

Stormwater Outfall Screening

What Is the Stormwater Program?

Many waterbodies in the United States were not meeting water quality standards after the implementation of the Clean Water Act. The source of some of the remaining pollution was stormwater runoff. The U.S. Environmental Protection Agency (EPA) implemented a two-phased stormwater program to improve water quality. Phase I implemented the National Pollutant Discharge Elimination System (NPDES), which pertains to medium and large municipal separate storm sewers (MS4s). This phase issues NPDES permits to facilities and industries, allowing them to discharge wastewater up to a certain concentration of particular pollutants. The Phase II program covers MS4s in smaller, more urbanized areas. This Phase II program helps eliminate and reduce pollutants in stormwater entering the storm sewers in your neighborhood. The Lake County Stormwater Management Department (LCSMD) ensures compliance with the Phase II program for its member communities. Funded by a stormwater user fee, the program and its partner agencies, including the Lake County General Health District, ensure compliance with all aspects of the permit and improve water quality.

Pollutants in Urbanized Areas

An illicit discharge is any discharge to an MS4 that is not composed entirely of stormwater. There are many pollutants in stormwater that originate from households in urban areas. These pollutants include:

- sediment
- grass clippings
- fertilizers
- pesticides
- pet waste
- litter
- road salt
- car washing soap
- motor oil
- antifreeze
- sewage from septic systems or leaking infrastructure

The pollutants have major harmful effects once they enter rivers, lakes and streams. They contaminate our fresh water for drinking and destroy wildlife habitat. Only you can prevent these pollutants from entering stormwater in your neighborhood. Be environmentally conscious, clean up your trash, pick up after your pets, only fertilize your lawn when necessary, and properly dispose of auto fluids.

What is Stormwater?

Rain, sleet and snow melt flows from our roofs, lawns, and driveways into the street or into drainage ditches where it enters the storm sewers through drains and catch basins. This water flows untreated through an outfall and directly into a lake or stream, carrying pollutants with it.

What is an Outfall?

An outfall is the point where stormwater from pipes and ditches, also known as the MS4, empties into a river, lake or stream. This point is where the water is sampled for pollutants and illicit discharges.



The Municipal Separate Storm Sewer System (MS4) is owned and maintained by the community you live in. All outfalls in Phase II Communities must be inspected in accordance with the stormwater permit.



Role of the Health District

The Lake County General Health District performs routine outfall screenings and investigations of illicit discharges in municipal separate storm sewer systems (MS4). Authority comes from Memorandums of Understanding with various agencies, Rules and Regulations, and local illicit discharge ordinances. All spills or discharges must be reported to the Health District.

Outfall Screening Process Performed by a Stormwater Sanitarian

- Screening is performed after three days of dry weather. It is more likely that water flowing during dry weather is due to an illicit discharge.
- Locate outfall using maps.
- Note time, current weather conditions, type of outfall, and infrastructure measurements.
- Perform visual inspection of the outfall, looking for damage or evidence of pollutants or illicit discharges. Look for staining and discoloration.
- If there is flowing water, measure the flow rate and take a sample for further analysis. Sample is analyzed using test kits at sampling site.
- Analyze sample for various pollutants such as nitrates, phosphates, chlorides, and total dissolved solids.
- If an illicit discharge is found or there is evidence of pollutants, further sampling and investigation in the area will be performed.



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**Lake County
General Health District**

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