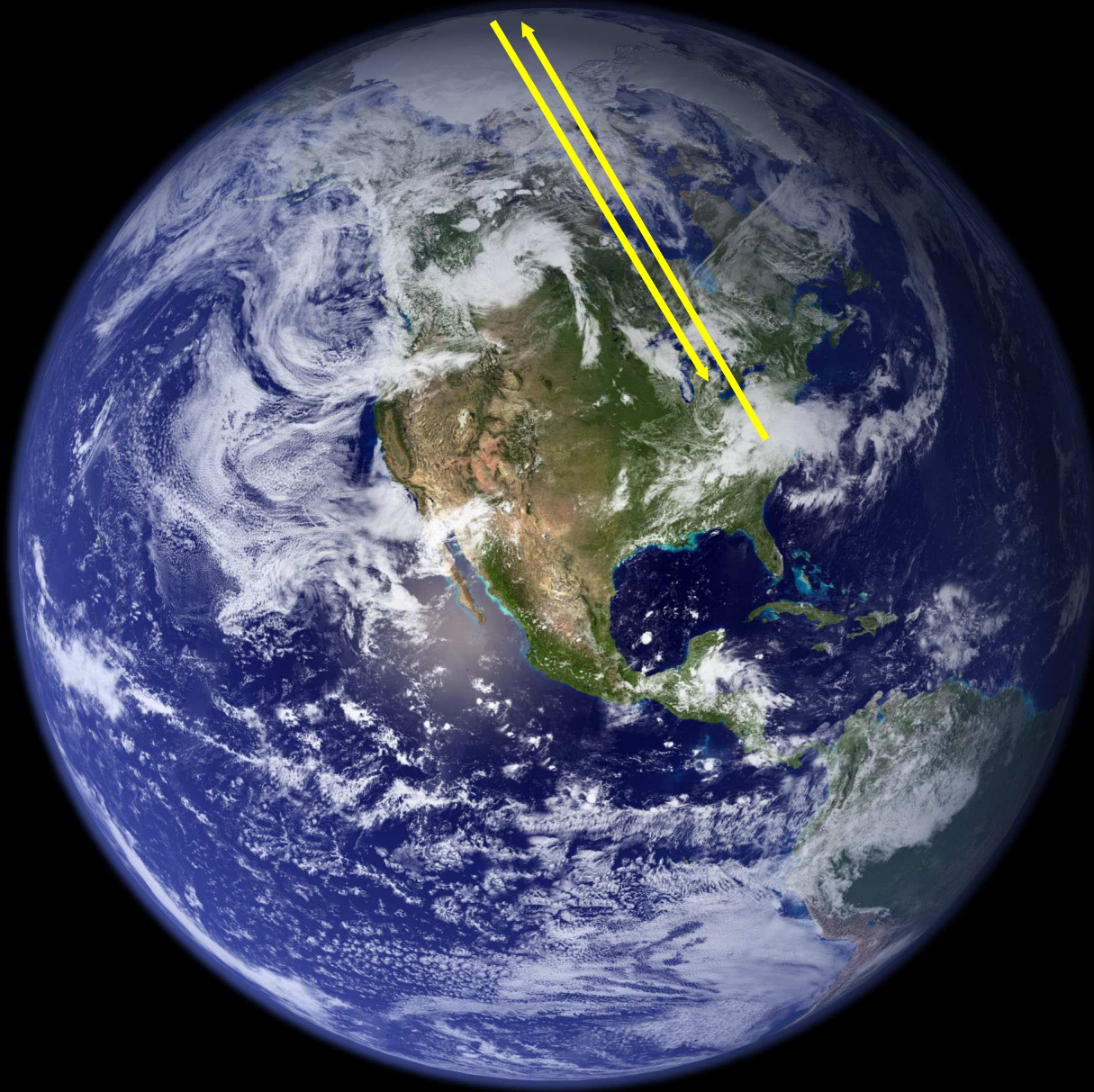
Construction Site Runoff Control
New Development Runoff Control
Operational Pollution Prevention



Buffer Protection & Enhancement
Watershed Management



Pipe, pipes everywhere. Where does all the water go?



