



# URBAN RUNOFF DIVERSION PROGRAM



**RESOURCE PROTECTION DIVISION**

**MERRILL SEILER**

**PRINCIPAL ENVIRONMENTAL SPECIALIST**



# DIVERSION BACKGROUND

Huntington Beach



Newport Beach

Google Earth



# WHY DIVERT URBAN RUNOFF?

1. Beach Closures Due To Bacteria
2. Selenium TMDL



# Current Urban Runoff Policy

Resolution No. OCSD 13-09

## Whereas,

certain types of dry weather urban runoff create public health and/or environmental problems

to address certain environmental concerns associated with dry weather urban runoff

RESOLUTION NO. OCSD 13-09

A RESOLUTION OF THE BOARD OF DIRECTORS OF ORANGE COUNTY SANITATION DISTRICT ESTABLISHING THE POLICY FOR DRY WEATHER URBAN RUNOFF AND REPEALING RESOLUTION NO. OCSD 01-07

WHEREAS, the Orange County Sanitation District ("District") is a duly organized County Sanitation District existing pursuant to the County Sanitation District Act, California Health and Safety Code section 4700, et seq., providing for the ownership, operation, and maintenance of wastewater collection, treatment, and disposal facilities within Orange County, California; and

WHEREAS, pursuant to Health and Safety Code section 4730.66, the District is authorized to acquire, construct, operate, maintain, and furnish facilities for all or any of the following purposes: "(1) The diversion of urban runoff from drainage courses within the district. (2) The treatment of the urban runoff. (3) The return of the water to the drainage courses. (4) The beneficial use of the water."; and

WHEREAS, certain types of dry weather urban runoff create public health and/or environmental problems which are infeasible to economically or practically control through traditional stormwater best management practices; and

WHEREAS, the District has available limited system capacity in its collection, treatment and disposal facilities which may allow the District to accept discharge of certain dry weather urban runoff flows not to exceed 10 million gallons per day ("mgd") without adversely affecting the District's primary function of collection, treatment and disposal of sanitary sewer discharges; and

WHEREAS, the District does not have system capacity available to allow wet weather discharges to the District's facilities; and

WHEREAS, for purposes of this policy, "wet weather" shall mean any period during which measurable rainfall occurs in any portion of the District's service area and shall include the period following the cessation of rainfall until the District determines that the wet weather event is no longer impacting the District's collection, treatment and disposal facilities; and

WHEREAS, for the purposes of this policy, "dry weather" shall mean any period which does not fall within the definitions of "wet weather"; and

WHEREAS, the District developed a Dry Weather Urban Runoff Policy pursuant to Resolution No. OCSD 01-07 to address certain environmental concerns associated with dry weather urban runoff; and

OCSD-13-09-1

the District has limited system capacity in its collection, treatment, and disposal facilities

the District intends to waive fees and charges associated for authorized discharges

# Stormwater / Groundwater

## Dry Weather Flows Only

We don't take rainwater/stormwater into the collection system

- Inundation (Sewage Spills)
- Sand and Silt



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OSCD-13-09-1

- 10 Million Gallons Day
- No Treatment or Administrative Costs
- Only if Capacity is Available
- No Wet Weather Discharges

# OCSD's PARTNERS

- Orange County Public Works

Santa Ana River, Huntington Beach Channel, Greenville Channel

- City of Huntington Beach

Adams, Atlanta, Banning, Flounder, Hamilton, Indianapolis, Meredith, Newland, Scenario, Yorktown and 1<sup>st</sup> Street CDS

- City of Newport Beach

Big Canyon, Newport Dunes, Mid Big Canyon

- Irvine Ranch Water District

Los Trancos Canyon, Muddy Canyon, Peters Canyon

- PH Finance (Pelican Hill Resort)

