

LOCAL WATER
SUPPLIES WITH
STORMWATER







## SOUTHERN CALIFORNIA NEEDS MORE LOCAL WATER SUPPLIES

Here in Southern California, water for our homes, businesses and farming operations comes from many sources. Some close, some far away like the Colorado River and the Sacramento-San Joaquin River Delta. In fact, approximately 1/2 of our region's water comes from imported sources. However, those imported water supplies are increasingly unreliable and rising in cost. Climate change, aging infrastructure and

impacted habitats are further reducing the reliability of these major delivery systems.

We need to invest in statewide actions to improve reliability of our imported water supplies. Concurrently, we need to develop more local water supply options here in Southern California. We've made significant progress thus far with conservation. During the past 20 years, Southern

California's water use has remained essentially the same, despite adding approximately three million people to its population.

In the coming years, Southern California water agencies will meet the demands of population growth through additional conservation efforts and new local supply projects, such as recycling and stormwater capture.

# STORMWATER

Billions of gallons
of freshwater are
lost every year
because we don't
yet have enough
stormwater
capture systems
in place.

#### STORMWATER IS AN

## UNDERUTILIZED RESOURCE

It's a basic idea: When it rains, we need to be able to capture that water, store it and then use it later. Today, about half the water from rain that could be used to replenish groundwater basins and increase local water supplies ends up turning into polluted stormwater runoff.

In highly developed urban areas, the water simply has nowhere to go. Unable to infiltrate through hard pavement, the stormwater

flows down our streets and rushes through concrete canals, picking up all kinds of debris and chemicals along the way, ultimately polluting Southern California's streams, rivers and ocean.

And, it's not just a coastal clean beach or water quality issue. Six Southern California counties would benefit from better stormwater management - Ventura, Los Angeles, Orange, Riverside, San Bernardino and San Diego.

Those inland counties also experience high storm flows through their rivers, often creating significant flooding, mudslides and hazards as the water pulses towards the ocean.

Residents are doing their part to promote sustainability, installing rain barrels and roof capture systems, replacing concrete and asphalt with more porous materials and paving stones, and implementing stormwater "friendly" landscape designs and rain gardens. Local governments are building neighborhood park and rainwater harvesting projects that are helping prevent flooding and pollution. And, water agencies, cities and counties are collaborating on large-scale infrastructure projects that capture large quantities of stormwater to replenish our groundwater basins and surface reservoirs.



IN THIS DRY CLIMATE,
WE NEED TO
MAKE THE MOST OF OUR
EXISTING WATER SOURCES
AND USE THEM AS
EFFICIENTLY AS POSSIBLE.

# CAPTURING MORE STORMWATER:

### A SMART AND SENSIBLE SOLUTION

It's a common sense solution.

Capture stormwater when flows run high - reuse it in your garden, reroute it to prevent neighborhood flooding, bank it in a surface reservoir or infiltrate it into a groundwater basin and save it for a future dry day. Capturing stormwater is viable, cost-effective and environmentally responsible.

In addition to promoting sustainability, capturing stormwater is an important tool that statewide water managers are eager to implement given the clear benefits.

Approximately 500,000 acre-feet of stormwater is currently captured and recharged into Southern California groundwater basins in an average year. That's enough water to supply three million people for a year, or satisfy the water supply needs of San Diego, Anaheim, Riverside, Santa Ana and Long Beach combined. And, we can do even more.

Capturing stormwater gives public water agencies access to additional, local water supplies that will help meet the demands of a growing population and provide emergency local supplies to help offset future droughts or disruptions of our imported supplies.

#### **Create more local water supplies**

By implementing additional stormwater projects in the Southland, we could potentially double the amount of stormwater captured in an average year, significantly enhancing local supplies and reducing reliance on imported sources.

#### **Reduce polluted runoff**

Each year, an average of 30 billion gallons of stormwater and urban runoff move through Los Angeles County's storm drains and river systems. This runoff flows over urban surfaces and picks up garbage, bacteria and other contaminants. Capturing stormwater can help prevent this polluted water from moving through our rivers, streams and ultimately to our beaches and ocean.

#### Provide a cost-effective water supply option

Stormwater capture is a cost-effective new supply for Southern California's water supply portfolio. Adding another source that can help improve the reliability of supply and stability of water costs.



### MOVING THE NEEDLE

The development of regional, consensus-based strategies for effective stormwater management is a priority for the Southern California Water Committee and the California Water Foundation—we've seen some early successes, but there's more to do.

Expanding on existing information, collaborating with public and private organizations across the region and investing in projects that have proven to be feasible and efficient are all sensible goals. Moving the needle on local water supplies though will take foresight, collaboration and commitment from our local, regional and statewide leaders. As we work to identify stormwater management projects and potential funding opportunities, we encourage you to learn more and become part of the solution.

#### SUCCESSFUL PROJECTS ALREADY IN PLACE

Public water agencies, flood control districts, cities and counties throughout Southern California have been successfully constructing stormwater projects that reduce pollution, prevent flooding, recharge groundwater basins and help fill surface reservoirs. From turning traditional blacktop parking lots into porous asphalt that will usher water into underground storage, to transforming an old landfill into a public park that doubles as a stormwater infiltration system, local governments and communities are creating innovative

stormwater capture projects that help increase water supplies, reduce flooding and clean up our waterways.







#### INDIVIDUAL RAIN GARDEN

- A rain garden allows
   30% more water to seep into the ground than a conventional lawn
- The native plants used in rain gardens require less water and less fertilizer than conventional lawns

#### NEIGHBORHOOD SUN VALLEY PARK PROJECT

- Reduced neighborhood flooding by capturing stormwater for groundwater recharge
- Water percolates into aquifers underneath playing fields
- Sun Valley Park in Los Angeles County can capture enough water for 60 families for one year

#### LARGE-SCALE PRADO DAM

- Storing stormwater behind the dam in Riverside County for percolation into the Santa Ana River
- Increasing water supply reliability for residents and businesses





**PUMP UP THE VOLUME** is a public education program developed by the Southern California Water Committee and sponsored by the California Water Foundation.

PHOTO CREDITS: Rain barrel and Sun Valley Park courtesy of TreePeople; rain garden courtesy of GardenSoft; Prado Dam courtesy of Patrick Huber

FOR MORE INFORMATION, please visit www.socalwater.org and www.californiawaterfoundation.org.