2380 miles (Storm Drain) + 3,942 miles (Sanitary Sewer) = 6322 miles

Sanitary Sewer Discharges to the Storm Sewer





April 20, 1995: Bunn Tire Service at 3752 East Independence Boulevard, Charlotte - Antifreeze Discharge to Storm Drain

July 19, 2000: Work Release and Reinstitution Center at 901 Elizabeth Avenue, Charlotte - Sewer Discharge to Storm Drain

Toilets were emptying into creek

3rd illegal sewage line found at county-owned office building

By BRUCE HENDERSON
Staff Writer

A Mecklenburg County-owned building near uptown Charlotte has been dumping raw sewage into Little Sugar Creek, apparently for years, officials say.

Workers investigating toilet backups at Court Plaza, a five-story building on Elizabeth Avenue that houses the county's work-release center, found three sewer lines leading from the building to an underground stormwater drain. The drain dumps into Little Sugar, one of the city's most polluted creeks.

The Mecklenburg County Department of Environmental Protection says it will cite the county for the violation. Fines, which theoretically could amount to \$10,000 a day, probably won't be levied since repairs were made once the problem was found.

The department also plans to cite a Mecklenburg County restaurant, the Riverview Inn, for piping sewage into Lake Wylie. Catawba Riverkeeper Donna Lisenby, alerted by a tipster on Monday, said sewage ran from a 3-inch pipe into a streambed draining to the



(Staff photo)

be reached for comment Tuesday.

"It probably happens more than we know," said Rusty Rozzelle, Environmental Protection's water chief. "There are situations I'm sure where people probably have their toilets straight-piping to the creek. The real problem is finding them."

The repairs at Court Plaza involve



PHOTO BY SCHWAB/STAFF

Kelly Davis (left) and Butch Heyworth of Heyworth Plumbing Co. install new sewer pipes during repairs at a county-owned building that may have been dumping into Little Sugar Creek for years.

3rd sewage line found tied to creek

POLLUTION from JB

els of fecal coliform bacteria, found in human or other animal wastes. Staff members suspected it was coming from the Elizabeth Avenue building. They injected dyes to trace the source, but couldn't prove it.

"We just went around and around with this thing, trying to confirm the source," said Rozzelle. "They weren't being uncooperative. We just couldn't tell it was them."

As a last resort, utilities workers plugged the stormwater pipe in April and waited for toilets to back up.

on repairs Monday illustrated the problem. After a toilet inside the building flushed, smelly black liquid flowed from the broken end of a 12-inch pipe serving the building. Sewage filled a hole dug to expose the pipe.

"See all that stuff coming out of that pipe?" said plumber Butch Heyworth. "That's all headed for the creek - or was."

Robert Lutz, project manager for jail construction in the county's Engineering and Building Standards Department, said the county bought the original portion of the building, believed to date to 1939, six or seven years ago. Building code officials say sewer hookups to storm drains have never been le-

made additions to the building after buying it and made proper connections, he said.

Little Sugar, which flows through Charlotte's densest core, suffers chronically high bacteria levels that make human contact unsafe.

The creek was one of four Mecklenburg creeks, including Irwin, McAlpine and Sugar, to appear on a state list of impaired waters earlier this year. Inclusion on the list means water-quality officials have to set and enforce a new limit on the amount of fecal coliform in those creeks by 2002.

Misdirected pipelines, intentional or otherwise, are among the causes of high bacteria levels in the

