



L.A. Stormwater

Improving the Water Quality of L.A.'s Lakes, Rivers and Oceans



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Mother (Nature) Always Knows Best



Staying ahead of the curve has always been important to the Los Angeles Stormwater Program, and that means adopting new stormwater management practices and in some cases completely rethinking how we look at stormwater pollution itself. One such approach is Low Impact Development (LID), which is a design principle modeled after nature, managing rainwater where it falls.

The premise behind LID is pretty simple – mimic a site's predevelopment hydrology by using techniques that filter, store, evaporate and contain runoff. The overarching philosophy for LID is to design solutions so that urban runoff is handled where the rain hits the ground, not at the end of the pipe. Such designs have numerous benefits over conventional stormwater management practices that include economic sustainability, the protection of public health, the improvement of community livability and the enhancement of our local environment. It's not just about going green for the sake of going green; it's about being smart when doing so.

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Prop 0 Update



Turning Trash into Treasure

A former landfill that now cleans runoff? Yes, it is true. Read how it's being accomplished.

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Forward Thinking Today for a Clean Tomorrow



Stormwater Program Manager explains how the City's approach to treating stormwater pollution is leading the wave of the future.

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The Stormwater Program's Vision for the Future



What will stormwater treatment look like in 30 years? Take a peek inside the LA Stormwater Program to see what community and government stakeholders have in store.

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Program Manager Recognized for Outstanding Leadership



Shahram Kharaghani recently received the Environmental Steward of the Year Award from the South Bay Business Environmental Coalition.

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Forward Thinking Today for a Clean Tomorrow *By Shahram Kharaghani*



In the 1930s city leaders struggled with ways to deal with the population boom of the southland as well as the flooding in the Los Angeles River watershed that followed development. Several large rain events in the early 20th century had caused massive flooding, loss of life and property damage, necessitating a rethinking of flood control for Los Angeles and its growing populace.

In the early 1900's, the school of thought and training was to engineer structures to effectively collect and quickly convey storm water runoff away from the city directly to the ocean. The rivers were deepened and paved with concrete over the years, creating a storm drain system that allowed developers to build closer to the river and flood risks were greatly diminished. This effective flood control system, unfortunately, presents Los Angeles with many pollution challenges. Today, we now understand the role natural systems perform in flood control and pollutant reduction.

That's why the Los Angeles Stormwater Program is focused on pushing the envelope, working to ensure that we are implementing forward thinking programs as a way to tackle the city's stormwater pollution challenges. Many of these programs seek to utilize natural approaches to storm water management and pollution reduction. In this issue of LA Stormwater you'll read about different initiatives the City is working on that range from a multi-use stormwater project that transforms a former landfill into a park to a program that addresses urban runoff and water supplies through low impact development solutions.



Echo Park Lake is getting a multi-million dollar makeover that will dramatically reduce stormwater pollution in the area.

Like the early leaders of LA, we continue to face many stormwater related challenges – challenges that we believe can be met by developing and implementing forward thinking ideas and programs today to make our communities, waterways and local bays cleaner and safer for the Angelenos of tomorrow.

Sincerely,

Shahram Kharaghani
City of Los Angeles Stormwater Program Manager



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Mother (Nature) Always Knows Best

Recently the City of Los Angeles City Council adopted a Green Streets Initiative that will incorporate numerous LID elements to manage runoff throughout the city. The Green Streets Initiative will implement projects in various open space areas such as streets, parkways, alleys, and parking areas. By infiltrating urban runoff at different points throughout the city's various watersheds, water does not enter the storm drain system where it flows to the ocean untreated.



Native vegetation separates the sidewalk and the street, capturing regular urban runoff before it reaches the storm drain system.

"Our Green Streets Initiative will serve as a blueprint on how to effectively manage stormwater pollution and increase the water supply," says Wing Tam, Bureau of Sanitation Green Streets Initiative project manager. "Addressing the issue before it becomes a problem is the best, most cost-efficient approach to dealing with urban runoff in Los Angeles. LID has the potential to have many positive benefits to our local communities."

