The Context for Climate Change Adaption Strategies on the Calleguas Creek Watershed

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U.S. Highway 101 and Conejo Creek, Ventura County, California
Principal Watersheds of Ventura County

Ventura River
Santa Clara River
Calleguas Creek
Chaparral, Lower Calleguas Creek, Ventura County, California
150 Years of Rainfall in Los Angeles

Total rainfall Jan. to Oct. 2002 = 2.09 inches
Ventura River, Foster Park, 10.18.02
It rains everyday on the Calleguas Creek Watershed
IRWM Guidelines

“Given the currently predicted effects of Climate Change on California's water resources, IRWM Plans should address adapting to changes in the amount, intensity, timing, quality and variability of runoff and recharge. “
Simi Valley: Early 1960’s Compared to 2003
Simi Valley Water Treatment Plant
Calleguas Creek River Watershed

15” local rain equals 274,000 acrefeet/year

100,000 acrefeet/year imported water equals 5 1/2” of additional rain over entire watershed

60,000 tons of salt imported annually with imported water

Five Wastewater Treatment Plants discharge 30 million gallons per day or 33,600 acrefeet per year
The Salts Problem

Salt coming in = 290 tons/day

Salt going out = 25 tons/day
NUS 101

Wastewater Treatment Plants

Northern Groundwater Basins of the Calleguas Creek Watershed

Simi Valley

Moorpark

Camarillo

ASR

Camarillo

Wastewater Treatment Plants

US 101
Over time shallow groundwater rose.
As a result, salts accumulate.
Salt Loading

Outfalls Discharge Salts to the Ocean

Urban Discharges

River Recharge

Farm Discharges

Imported Water

Imported & Stream Recharge

Treated Wastewater Recharge

Urban Discharges

Salt Storage

Seawater Intrusion
New Water

North Pleasant Valley Desalter
2015
7,300 AF/yr

PV Grower Desalters (not purveyors)
2013
4,000 AF/yr

PHWA Desalter
~1998
3,744 AF/yr

Moorpark Desalter
2017
5,000 AF/yr

Las Posas Grower Desalter
2016
5,000 AF/yr

Simi Desalter
2021
4,500 AF/yr

Camarillo WRF
2014
350 AF/yr

Camrosa Round Mountain Desalter
2014
900 AF/yr