SUN VALLEY WATERSHED
MANAGEMENT PLAN

Efficient Resource Management in a Highly Urbanized Watershed

Presented By: County of Los Angeles Department of Public Works; Stacie Nakao
Watershed

INfiltration
Natural (permeable) surface
More water soaks into ground

Part of Neighboring Watershed

The Longclean River Watershed
Green-colored area drains to the Longclean River

Runoff
Hardscape (impermeable)
More water runs over surface

Divide
Ridgeline separates watersheds
“Divides” water among neighboring watersheds
Infiltration

- Precipitation
- Hard surfaces (more runoff)
- Permeable surfaces (more infiltration)
- Water department
- Unsaturated zone
- Water table
- Aquifer (groundwater)
- Infiltration
- Well
Sun Valley Watershed Background

- 2,800 acres (4.4 square miles)
- Tributary to the Los Angeles River
- Highly Urbanized
  - Active Gravel Mines and Landfills
  - Numerous Auto-dismantling Operators
  - Other Commercial and Industrial Land Uses
Flooding in Sun Valley

Light Rainfall (Dec. 2002)
Other Environmental Problems

- Decreasing Water Supply
- Increased Air Pollution
- Decreased Wildlife & Aesthetics
- Increased Water Pollution
Multiple Objectives Leads to Multiple Benefits

Single Objective

Multiple Objectives
Or
Multipurpose
The mission of the Sun Valley Watershed Stakeholders Group is to solve the local flooding problem while retaining all stormwater runoff from the watershed, increasing water conservation, recreational opportunities, and wildlife habitat, and reducing stormwater pollution.
Over 65 Members At the Table

- LACDPW
- TreePeople
- CALFED
- LADWP
- Watermaster
- Vulcan Materials
- City Rec. & Parks
- LAUSD
- City of L.A.
- Watermaster
- City of Burbank
- Elected Officials
- RWQCB
- Property Owners
- Community Groups
Alternative Analysis Process

- Opportunities Identified throughout watershed
- Alternatives narrowed down to four
  - Each alternative contains a different set of components to reach goals of mission statement.
- Determine costs and benefits of each alternative

Hydrologic Analysis

Groundwater Modeling
Alternative Components
Sun Valley Park Multiuse Project

- Flood Reduction
- Improved Water Quality
- Water Conservation
STU = Settling Treatment Unit
MTU = Metals Treatment Unit
IB = Infiltration Basin
Underground Infiltration Basins

SUN VALLEY PARK RECHARGE BASINS

NOT TO SCALE
Vegetative Swale

Existing

Proposed
Recreational Enhancements

Existing

Proposed

Sports Lighting
Valley Steam Plant

- Groundwater Recharge
- Water Quality Enhancements
- Flood Reduction on San Fernando and Tuxford
“Tuxford Green”
“Tuxford Green”
Flooding Hotspot

February 2003
“Tuxford Green”

- Underground storage tanks
- Landscaping
- Reduced flooding at intersection
Middle School

- Water Conservation
- Water Quality Enhancements
- Ability to store and recycle water for landscaping
- Opportunity to green the school and decrease water and electricity usage
- Opportunity for education program and tree planting
Gravel Pit Example: Before and After

- Terraced Soccer Fields
- Hydroseeded Slopes (native grasses)
- Top of Dike
- Access Road
Powerline Easements

- Flood Control: Contain 100% of 10-year storm
- Improve Water Quality
<table>
<thead>
<tr>
<th>Alternative</th>
<th>Infiltration</th>
<th>Water Conservation</th>
<th>Stormwater Reuse</th>
<th>10-Year Retention Basins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Widely Distributed Small Projects</td>
<td>Maximizes Wildlife Habitat</td>
<td>Maximizes Stormwater Reuse for Industry</td>
<td>Full Conveyance with Regional BMPs</td>
</tr>
<tr>
<td>Retention Basin Size</td>
<td>50-Year</td>
<td>50-Year: Subareas 1-6 10-Year: Subareas 7-8</td>
<td>50-Year</td>
<td>10-Year</td>
</tr>
<tr>
<td>Net Volume Discharged to LA River in Capital Storm</td>
<td>21 acre-feet</td>
<td>426 acre-feet</td>
<td>8 acre-feet</td>
<td>602 acre-feet</td>
</tr>
</tbody>
</table>

### Baseline Components

| Bradley Landfill | Yes | Yes | Yes | Yes |
| LADWP Steam Plant | Yes | Yes | Yes | Yes |
| Vulcan Gravel Processing Plant | Yes | Yes | Yes | Yes |
| Tuxford Green | Yes | Yes | Yes | Yes |
| Sun Valley Middle School | Yes | Yes | Yes | Yes |
| Sun Valley Park | Yes | Yes | Yes | Yes |
| Tree Planting and Mulching | Yes | Yes | Yes | Yes |
| Lateral Storm Drains | Yes | Yes | Yes | Yes |
| Trunk Storm Drains | Yes | Yes | Yes | Yes |

### Differentiating Components

| Water Transfer | No | Yes | No | No |
| Infiltration in Tujunga Spreading Grounds from Strathern Pit | Yes | Yes | No | Yes |
| Stonehurst School | Yes | No | No | No |
| Stonehurst Park | Yes | No | No | No |
| Roscoe School | Yes | No | No | No |
| Park on Wentworth | Yes | No | No | No |
| Stormwater Reuse by Vulcan from Strathern Pit | No | No | Yes | No |
| Sheldon Pit | No | Yes | No | No |
| Cal Mat Pit | No | Yes | No | Yes |
| Strathern Pit | Yes | Yes | Yes | Yes |
| Boulevard Pit | No | Alternate with Sheldon | No | Yes |
| Parking Lot Infiltration | Yes | Yes | No | Yes |
| Street Storage | Yes – 1.5 miles | Yes – 0.6 miles | Yes – 5.1 miles | Yes – 0.4 miles |
| Onsite BMPs | Yes - 2-yr Storm, 40% Participation | Yes - 2-yr Storm, 20% Participation | Yes - 50-yr Storm, 40% Participation | Yes - 2-yr Storm, 20% Participation |
| Powerline Easement | Yes – 1.1 miles | Yes – 0.5 miles | Yes – 0.9 miles | Yes – 0.8 miles |
Benefits Sooner With Multipurpose Projects

We are here

Years

Increasing Benefit

Multipurpose Project

Traditional Storm Drain

Years

1 2.5 4 6 8 10 12 14 16
Public Outreach
Spreading The Word

Education

In-School Education

Newsletters

Educational Brochures
Welcome to SunValleywatershed.org!

The mission of the Sun Valley Watershed Stakeholders Group is to solve the local flooding problem while retaining all stormwater runoff from the watershed, increasing water conservation, recreational opportunities, and wildlife habitat, and reducing stormwater pollution.

Notice of Preparation
Initial Study

There’s something exciting going on in Sun Valley! A serious effort to solve the area’s chronic flooding problem is underway, but that’s not the half of it. Planners envision a solution that will bring many other benefits to the community as well. The implementation here of what’s known as a “watershed approach” to urban environmental problems could focus regional and national...
Lose it. Or use it.
Floodwater is a resource.

Get with the Sun Valley Watershed Project.
Help us make it happen
at www.sunvalleywatershed.org, or
call 626.458.4300 to get involved.