

frequently asked questions

Los Angeles County Flood Control District
Water Quality Funding Initiative



On May 13, 2008, the Los Angeles County Board of Supervisors voted to move forward with a comprehensive effort to clean up our rivers, lakes, beaches, and oceans. This initiative, sponsored by the Los Angeles County Chief Executive Office and the Los Angeles County Flood Control District (District), aims to establish a dedicated, long-term funding source—a stormwater drainage fee—to address stormwater and urban runoff pollution. If Los Angeles County voters approve, this new revenue source would provide for facilities to clean up runoff and for ongoing maintenance to keep those facilities functioning far into the future

1. What is the problem with the water in rivers, lakes, beaches and oceans in the Los Angeles area?

Virtually all of the rivers, lakes, beaches, and coastal waters in the Los Angeles area are contaminated with toxins and health-threatening pollutants at levels above established public health standards. As a result:

- There were 2,000 beach closures in 2007 due to bacterial contamination. Closings mean the water is dirty enough to cause gastroenteritis, dysentery, hepatitis, respiratory ailments, and other serious health problems.
- About 500,000 children and adults contract a gastrointestinal disease after swimming at a Los Angeles County beach or lake every year.
- Enough trash hits the beach every year, over 16 million tons, to fill Dodger Stadium two stories high.
- A floating raft of trash twice the size of Texas and originating from around the Pacific Ocean now floats between California and Hawaii.
- More than 14,000 seals, sea lions, and dolphins have landed sick or dead along the California shoreline in the last decade.

2. Where is the pollution coming from?

Most water pollution comes from untreated water that flows every day off Los Angeles County's 3,000 square miles of yards, streets, and parking lots. Think of the County as a concrete bowl that slopes toward the ocean, then add 10 million residents and all the waste they produce. When it rains or when people over water their lawns or hose down their driveways, water washes over the ground and flushes the waste of everyday life down to the ocean. In fact, runoff can contain over 90 types of pollutants such as trash, pet feces, bacteria, motor oil, oxygen-choking fertilizers and pesticides, and toxic heavy metals such as lead, mercury, copper, and arsenic.

3. What is the difference between the storm drain system and the sewer system?

In Los Angeles County, the storm drain system of pipes and channels is completely separate from the sewer system. Sewer systems transport the water used inside homes and



businesses (toilets, showers, sinks, etc.) to a wastewater treatment plant. The plant treats water and discharges it either to the storm drain system or to the ocean. Wastewater treatment plants are extremely costly and are, therefore, usually designed to handle only the water used inside homes and businesses.

Storm drain systems are designed to prevent outdoor flooding and, therefore, must carry large volumes of water. Rain or other sources of water flow over land and streets, into the storm drain system, and then directly into the ocean. That water is not treated—anything that enters the storm drain system will eventually flow directly into the ocean.

4. What is the difference between dry-weather runoff (urban runoff) and wet-weather runoff (stormwater runoff)?

Urban runoff and stormwater runoff both involve water flowing over the land and into the storm drain system. Urban runoff occurs during periods of dry weather and is caused by activities such as overwatering of lawns, washing cars in driveways, and hosing down driveways. As the water washes over chemically fertilized lawns, parking lots, and streets it picks up pollutants. The volume of water is small so the pollutants it carries are highly concentrated.

Stormwater runoff occurs when it rains. Rain falls and large volumes of water flow over the land and into the storm drain system taking with it the same pollutants picked up through urban runoff; however, since there is more water when it rains, the pollutants are less concentrated.

5. How is water quality regulated?

The Clean Water Act is the primary Federal law that governs water quality in our creeks, rivers, lakes, and the coastal oceans. Its purpose is to protect human health and enhance beneficial uses of water such as aquatic life, fisheries, drinking water, recreation, and agriculture among others.

The United States Environmental Protection Agency (EPA), in partnership with State EPAs, manages the National Pollutant Discharge Elimination System (NPDES), which regulates what substances can go into our waterways. NPDES specifically prohibits pollutants carried in a storm drain system that cause or contribute to violating clean water standards—in both dry and rainy weather.

The EPA has determined the maximum amount of various pollutants that can go into water and still meet water quality standards. Each pollutant has its own specific Total Maximum Daily Load (TMDL), and every City and unincorporated area must meet these TMDL requirements.

6. Which agencies make sure our water is clean?

The California State EPA has a number of Regional Water Quality Control Boards (Regional Boards) that regulate and enforce clean water at the local level. In order to operate their storm drain systems, cities, the unincorporated areas, and the District must obtain a Municipal Stormwater Discharge Permit from the Los Angeles Regional Board. Under the permit, cities, the unincorporated areas, and the District itself have a responsibility to protect clean water.

Although the District does not generate polluted runoff itself (its facilities merely transport the polluted runoff from one point to another), as a regional agency with ties to each of the individual cities and the County, it is in a unique position to coordinate efforts and develop partnerships between everyone involved to ensure that taxpayers' money is used to clean up polluted runoff in the most cost-effective ways possible.