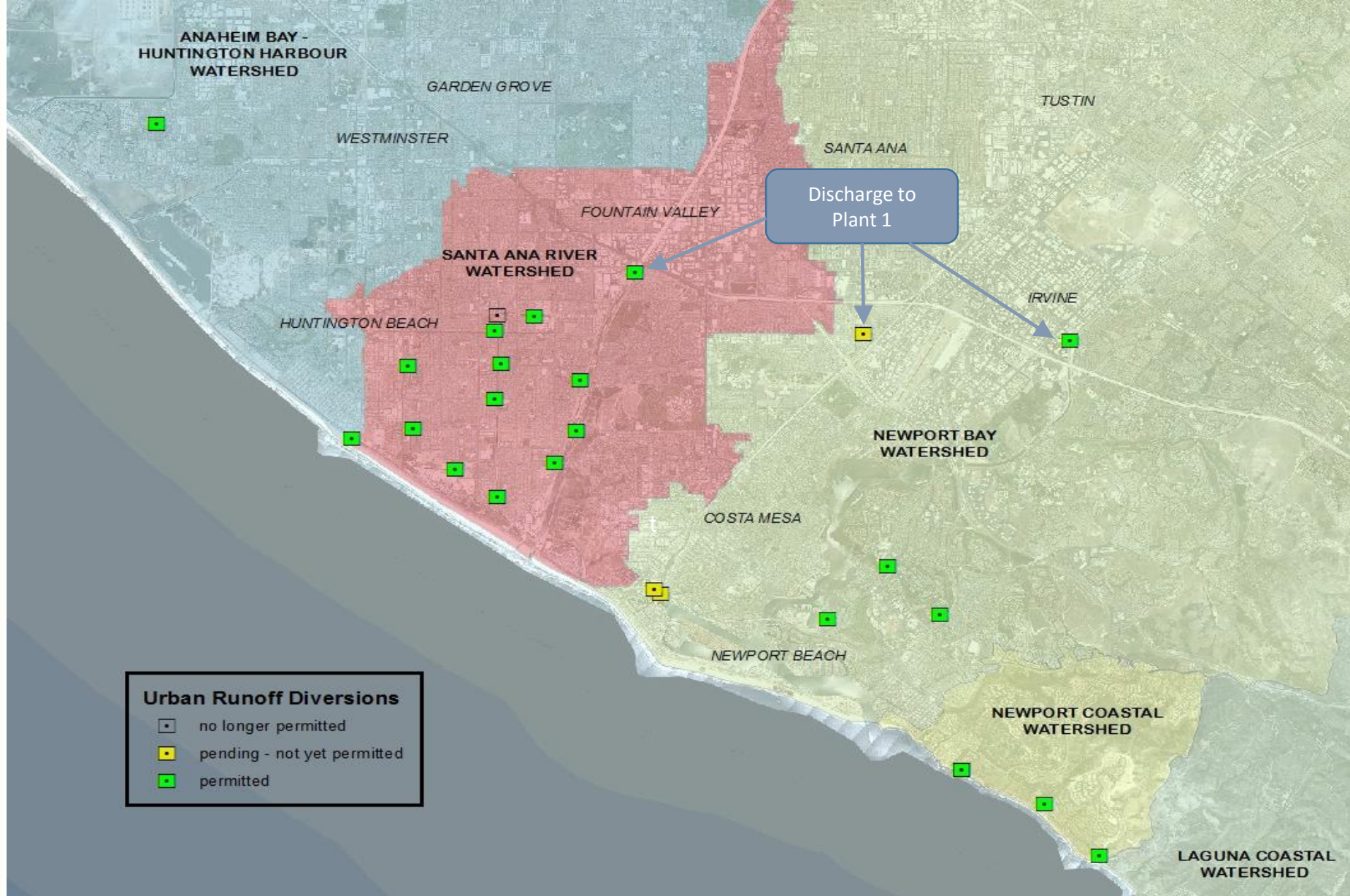
Pelican Point



# Program Administration

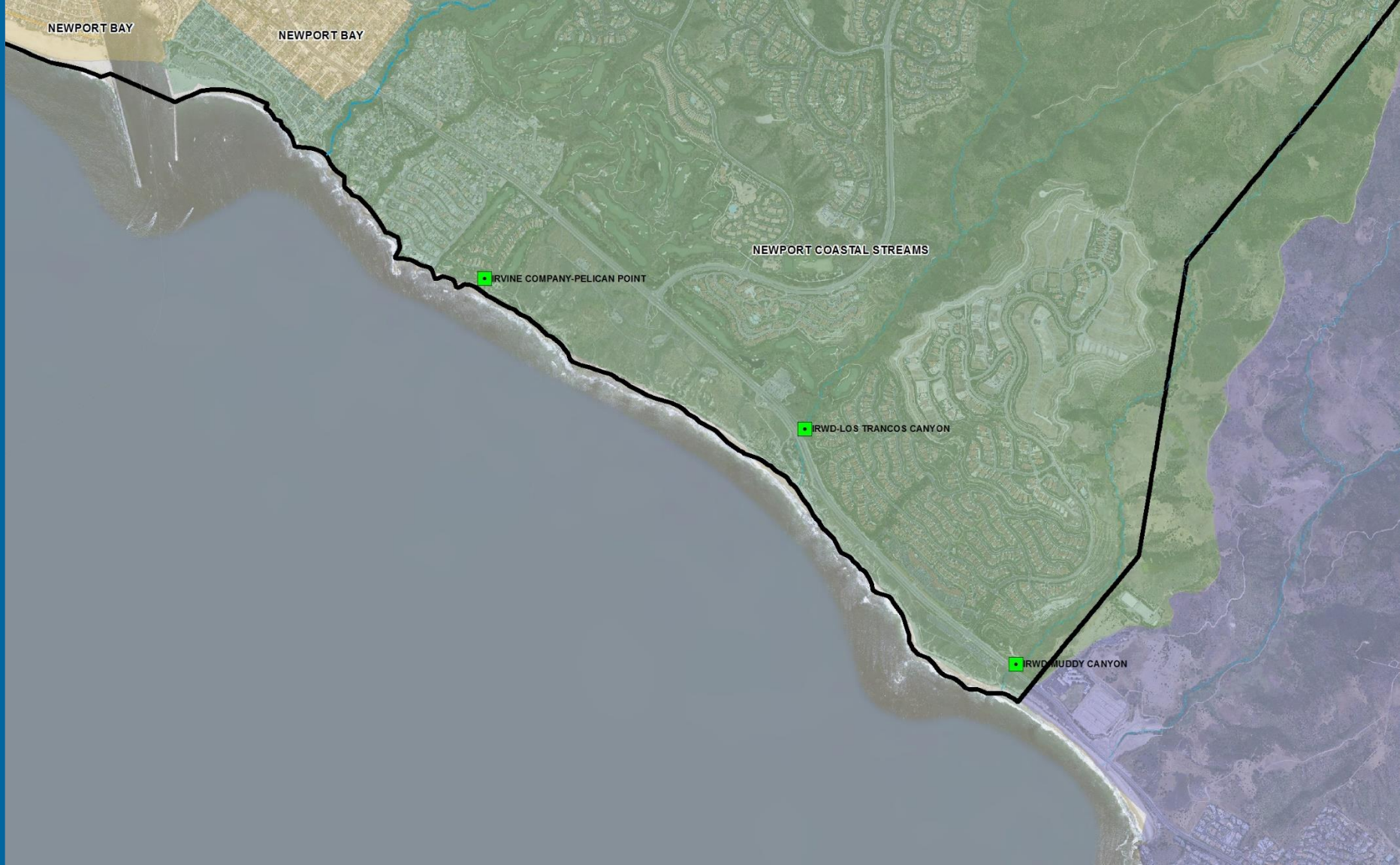
- OCSD coordinates with O.C. Watersheds  
(Technical Advisory Committee)
- OCSD and Permittee execute an  
Agreement for Dry Weather Urban Runoff
- Dry Weather Urban Runoff Discharge Permit  
issued to each diversion





# Diversion Locations





# Area of Special Biological Significance





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# Santa Ana River Diversion Plant 1







# Santa Ana River – Plant 1



# Big Canyon Diversion (Newport Beach)



## Selenium Mediation in the Upper Newport Bay





# Mid Big Canyon Diversion

(Newport Beach)



