

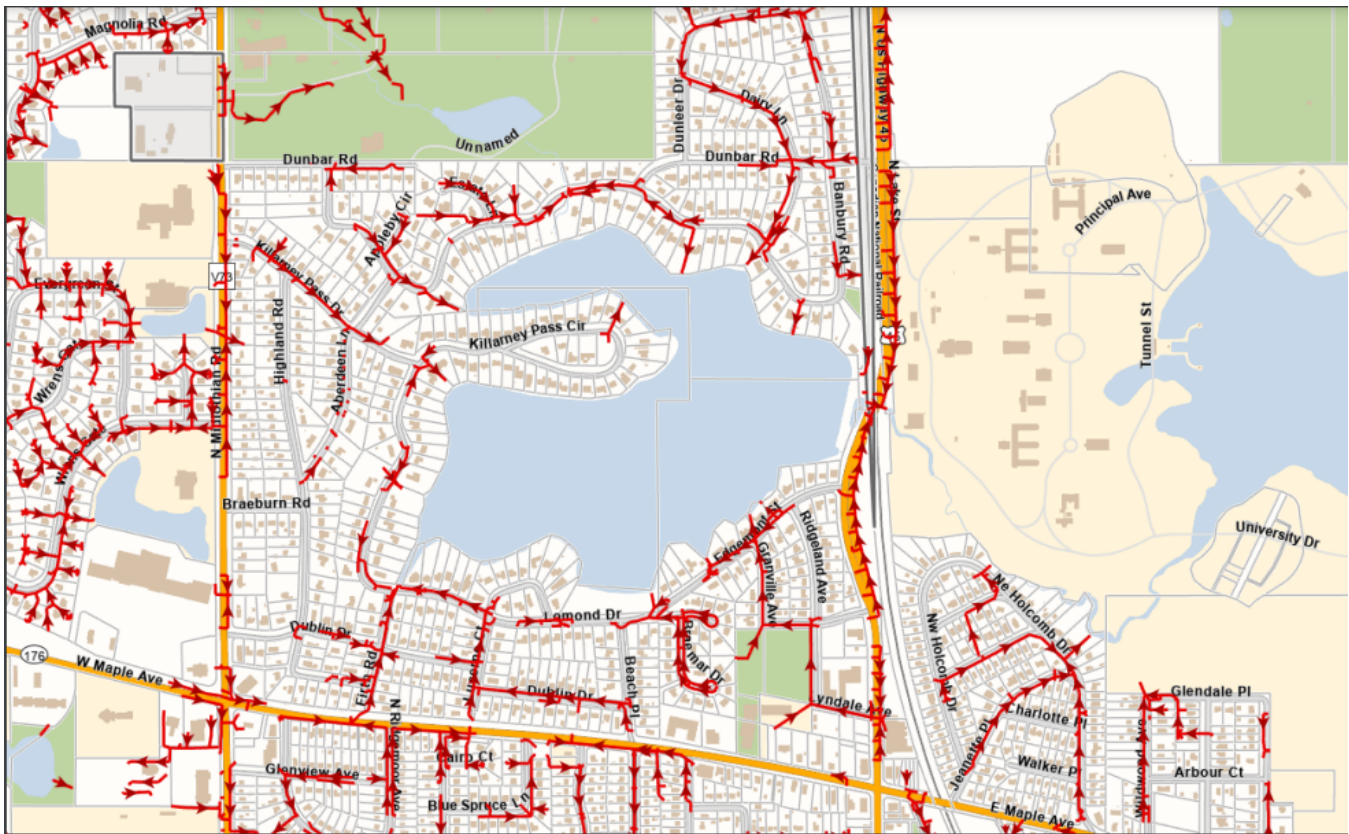


# Loch Lomond Storm Sewers - Where Do They Go?

LLPOA Lake Committee - 2023

## Where Do the Loch Lomond Storm Sewers Drain?

- **Most storm sewers in the Loch Lomond subdivision flow into Loch Lomond lake.**
- The map below is from the Village of Mundelein and indicates the location and direction of flow of the storm sewers in Loch Lomond subdivision.



## How Many Sources of Water Flow into Loch Lomond?

- There are ~14 locations where storm sewers and/or Bull Creek flow into Loch Lomond.
- **Bull Creek from Community Park is the most consistent and significant source of water flowing into Loch Lomond.**
- Most of the water sources west of Midlothian Road enter retention ponds before flowing into Loch Lomond. These retention ponds hold water for a long time and allow evaporation to reduce the amount of water eventually entering Loch Lomond.

## [A Closer Look Around the Lake](#)

### [North East](#)

- All of Dunleer, Dairy, Rye, half of Dunbar, and the NE part of Banbury flow into the NE corner of Loch Lomond.
- Route 45 south of Dunbar, a portion of Banbury, and the path next to the dam flow into the small pond east of the spillway. These do not appear to flow directly into Loch Lomond.