7. What is the Flood Control District and what does it do?

The District is a regional agency responsible for providing flood protection and water conservation. The District was created by the California State Legislature in 1915, after a disastrous regional flood took a heavy toll on lives and property.

The District is governed as a separate entity by the County of Los Angeles Board of Supervisors. It covers more than 3,000 square miles, 85 cities, and about 2.1 million land parcels. It operates and maintains regional flood control, water quality, and water conservation facilities including:

- 15 major dams to both prevent flooding and increase available water supply.
- 398 debris basins that store floatable debris, sediment, boulders, and mudflows during storms to prevent flooding and damage downstream.
- 529 miles of open channels and 2,800 miles of underground storm drains to convey water to the ocean and prevent flooding.
- About 77,900 catch basins that collect water from the surface and direct it into underground storm drains.
- 46 pump plants that lift water out of low-lying areas that would normally flood and deposit storm drains where it can flow with gravity to the ocean.
- 27 spreading grounds covering 1,989 acres that retain water diverted from rivers and allow it to percolate into the ground where it is naturally filtered.
- 22 miles of sea water barrier projects that prevent the intrusion of seawater into the fresh water supply.

The District also inspects storm drains for illegal connections and discharges.

8. Why is the District taking on this effort?

Individual cities and the unincorporated areas do not have the funds to address TMDLs. The Los Angeles County Flood Control District, as a regional entity providing flood protection to the cities and unincorporated areas, recognizes that water quality is a problem that affects all jurisdictions. As a regional agency, the District is in a unique position to facilitate a solution that works for the whole community. The District intends to collaborate and partner with the cities to lead the effort to identify and implement watershed level solutions to the water quality problem.

9. How would the District address stormwater and urban runoff pollution?

The District's approach to improving water quality is based on three guiding principles:

- Stormwater is one part of the natural water cycle. Especially today when we are facing a serious water supply issue, we can do more with stormwater than quickly sending it to the ocean. For example, by retaining it in engineered basins, we can allow it to naturally filter into the ground to increase our supply of drinking water.
- Water quality solutions, whenever feasible, should be multiobjective, incorporating natural filtration and groundwater (drinking water) recharge, parks and green infrastructure, open space, and riparian and aquatic habitat restoration.
- The most effective treatment strategy involves partnerships with many stakeholders, including cities, unincorporated areas of the County, nongovernmental entities, environmental organizations, and water resources agencies in which all parties work



together to develop cost-effective solutions to clean up our rivers, lakes, beaches, and oceans.

10. What is a watershed-wide approach?

The District believes that the most effective runoff treatment strategy involves partnerships with many stakeholders where individual entities work together to develop cost-effective solutions. The District does not think it is practical or economical to create 25 Hyperion-like treatment plants nor is it practical for three neighboring cities to build projects side by side. Rather, the District feels that a linked system of projects should be created to address water quality at the watershed and subwatershed level. Projects could be strategically located within each watershed to economically treat runoff, thereby benefiting each of the communities that directly contribute pollution in that watershed. Typically, the water quality facilities the District has already put in place each treat about a 2-square-mile area. As most cities are larger than that 2 square miles it is very likely that every city will have several projects located within their boundaries.

11. What is the District doing now to help clean up the pollution?

The District has already installed diversions on the 18 major storm drains that send urban runoff into Santa Monica Bay. During dry days, urban runoff is diverted into the sewer system's wastewater plants and treated before flowing to the ocean. It is not possible to do this type of treatment during rainy days since the volume of stormwater runoff is much greater. Instead, stormwater runoff must be sent directly to the ocean without being treated.

The District has also installed 441 catch basin trash excluder devices in cooperation with many coastal cities to further reduce trash getting into the storm drain system and ultimately washing back up on beaches.

In addition, the District, through partnerships that achieve separate but united goals, has completed many successful state-of-the-art, multijurisdictional, multiobjective prototype projects that could be implemented regionally with revenue raised from this proposed fee.

- **The Dominguez Gap Wetlands, Long Beach:** Once a barren and lifeless drainage ditch off limits to the public, it is now a 50-acre wetlands that can treat up to 3.2 million gallons per day of stormwater and urban runoff. Wetlands naturally remove up to 80 percent of pollutants such as nutrients, heavy metals, oil, greases, and fecal coliform before waters enter the Los Angeles River and the Pacific Ocean. The restored wetland includes woodland and riparian habitat, pedestrian and equestrian trails, bird observation decks, and a bike trail rest station.
- **Marie Canyon, Santa Monica:** After earning the dubious distinction as one of the State's worst beaches for water quality, Puerco Beach in the North Santa Monica Bay has been thoroughly cleaned up by the Marie Canyon Water Quality Improvement Project. Within its first month of use in fall 2007, the treatment system, which can treat 100 gallons per minute of dry-weather runoff and is composed of six filtration units and an ultraviolet light disinfection system, immediately reduced fecal coliform, enterococcus, and other indicator bacteria and viruses by 99.9 percent.
- **Tujunga Wash Greenway, San Fernando Valley:** The concrete channel that delivers runoff from the Hansen Dam to the Los Angeles River now has one mile of restored natural stream that enhances water quality, brings back native plants and habitat for fauna, creates



