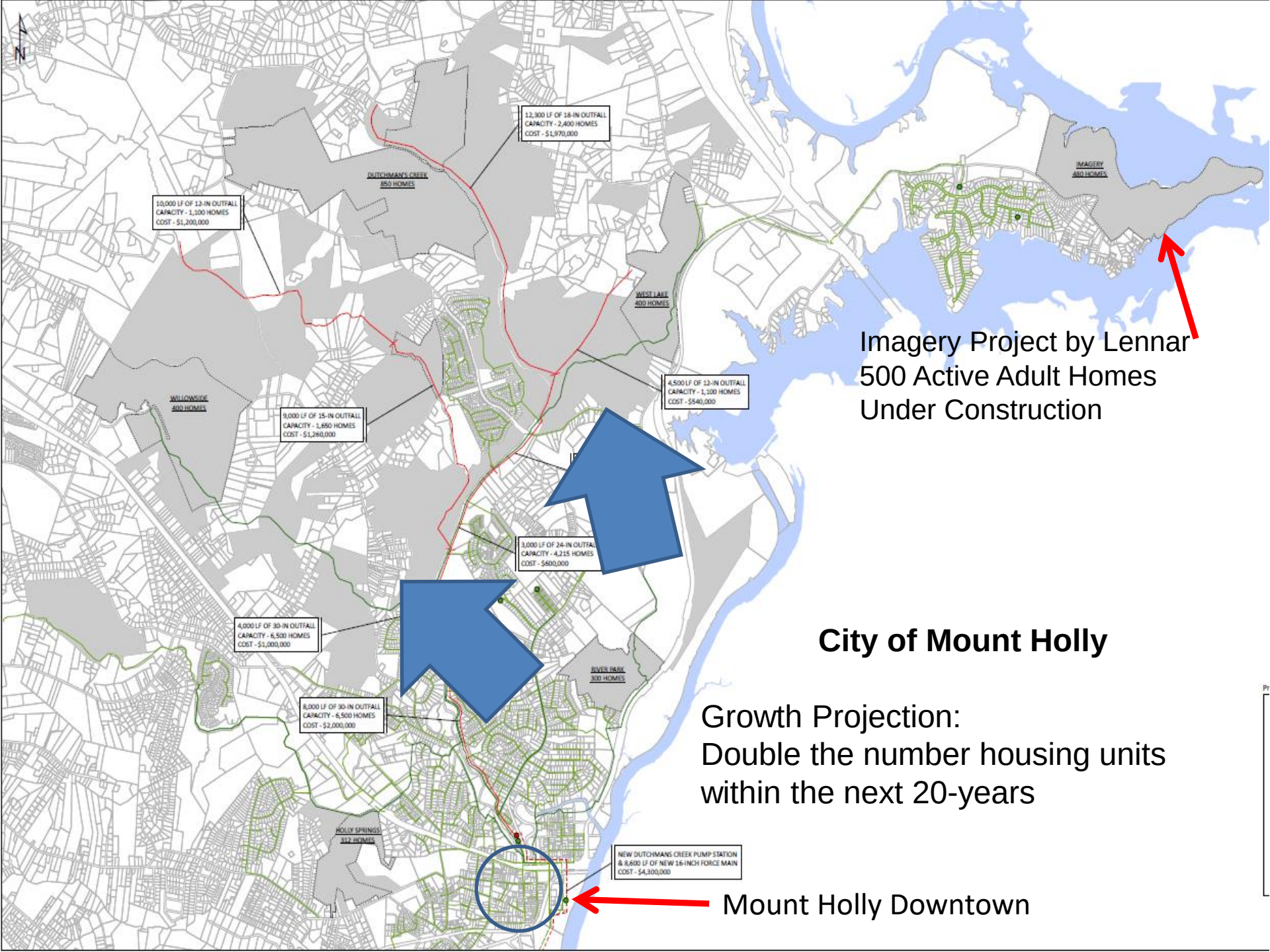
City Of Mount Holly

- Mount Holly received NPDES Permit on July1, 2005

- Receiving waters:
  Taylor's Creek,
  Fites Creek,
  Dutchman's Creek,
  Stanley Creek,
  South Stanley Creek
  within the Catawba River Basin