According to Community Conservancy International, nearly 40 percent of the needs for cleaning polluted runoff could be met by implementing LID projects on existing public grounds county-wide. Additionally, according to an August 2008 National Resources Defense Council report, LID projects implemented county-wide could save 41,000 to 83,000 acre/foot of imported water per year through groundwater recharge and water capture and reuse.

LID is just one facet of the City's efforts to deal with stormwater pollution at the source. The application of LID to new developments is easier to apply than to rebuild the city's existing infrastructure. As a result, areas that have already been developed require different ideas to ensure that they are striving to replicate nature's model of treating rainwater where it falls.

In these instances the City is implementing initiatives such as the *Standard Urban Stormwater Mitigation Plan (SUSMP)* that addresses post-development stormwater pollution and peak flows from new and re-development projects. Other initiatives include the *Downspout Disconnection Program* that partners with local homeowners to capture rainwater with rain barrels, and green street projects that implement innovative local solutions from rain-catching cisterns to porous pavement on sidewalks to rain gardens that store stormwater in makeshift ponds to wetlands systems at parks. It is these types of neighborhood solutions that will solve our stormwater pollution problems and address our water supply needs.

It is the City's belief that the tenants of SUSMP and the green street projects, along with the objectives of low impact development, will together help guide our city toward a sustainable stormwater future, where rainwater once again becomes the invaluable resource that Mother Nature intended.



The Stormwater Program's Plan for the Future



Board of Public Works Commissioner Paula Daniels closes the workshop by thanking stakeholder participants.

once projects and programs get rolling. The sense of partnerships that have developed won't be there down the road if non-profits and consultants don't continue to have a voice."

The first workshop held in June 2007 laid out the scope and development of the WQCMPUR and provided a forum for stakeholder discussion on the next steps. During the second session in August 2007, the audience broke up into four groups to make suggestions on how to improve the City's runoff management.

During the third and final workshop held in December 2007, the Public Review Draft of the Plan was presented and handed out to all the attending stakeholders with a request for their comments and suggestions. Final comments and recommendations were provided by the Mayor's Office, Council Districts 1 and 11, the Office of the Chief Legislative Analyst, the Board of Public Works, and the Bureau of Sanitation. All comments are being incorporated into the document. The final WQCMPUR will be scheduled for Los Angeles City Council approval in early 2009.

"The stakeholder workshops were very productive and provided a wealth of ideas and suggestions," says Stormwater Program Manager Shahram Kharaghani. "Many of those suggestions can be found in the WQCMPUR. This document can truly be seen as a citywide document, one that we will use to guide our work for the next 30 years."

WQCMPUR documents will soon be available to everyone via the Stormwater program's website at LAstormwater.org.

The development of the City's Water Quality Compliance Master Plan for Urban Runoff (WQCMPUR) began in early 2007 with the full involvement of the City and our community stakeholders. Three workshops were attended by committed and concerned citizens and organizations from City departments, council districts, environmental organizations, regulators and other government agencies in the area.

The WQCMPUR provides a description of the Los Angeles watersheds, the concerns about the quality of urban runoff, the ongoing City efforts to address those concerns, a strategy for future urban runoff management over the next 20 to 30 years, and a financial plan to support this strategy. The primary goal is to meet water quality regulations.

"Implementation of the WQCMPUR will lead to clean rivers, lakes, beaches and bays, increased local groundwater supplies, and greener communities," says Mark Gold, president of Heal the Bay.

Workshops to help develop the WQCMPUR were held at the Los Angeles River Center and were attended by approximately 100 stakeholders. Objectives of the meetings included informing the stakeholders of the ongoing progress of the WQCMPUR and receiving their input during development. Much of the participants' suggestions have found their way into the final documents.

"It was great to see City staff involved in all stages of the plan's development," says Paul Herzog, an independent environmental consultant who participated in the stakeholder meetings. "My hope is that the relationships established during the process continue to grow



Stakeholders give WPD management feedback on the Plan during the final meeting.

Prop O Update

Turning Trash into Treasure

It may be hard to believe that a municipal landfill could one day be transformed into a public park that helps reduce water pollution and increase water supply, but it's true. The former Sheldon Arleta-Landfill is in the throes of a major conversion that will turn this Los Angeles landfill into a multi-use recreational space that will simultaneously clean up the area's runoff. It will be named after labor and civil rights leader Cesar Chavez.