**May 18, 2001: Circle K at 4474 Randolph Road, Charlotte - Sewer
Discharge to Storm Drain**



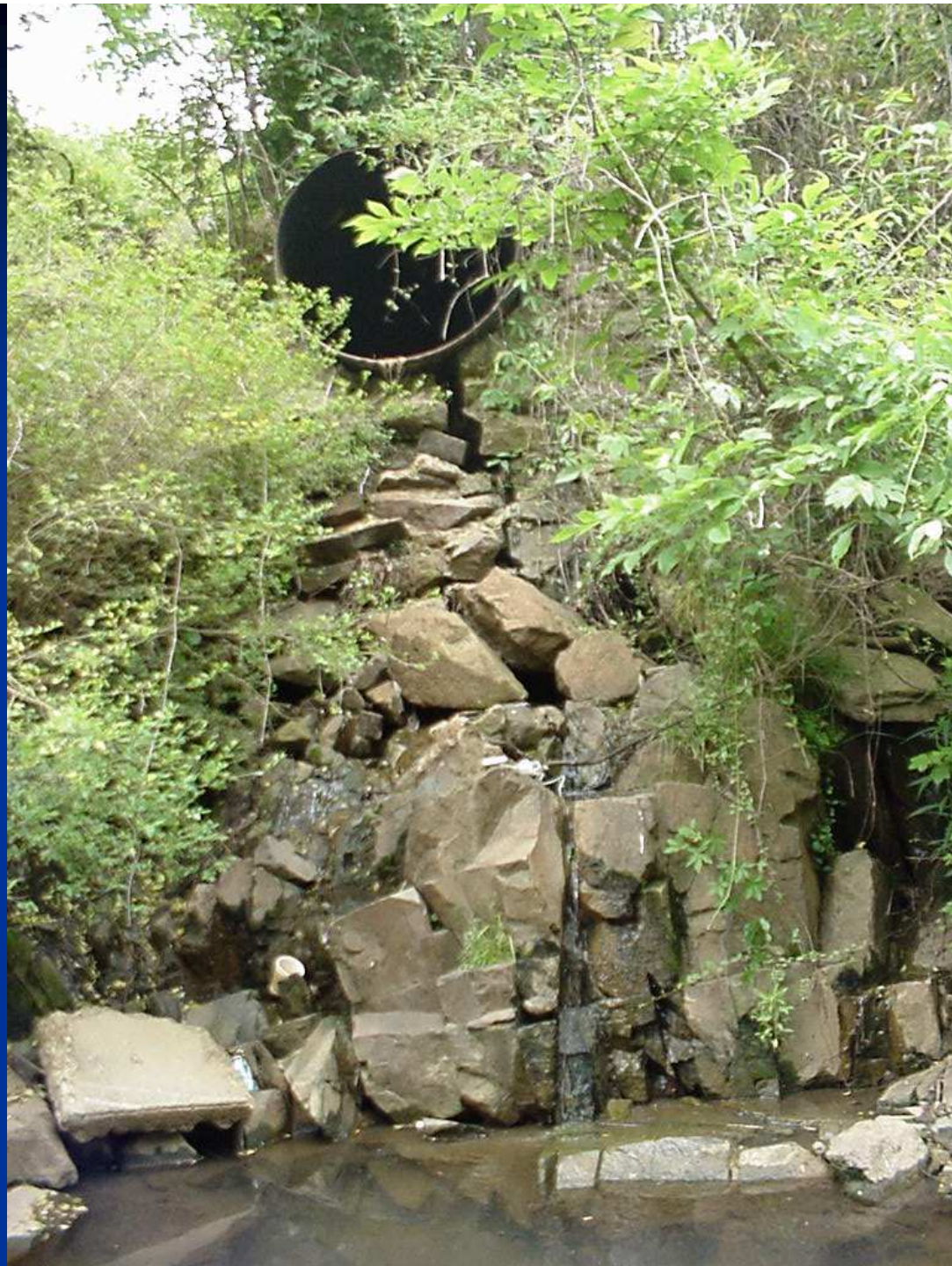


**November 20, 2001: Charlotte Town Manor at 600 Kings Drive,
Charlotte - Sewer Discharge to Storm Drain**

**February 5, 2002: Exxon on the Run at 4401 Park Road, Charlotte -
Sewer Discharge to Storm Drain**



FEB16/02,0145:48.750,-05,9/01,01889F
0111,3510.376N,08050.799W, 58KTS,183



August 7, 2002: Citizen complaint received regarding the discoloration and foul odor of a tributary to Irwin Creek at the 700 block of 6th Street at Elmwood Cemetery in Charlotte.



August 11, 2003: Cotton Mill Apts. (180 units) at 520 West 5th Street







OCT 30 2003



AUG 11 2003

**November 24, 2003: 430 Amon Lane - Washing Machine Discharge
to Creek**



January 13, 2004: Amon's Café at 207 Regency Executive Park Drive, Charlotte - Sewer Discharge to Detention Pond





14 10:24 PM



14 10:22 PM













14 10:25 PM

October 10, 2008: Sterling Elementary School at 9701 China Grove Church Road, Charlotte - Sewage Discharge to Storm Drain - 200 gallons per day for 34 days for an estimated total of 6800 gallons