### [North](#)

- Banbury, east of Dunbar flows into the lake
- Banbury west of Dunbar, Banbury west of South Beach, and Estate Ln flow into the Bull Creek inlet at North Beach
- Banbury from Appleby toward Aberdeen, and down Banbury flow into the NW corner of the lake
- The west section of Dunbar flows into the south edge of Community Park at the base of the sled hill

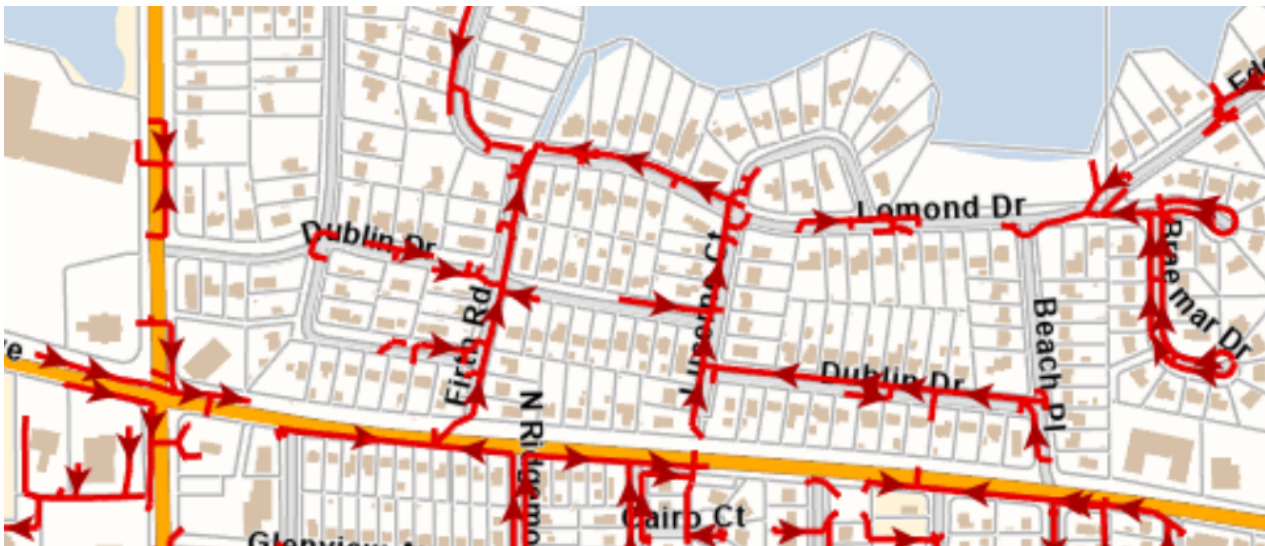


## East of Midlothian

- Most of the streets drain into the lake in three locations:
  - Killarney Pass Dr & Lomond
  - Lomond bridge south of Killarney Pass
  - Firth Canal
- The Library Pond, and the Retention pond south of the Fire Station may drain into Loch Lomond, but they also hold water which evaporates beforehand



## Firth to South Beach



- The SW corner sewers flow into the Firth Canal. This appears to include a portion from the intersection North of Midlothian & Route 176. It also appears to include a portion of 176 and Ridgeland (south of 176).
- Part of Lomond near South Beach drains into the lake just west of South Beach.
- Part of Lomond and Braemar drain into the lake just east of South Beach

### South East Corner

- The streets South East (Edgemont, Ridgeland, Granville, Lyndale) appear to drain into the lake in 3 locations
- It appears that Rt 45 drains to the East side of 45 and not into Loch Lomond



### Information & Other Resources

- Loch Lomond Storm Sewer Atlas: [https://drive.google.com/file/d/1PehacuAJ0-VSzoTZYh8ebjGol1QlyRfL/view?usp=drive\\_link](https://drive.google.com/file/d/1PehacuAJ0-VSzoTZYh8ebjGol1QlyRfL/view?usp=drive_link)
- Des Plaines Watershed: <https://www.lakecountyil.gov/2376/Des-Plaines-River-Watershed>
- EPA - After the Storm: A Citizen's Guide to Understanding Stormwater (2003) - (following pages)

**EPA - After the Storm: A Citizen's Guide to Understanding Stormwater (2003)**

**WHEN IT RAINS IT DRAINS**

*After the Storm*

For more information contact:

or visit  
[www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater)  
[www.epa.gov/nps](http://www.epa.gov/nps)

**EPA** United States Environmental Protection Agency  
 EPA 833-B-03-002  
 January 2003

**THE YEAR OF CLEAN WATER**  
 Celebrating 30 Years of the Clean Water Act

*A Citizen's Guide to Understanding Stormwater*

**WHEN IT RAINS IT DRAINS**

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### What is stormwater runoff?



Stormwater runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

### The effects of pollution

Polluted stormwater runoff can have many adverse effects on plants, fish, animals, and people.

- ◆ Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.
- ◆ Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.
- ◆ Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.
- ◆ Debris—plastic bags, six-pack rings, bottles, and cigarette butts—washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.
- ◆ Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish and shellfish or ingesting polluted water.