Once completed, the 44-acre Cesar Chavez Recreational Complex in Sun Valley will not only restore ground water supplies and clean up dirty urban runoff, but also provide the public with basketball courts, baseball fields, bike paths, picnic tables, children's play areas, and other community amenities. Divided into three phases of construction, the project utilizes the forward thinking idea of retooling an existing City facility into a park with the capacity to provide much-needed green space, recharge ground water levels and reduce polluted urban runoff flowing into the LA River.

Phase I of the project is nearing completion. It will restore the water spreading capacity in the adjacent Tujunga Spreading Grounds, currently operated by the Los Angeles County Department of Public Works, by renovating the existing landfill gas collection system. "Since Phase I is directly related to the improvement of water quality, the Proposition O Clean Water Bond program provided more than \$3 million dollars to support this phase," states Cynthia M. Ruiz, president of the Board of Public Works and Proposition O Administrative Oversight Committee member. "Directing stormwater runoff from rainwater into the ground also provides much needed relief for local potable water demands," continued Ruiz.



These stormwater infiltration devices will ultimately replenish groundwater below the park



Early estimates show that this project will significantly increase the water spreading activities at the Tujunga Spreading Grounds from the current 11,000 acre-foot/year up to 22,000 acre-foot/year in capturing the rainwater. An added bonus will be the use of the captured rainwater to irrigate the city-block-sized park using enhanced irrigation methods.

Phase II of the project will consist of extensive grading and earthwork to establish proper drainage pathways for the complex, and Phase III will involve the development of the large park and recreational areas. In addition to Proposition O, the project is also being funded by Proposition K, Proposition 40, Proposition 12, the Los Angeles Department of Water and Power, and the Urban Development Action Grant Program.

Stormwater Program Manager Recognized for Outstanding Leadership

The South Bay Business Environmental Coalition (SBBEC) honored Shahram Kharaghani, City of Los Angeles Stormwater Program Manager, as the Environmental Steward of the Year for playing a vital role in helping to protect water quality in the Los Angeles area by reducing stormwater pollution. The SBBEC presented the award to



Kharaghani (left) receives the SBBEC award for The Environmental Steward of the Year.

Kharaghani at its 8th annual environmental awards event on September 24, 2008 where numerous businesses, individuals and organizations were recognized for working hard to clean and protect our local environment.

“It was an honor to receive this prestigious SBBEC award,” said Kharaghani, “However, the work that we do is only as good as the team that carries out the initiatives, and that team doesn’t just include Stormwater program staff and myself, but all of the engaged residents of Los Angeles.”

Kharaghani and the Watershed Protection Division (WPD) were acknowledged as a national leader in developing sustainable methods for reducing water pollution and utilizing low-impact neighborhood upgrade concepts such as green streets, increased use of infiltration such as porous pavement, the Downspout Disconnection Program that allows for the reuse of rainwater and reduces runoff, as well as low-flow diversion projects (LFDs) that divert polluted urban runoff to the sanitary sewer system for treatment and discharge.

Additionally, the SBBEC recognized the WPD’s Water Quality Compliance Master Plan for Urban Runoff that outlines the efforts necessary to meet urban runoff regulatory requirements over the next 20 years. Also honored was the \$117 million Proposition O-funded Machado Lake project for the community effort in restoring the wetlands habitat for migratory birds.

“Our work in reducing stormwater pollution is on-going, but it’s nice to be recognized for being on the right path,” said Kharaghani.

City of L.A. Stormwater Program Resources

Recycling & Hazardous Waste Disposal

City of Los Angeles
(for businesses)
(800) 98-TOXIC / 988-6942

City of Los Angeles
(for residents)
Stormwater Program Hotline
(800) 974-9794

Los Angeles County
(for residents)
(888) CLEAN-LA / 253-2652

To Report Illegal Dumping or Clogged Catch Basins

City of Los Angeles
Stormwater Program Hotline
(800) 974-9794

Los Angeles County
Department of Public Works
(888) CLEAN-LA / 253-2652

To Obtain Free Educational Materials

City of Los Angeles
Stormwater Program Hotline
(800) 974-9794
LAstormwater@LACity.org

One Call to City Hall: 3-1-1



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