Municipal Parking Lot
City of Mount Holly Downtown
Population about 16,000
5 miles of Catawba River frontage
15 minutes to Charlotte Airport
Image Landsat / Copernicus



Imagery Project by Lennar
500 Active Adult Homes
Under Construction

City of Mount Holly

Growth Projection:
Double the number housing units within the next 20-years

Mount Holly Downtown

Stormwater Fee

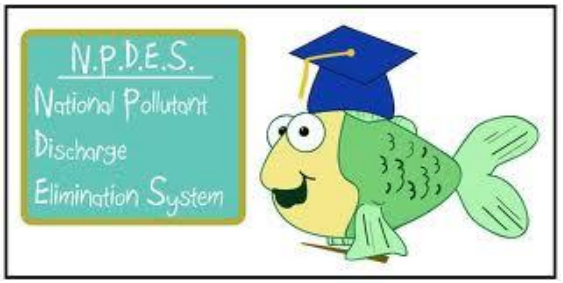
$2.50 / ERU (1 ERU = 5,000 sf impervious surface

FY ‘19 – ’20 Budget $220,000

Staff, professional fees, maintenance programs, drainage repairs, training, participation in

The Regional Stormwater Partnership of the Carolinas,

6 minimum control measures:



1. Public Education
2. Public Participation
3. Illicit discharge & elimination
4. Construction site runoff control
5. Post construction stormwater control
6. **Pollution Prevention / Good Housekeeping**

Mount Holly recently completed a new Public Works, Garage, and storage facility

The new North Fire Station had a typical detention basin to control stormwater.

The PW Facility used a combination of an infiltration trench and a level spreader

Municipal Facilities O & M Program – Mount Holly's Facilities Management Group has a detailed operation and maintenance program for all municipal buildings.

WTP and WWTP have their own operation and maintenance programs with standard operating procedures

Mount Holly retains the services of an outside training consultant to train City staff on regulatory responsibilities, safety and good

As the storm water flows over hard surfaces, it picks up anything in its path-oil, dirt, litter, leaves. As a result, storm water runoff often contains pollution levels that exceed acceptable health and water quality levels. Unfortunately, all this storm water pollution ends up in our

Fertilizers and herbicides should be applied in moderation. Excess amounts can be carried away by storm water, end up in water bodies and increase the amount of nitrates and phosphates in the water.

Oils and grease poured into a storm drain can reduce the drainage system's capacity. When it enters a water body, it blocks sunlight and decreases the oxygen which is needed by underwater plants and animals.

Soaps and detergents that enter into the storm drain system and go into water bodies coat fish gills and can suffocate fish and other aquatic animals.

Yard waste can contain fertilizers and herbicides. Leaves can clog storm drains and can result in standing water and flooding.

Pet waste contains dangerous bacteria and high levels of nitrates and phosphates. This can have negative effects on plant and animal life in our water bodies, but also increases bacteria (E. coli) levels in water making fishing and swimming dangerous.

What can you do?

- Pick up trash on the ground even if it is not yours. By doing so, you are preventing it from entering into the storm drain system.
- Plant a tree-it helps reduce storm water runoff. Trees that are native to NC are easier to maintain and require less fertilizer.

- Don't pour grease and oils into a storm drain.
- ALWAYS pick up after your pet.
- Allow grass clippings to decompose naturally on the lawn, it fertilizes the lawn and helps reduce clogged storm drains. You can also compost your clippings and leaves.
- Recycle or properly dispose of chemicals and automobile fluids and oils.
- Wash vehicles and machinery over your lawn or at a commercial carwash and not over paved surfaces.