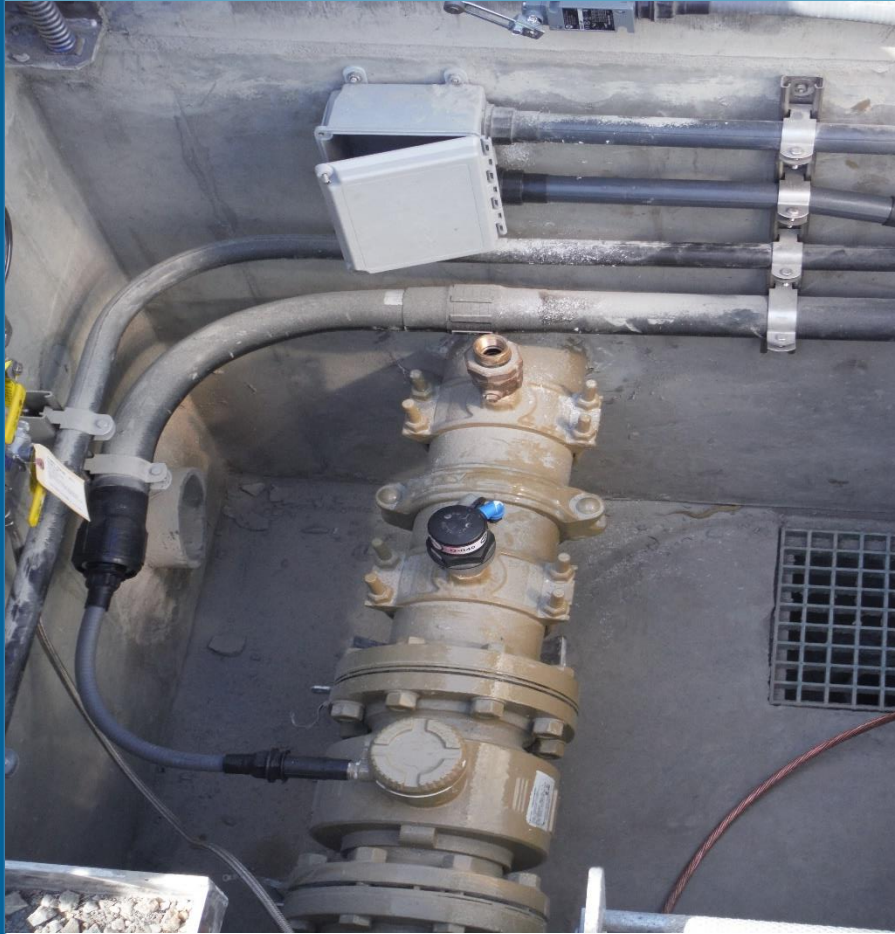


# Mid Big Canyon Diversion (Newport Beach)





# Peters Canyon Pipeline (Irvine)



Como, Edinger, &  
Valencia Channel  
Tributaries





# Greenville Channel Diversion

(Costa Mesa)

