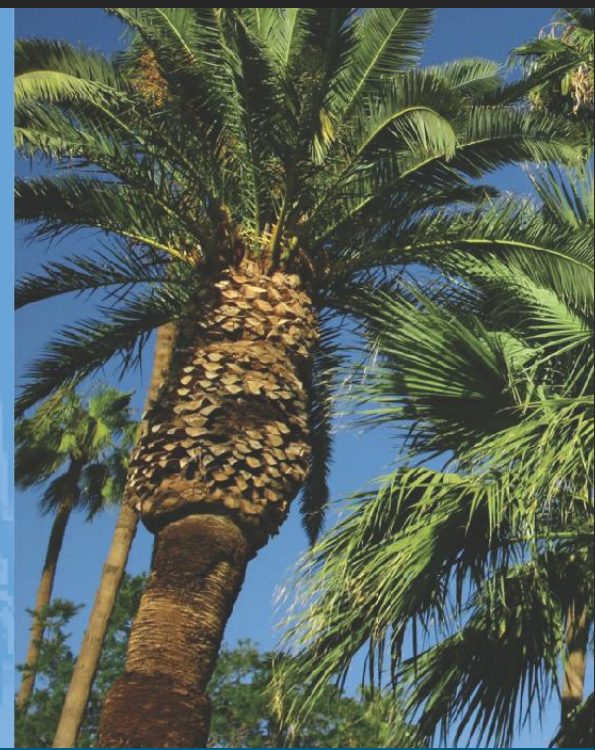


Los Angeles Gateway Region  
Integrated Water Management Joint Powers Authority



# Development of the Integrated Regional Water Management Plan

February 14, 2013

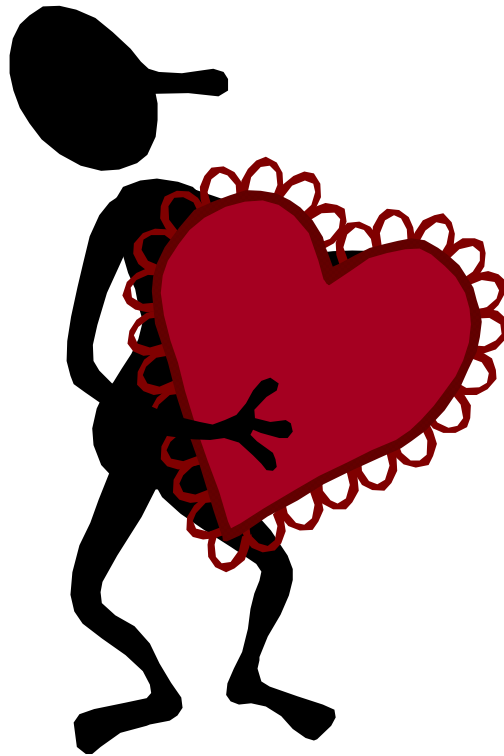




# Stakeholder Meeting Agenda

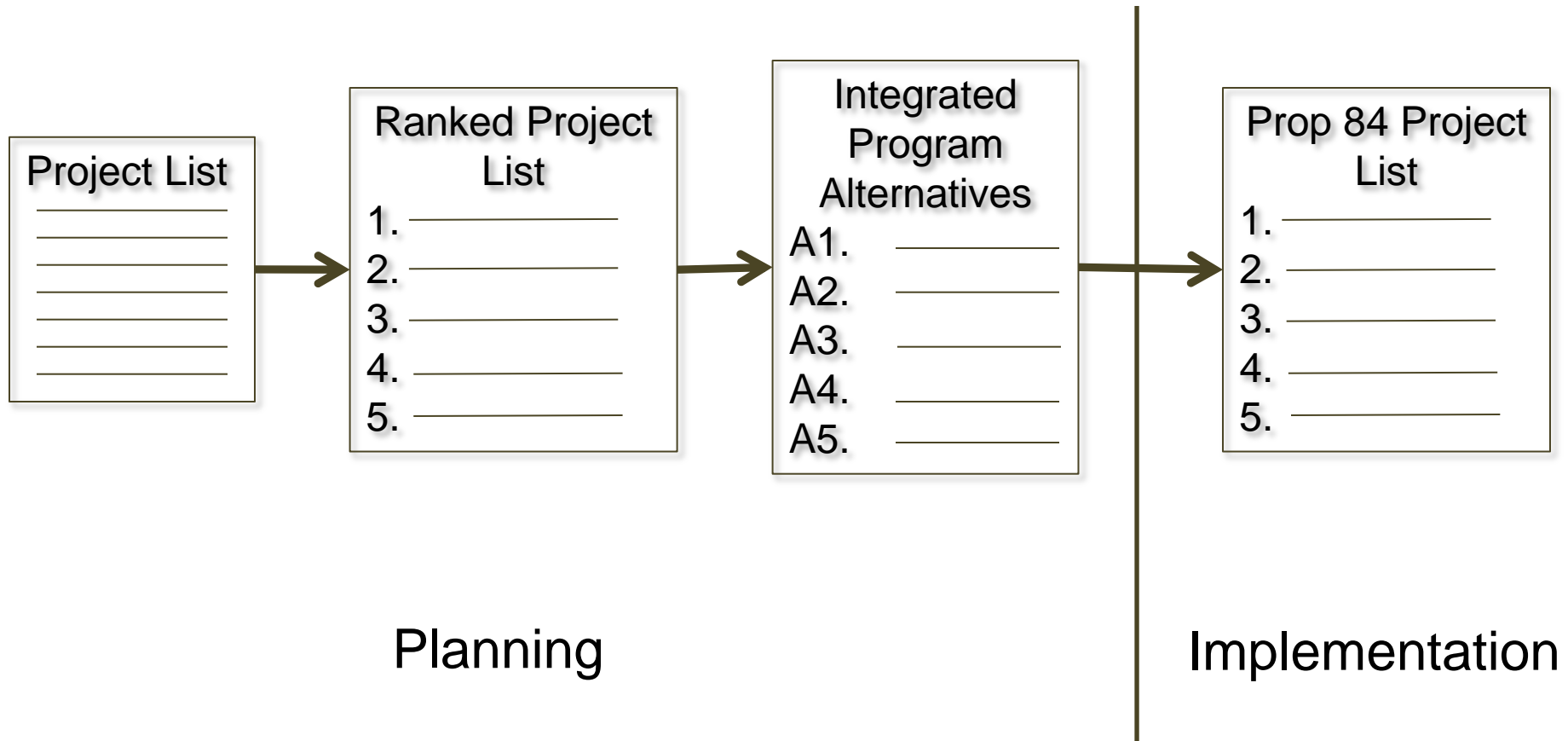
1. Introductions
2. Status of Proposition 84 Implementation Grant Application
3. Review of Groundwater Monitoring in the Region
4. Corrected Project Locations
5. In-kind Work Accounting
6. Next Steps

# Introductions



- Name
- Organization
- Valentine Day ?

# Project Review and Evaluation





# Prop 84 Proposal Solicitation Summary

<b>Requirement</b>	<b>Prop 84 Implementation Grant (Round 2)</b>
<b>Due Date</b>	<b>March 29, 2013</b>
<b>Approval Date</b>	<b>October 2013</b>
<b>Total Funding Available</b>	<b>Approximately \$131 million</b>
<b>Max Funding</b>	<b>\$31,294,000 for LA Hydrologic Region</b>
<b>Minimum match</b>	<b>25%. Potential DAC waiver.</b>
<b>Eligible Applicants</b>	<b>Local public agency or non-profits</b>

# Project List: Stakeholder Recommendation

ID	Name	Grant Needed	Total Cost
A5	Catch Basin Trash Inserts and Face Plate Screens	\$5,168,288	\$5,338,454
37	Disadvantaged Communities Schools Retrofit Program	\$655,000	\$1,310,000