- City's Stormwater Brochure outlining Good Housekeeping Practices

STORMWATER PRIORITIZATION WORKSHEET

PROJECT NAME :

Priority A

RIGHT-OF-WAY:

- STREET FLOODING
- PIPE BLOWOUTS
- DRAINAGE STRUCTURE FAILURE
- MISSING GRATES/COVERS
- STREET FAILURE/SINKHOLE
- SIDEWALK/DRIVEWAY FAILURE
- DITCH/PIPE BLOCKAGE

PRIVATE PROPERTY (WITH *direct* R/W RUNOFF):

(adjacent public system failure contributes to private property issue)

- LIVING SPACE FLOODING
- NON-RESIDENTIAL WITH ELECTRICITY
- DRAINAGE FEATURE FAILURE WITHIN 10' OF HOUSE

Priority B

RIGHT-OF-WAY:

- IMMINENT STRUCTURE FAILURE
- HEADWALL DAMAGE

PRIVATE PROPERTY (WITH *direct* R/W RUNOFF):

(adjacent public system failure contributes to private property issue)

- CRAWLSPACE/BASEMENT FLOODING

Priority C

RIGHT-OF-WAY:

- PIPE/DITCH SEDIMENTATION
- DEBRIS IN DITCH
- DRAINAGE STRUCTURE MINOR DAMAGE
- DITCH EROSION

DNQ (does not qualify)

- private property to private property runoff
- groundwater
- seepage in basements/crawlspaces
- springs
- yard flooding
- standing water
- bury pits
- downspouts
- private drainage systems
- lack of private drainage systems

	PUBLIC HEALTH/SAFETY	PEOPLE AFFECTED	SYSTEM DAMAGE / LACK OF SYSTEM	FREQUENCY OF PROBLEM	ENVIRONMENTAL IMPACT	INVESTMENT PROTECTION/ CONDITION OF SYSTEM
LOW (x1)	NEGLIGIBLE RISK	INDIVIDUAL	NEGLIGIBLE RISK	EVERY COUPLE YEARS	SYSTEM IMPROVEMENT W/NO EFFECT ON WQ	LESSER PRIORITY
MED (x2)	POSSIBLE RISK	STREET	IMMINENT FAILURE	FEW TIMES PER YEAR		NON REPAIR = IMMINENT FAILURE
HIGH (x3)	PUBLIC HAZARD	NEIGHBORHOOD	SYSTEM FAILURE OR LACK OF SYSTEM	EVERY RAIN EVENT	SYSTEM IMPROVEMENT WILL HELP WQ	FAILED/ NO SYSTEM

PRIORITY RANK

CATEGORY SCORE

RANKED BY _____

REQUEST DATE _____

City of Mount Holly is an old mill town which developed as mill's came and went.

Mount Holly's Stormwater Committee and Staff have a worksheet to prioritize existing problems / complaints/ issues.

This is important with the limited financial resources devoted to stormwater

Mount Holly has over 36 miles of ditch section roads that over the years have not been maintained:

Clogged driveway culverts
Filled in swales
Undersized driveway culverts

Roadside swale maintenance program includes reworking swales and replacing culverts if needed.

Unintended Consequences an Issue

Regulations for New Developments within the City promotes

Design creativity based on site criteria

Vegetative Buffers Required

100-ft. along Mountain Island Lake

50-ft along each bank of a perennial stream located in a critical area

30-ft. along each bank of a perennial stream located within the watershed overlay district as per Zoning Map

Stormwater discharge from public right of way infrastructure includes a plunge pool and rip rap swales to dissipate velocity, spread flow, and minimize or eliminate erosion

Mount Holly constructed a stormwater wetland to manage the flow from the City’s primary park area before discharging into the stream

Requiring structural stormwater facilities in new developments is becoming the norm.

We now have to focus on the long term maintenance and operation of each facility

Enforcement is the next significant issue to be addressed by local governments

Q & A