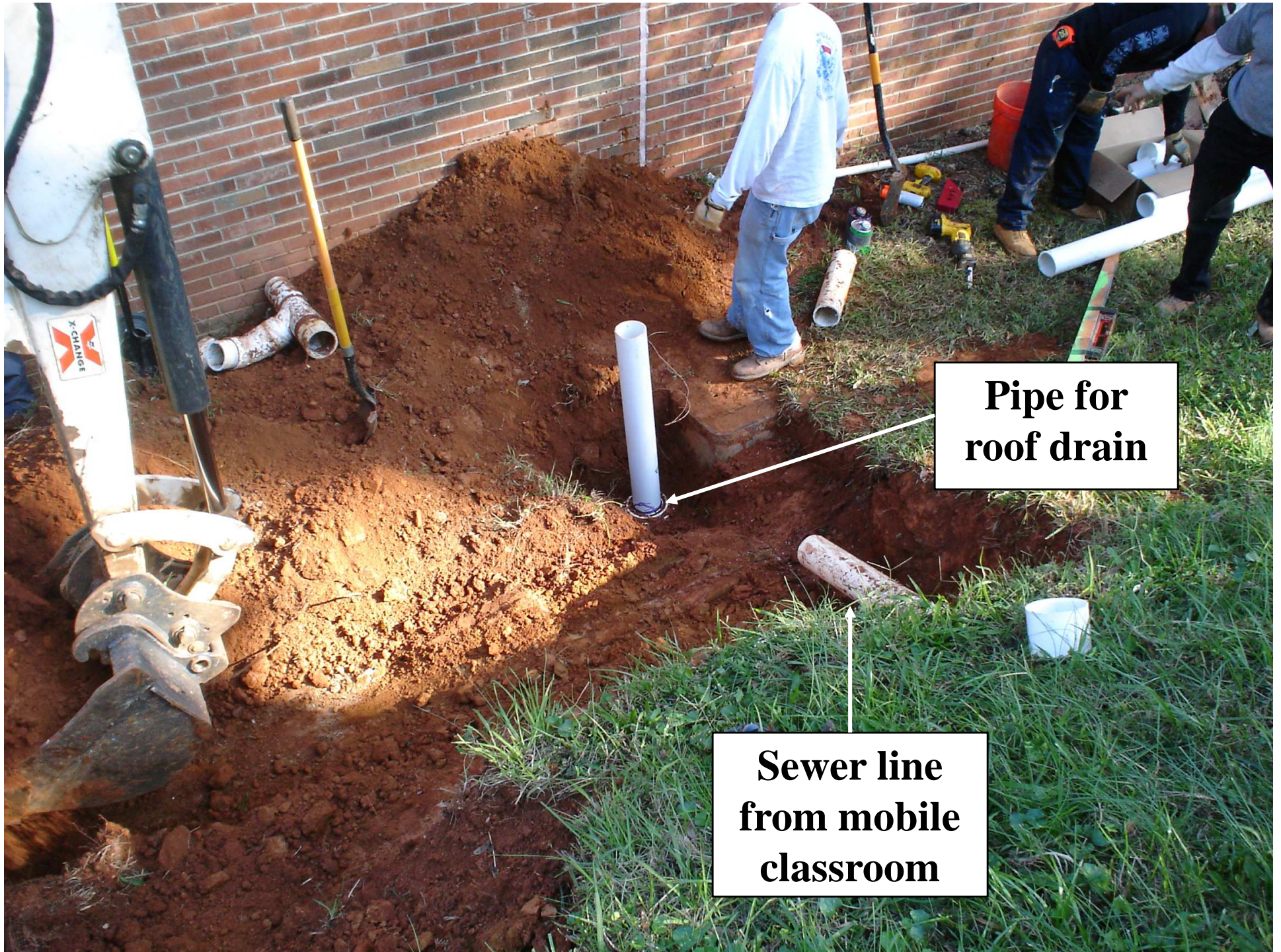






October 21, 2008: Villa Heights Elementary School at 800 Everett Place, Charlotte - Sewer Discharge to Storm Drain - 100 gallons per day for 760 days for an estimated total of 76,000 gallons -





**Pipe for
roof drain**

**Sewer line
from mobile
classroom**

November 7, 2008: Downs Road Transportation Staging Facility at 11751 Down Road, Charlotte - Sewer Discharge to Ditch - Amount Unknown but Discharged for 9 Years -