diversion pipeline

rubber dam





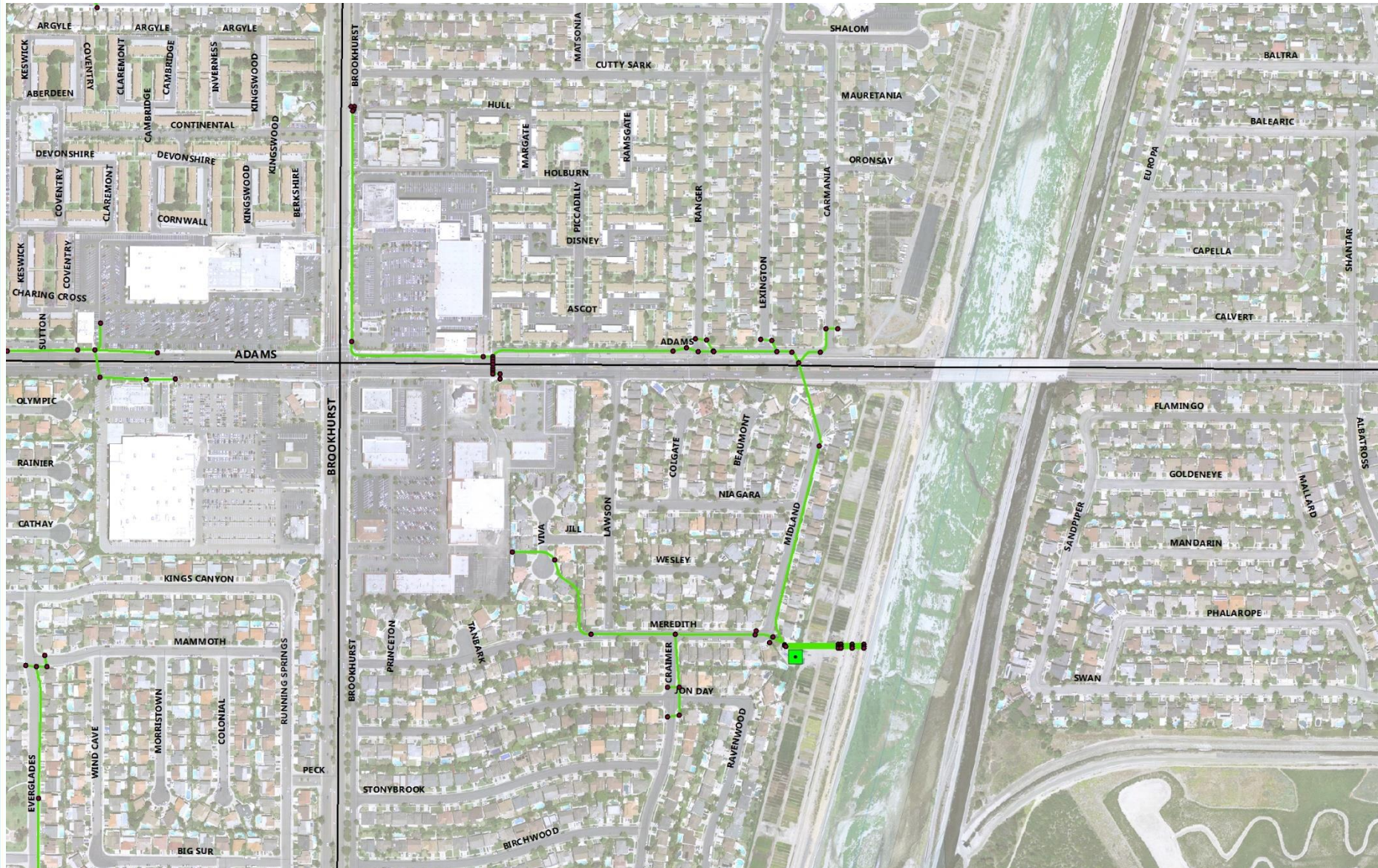
# Stormdrain System

(Huntington Beach)





# Stormdrain System (Huntington Beach)





# Stormwater Pump Station

(Huntington Beach)





# Adams Diversion (Huntington Beach)



**WHY DIVERT URBAN RUNOFF?**

High Bacteria Levels Close Beaches



# Delhi Channel Diversion

(Santa Ana – Costa Mesa)





# Delhi Channel Diversion

(Santa Ana – Costa Mesa)





# Delhi Channel Diversion

(Santa Ana – Costa Mesa)





# Delhi Channel Diversion

(Santa Ana – Costa Mesa)



# Dry Weather Urban Runoff Quality

- **Routine Monitoring**  
Both OCSD and Permittees
- **Very Good Compliance Record**  
Heavy metals, oil & grease, pesticides, and TTOs (chloroform, toluene) at near detection limit concentrations
- **Occasional Sulfide Exceedances**





# Impact

- *Summer Dry Weather - 97% of sites score A and B grades*
- *Winter Dry Weather - 93% of sites score A and B grades*
- *Wet Weather – 44% of sites score A and B grades  
(down from 5-year average of 60%)*

Location	Summer Dry	Winter Dry	Wet Weather
Brookhurst Street	A	B	B
Crystal Cove State Beach Honor Award Recipient	A+	A+	A+
Huntington Street	A+	A	C
Magnolia Street	A	A	A
Muddy Canyon Beach	A+	A+	A
Newport Dunes – 4 monitoring locations	A	A+	F
Pelican Point Beach	A+	A+	A+
Santa Ana River Mouth	A	A	C

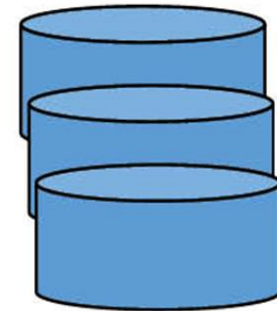
# PROGRAM at a GLANCE



~1.5 Million Gallons  
Per Day



9 Billion Gallons in...



18 Years



Millions of Happy Beachgoers!







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RESOURCE PROTECTION DIVISION

**QUESTIONS?**