A1	Interties, Phase 1 (Regional): 1. Potable Water Interconnections- Bloomfield /Hayford and Pioneer /Lakeland  2. Pico Rivera Emergency Intertie	\$1,168,000	\$1,268,000
39	Fernwood Water Improvement Park	\$3,600,000	\$7,477,066
2	Advance Groundwater Wellhead Treatment Facility	\$4,750,000	\$7,750,000
63	Willow Springs Habitat Enhancement, Trail Improvement and Water Quality Improvements	\$2,250,000	\$2,500,000
62	Long Beach Graywater Program	\$400,000	\$400,000
59	Chittick Field	\$2,250,000	\$4,300,000
<b>Total</b>		<b>\$20,241,288</b>	<b>\$30,343,520</b>



# Catch Basin Program

City	Total No. of Catch Basins	Total Amount (\$)	Matching Funds (\$)	Total Grant Amount Needed (\$)
Artesia	239	\$73,851	\$18,463	\$55,388
Bellflower	174	\$165,300	\$0	\$165,300
Bell Gardens	69	\$77,700	\$0	\$77,700
Commerce	82	\$25,338	\$6,335	\$19,003
Downey	793	\$329,336	\$82,334	\$247,002
Hawaiian Gardens	132	\$81,004	\$8,554	\$72,450
Lakewood	2,103	\$2,473,800	\$0	\$2,473,800
Norwalk	58	\$17,922	\$4,481	\$13,442
Paramount	452	\$476,634	\$0	\$476,634
Pico Rivera	960	\$668,470	\$0	\$668,470
Signal Hill	320	\$238,760	\$50,000	\$188,760
South Gate	267	\$662,517	\$0	\$662,517
Vernon	71	\$47,822	\$0	\$47,822
<b>Totals</b>	<b>5,720</b>	<b>\$5,338,454</b>	<b>\$170,166</b>	<b>\$5,168,288</b>