### Why is stormwater runoff a problem?



Stormwater can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly to a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and providing drinking water.



- ◆ Polluted stormwater often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

# Stormwater Pollution Solutions

## Residential



Recycle or properly dispose of household products that contain chemicals, such as insecticides, pesticides, paint, solvents, and used motor oil and other auto fluids. Don't pour them onto the ground or into storm drains.

### Lawn care

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

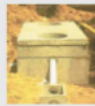
- ◆ Don't overwater your lawn. Consider using a soaker hose instead of a sprinkler.
- ◆ Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- ◆ Compost or mulch yard waste. Don't leave it in the street or sweep it into storm drains or streams.
- ◆ Cover piles of dirt or mulch being used in landscaping projects.



### Septic systems

Leaking and poorly maintained septic systems release nutrients and pathogens (bacteria and viruses) that can be picked up by stormwater and discharged into nearby waterbodies. Pathogens can cause public health problems and environmental concerns.

- ◆ Inspect your system every 3 years and pump your tank as necessary (every 3 to 5 years).
- ◆ Don't dispose of household hazardous waste in sinks or toilets.



### Auto care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping the materials directly into a waterbody.

- ◆ Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so the water infiltrates into the ground.
- ◆ Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.



Education is essential to changing people's behavior. Signs and markers near storm drains warn residents that pollutants entering the drains will be carried untreated into a local waterbody.

## Residential landscaping

**Permeable Pavement**—Traditional concrete and asphalt don't allow water to soak into the ground. Instead these surfaces rely on storm drains to divert unwanted water. Permeable pavement systems allow rain and snowmelt to soak through, decreasing stormwater runoff.

**Rain Barrels**—You can collect rainwater from rooftops in mosquito-proof containers. The water can be used later on lawn or garden areas.



**Rain Gardens and Grassy Swales**—Specially designed areas planted with native plants can provide natural places for



rainwater to collect and soak into the ground. Rain from rooftop areas or paved areas can be diverted into these areas rather than into storm drains.

**Vegetated Filter Strips**—Filter strips are areas of native grass or plants created along roadways or streams. They trap the pollutants stormwater picks up as it flows across driveways and streets.



## Commercial

Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and eventually enter local waterbodies.

- ◆ Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains.
- ◆ Cover grease storage and dumpsters and keep them clean to avoid leaks.
- ◆ Report any chemical spill to the local hazardous waste cleanup team. They'll know the best way to keep spills from harming the environment.

Erosion controls that aren't maintained can cause excessive amounts of sediment and debris to be carried into the stormwater system. Construction vehicles can leak fuel, oil, and other harmful fluids that can be picked up by stormwater and deposited into local waterbodies.

- ◆ Divert stormwater away from disturbed or exposed areas of the construction site.
- ◆ Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment and erosion controls and properly maintain them, especially after rainstorms.
- ◆ Prevent soil erosion by minimizing disturbed areas during construction projects, and seed and mulch bare areas as soon as possible.



## Construction

## Agriculture

Lack of vegetation on streambanks can lead to erosion. Overgrazed pastures can also contribute excessive amounts of sediment to local waterbodies. Excess fertilizers and pesticides can poison aquatic animals and lead to destructive algae blooms. Livestock in streams can contaminate waterways with bacteria, making them unsafe for human contact.

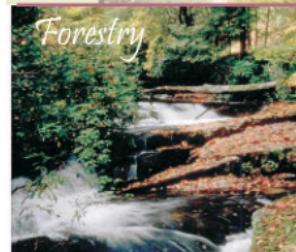
- ◆ Keep livestock away from streambanks and provide them a water source away from waterbodies.
- ◆ Store and apply manure away from waterbodies and in accordance with a nutrient management plan.
- ◆ Vegetate riparian areas along waterways.
- ◆ Rotate animal grazing to prevent soil erosion in fields.
- ◆ Apply fertilizers and pesticides according to label instructions to save money and minimize pollution.



## Forestry

Improperly managed logging operations can result in erosion and sedimentation.

- ◆ Conduct preharvest planning to prevent erosion and lower costs.
- ◆ Use logging methods and equipment that minimize soil disturbance.
- ◆ Plan and design skid trails, yard areas, and truck access roads to minimize stream crossings and avoid disturbing the forest floor.
- ◆ Construct stream crossings so that they minimize erosion and physical changes to streams.
- ◆ Expedite revegetation of cleared areas.



## Automotive Facilities



Uncovered fueling stations allow spills to be washed into storm drains. Cars waiting to be repaired can leak fuel, oil, and other harmful fluids that can be picked up by stormwater.

- ◆ Clean up spills immediately and properly dispose of cleanup materials.
- ◆ Provide cover over fueling stations and design or retrofit facilities for spill containment.
- ◆ Properly maintain fleet vehicles to prevent oil, gas, and other discharges from being washed into local waterbodies.
- ◆ Install and maintain oil/water separators.