**November 17, 2008: Beverly Woods Elementary School at 6001
Quail Hollow Road - Sewer Discharge to Storm Drain -
Amount Unknown**

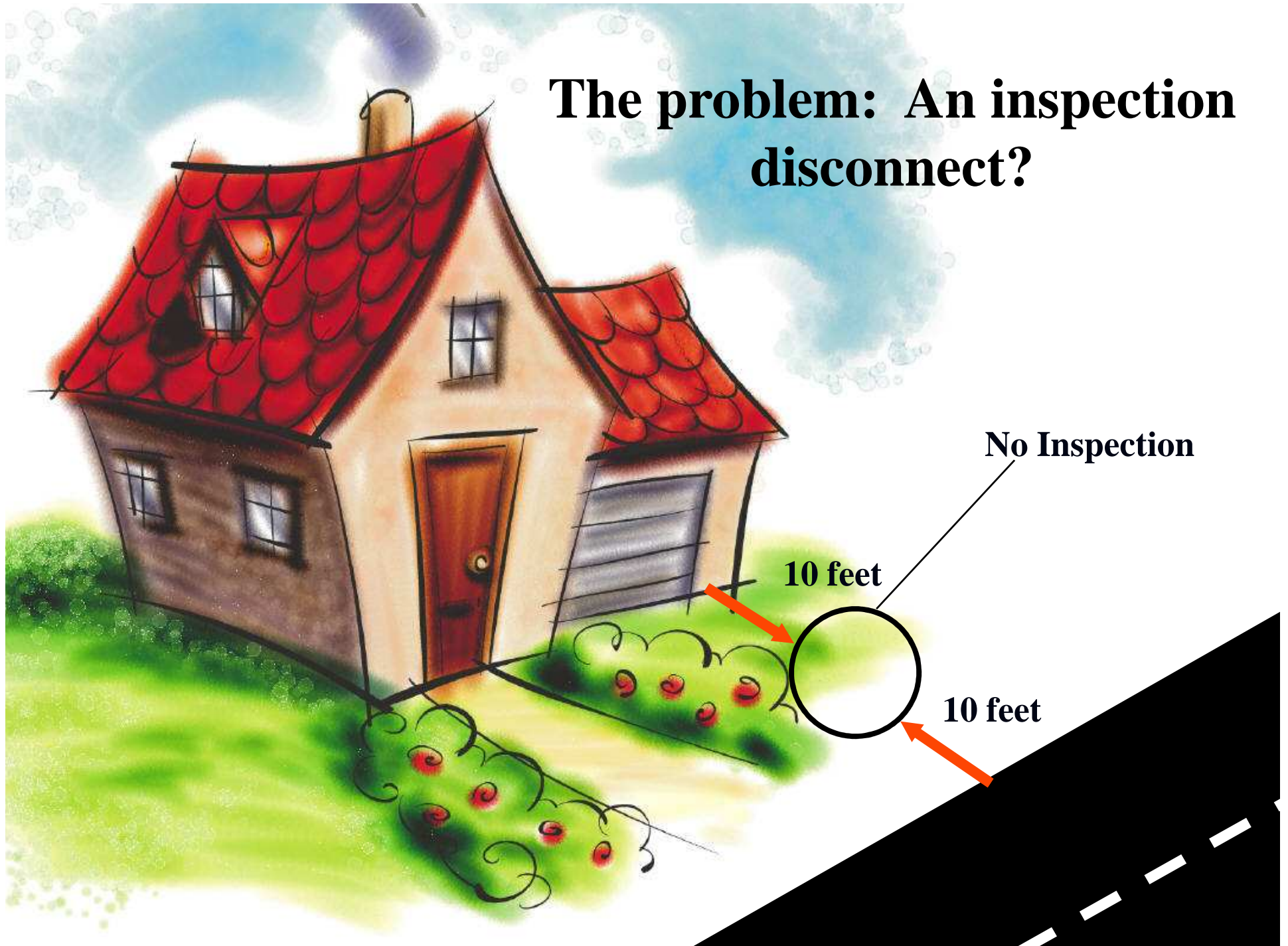


Compliance Costs



- Repair costs for the four (4) facilities = \$37,120
- Dye test costs for 89 facilities = \$66,000
- Total cost of compliance = \$103,120

The problem: An inspection disconnect?





Rusty Rozzelle

704-336-5500

<http://stormwater.charmeck.org>