# Catch Basin Program

Please provide information in the blue cells below:

City:	Gateway Region Total
Contact Person:	Grace Kast
E-Mail:	
Phone #:	
Can you start Project by October 2013? (Yes/No)	Yes

ARS - Automatic Retractable Screen

CPS - Connector Pipe Screen

Type of Retrofit Unit: Size (Width):	ARS					CPS	Other
	<5ft	5ft to 8ft	8ft to 15ft	15ft to 22ft	22ft to 29ft		
Cost per unit *	\$620	\$ 950	\$ 1,200	\$ 1,800	\$ 2,200	\$ 309	\$ -

## Watershed

	Fill in the Number of Retrofits needed by Type and Watershed in the cells immediately below:							Total by Watershed
	<5ft	5ft to 8ft	8ft to 15ft	15ft to 22ft	22ft to 29ft	CPS	Other	
Los Angeles R	51	34	142	7	4	292	41	571
San Gabriel R.	193	90	1,322	36	10	2,041	75	3,767
Los Cerritos	35	160	66	245	13	434	0	953
Coyote Creek	23	21	22	0	0	363	0	429
Other	0	0	0	0	0	0	0	0

Total Number (type)	302	305	1552	288	27	3130	116	5,720	Total Number
Total Cost per Type	\$189,484	\$296,130	\$1,870,876	\$519,720	\$59,400	\$1,160,844	\$1,242,000	\$5,338,454	Total Cost
								\$170,166	Matching Funds
								<b>\$ 5,168,288</b>	Needed from Grant

Provide the amount local matching funds you have available here >

\* Unit Cost estimates used for this table are from previous LA River Catch Basin Retrofit Program Invoices; if your city has new costs, you may substitute.





# Proposed Implementation Projects

ID	37
<b>Project Title</b>	<b>Disadvantaged Communities Schools Retrofit Program</b>
Participating Agencies	CBMWD and MWD, local cities, retail agencies and various school districts.
Submitting Agencies	Central Basin Municipal Water District
Project Summary	<p>This program will be comprised of two components: first a retrofit program to install water and energy saving devices and second, an energy and water conservation educational program, all in 10 Disadvantaged Communities (DAC) schools. This program will retrofit schools K-12 with High-Efficiency Toilets, Zero Consumption or High-Efficiency Urinals, Custom Flow Control Valves, Waterbrooms, irrigation management systems, water saving irrigation heads, artificial turf and California Friendly plants where applicable. Potential energy retrofits will be coordinated with Southern California Edison. Additionally, an educational program will be implemented to increase student, faculty and staff's knowledge of water and energy conservation and runoff reduction. A partnership with Southern California Edison and Southern California Gas Company will be pursued to fund a portion of the educational component.</p>
Total Estimated Cost	\$1,310,000
Matching Funds	\$655,000



# Proposed Implementation Projects

ID	A1 (1, 19)
<b>Project Title</b>	<b>Interties, Phase 1 (Regional)</b>
Participating Agencies	Pico Water District, City of Pico Rivera, City of Norwalk
Submitting Agencies	City of Pico Rivera, City of Norwalk
Project Summary	Gateway Water Management Authority has bundled water system interties into a phased regional program. Water purveyors within the region have indicated a need to connect between city and district pipes to aid in responding to droughts and water emergencies and well as provide better security and supply reliability. The first phase includes interties sponsored by the cities of Pico Rivera and Norwalk, who are ready to proceed with implementation at this time. See details per each city below.
Total Estimated Cost	\$1,268,000 (both)
Matching Funds	\$100,000 est.



# Proposed Implementation Projects

ID	39
<b>Project Title</b>	<b>Fernwood Water Improvement Park</b>
Participating Agencies	City of Lynwood
Submitting Agencies	City of Lynwood
Project Summary	Fernwood Water Improvement Park is a multi-benefit project that serves disadvantaged communities in the City of Lynwood while meeting IRWMP water management objectives. The project site is currently an empty 6.5-acre lot owned by the City of Lynwood located on a long stretch along Fernwood Ave., between Atlantic Ave. and Long Beach Blvd. The park will feature stormwater improvement elements such as infiltration areas and bioswales. The project also includes native shrubs and trees that will increase habitat for birds, butterfly species and mammals. Moreover, the park will provide recreational opportunities for disadvantaged communities in Lynwood.
Total Estimated Cost	\$7,477,066
Matching Funds	\$3,877,066
Additional Information	Fernwood Water Improvement Park provides targeted benefits to disadvantaged communities in the city. The park was designed by Lynwood residents this past spring through a community planning process led by Alcanza and funded by the Rivers and Mountains Conservancy to specifically identify an IRWMP disadvantaged community project.



# Proposed Implementation Projects

ID	2
<b>Project Title</b>	<b>Advance Groundwater Wellhead Treatment Facility</b>
Participating Agencies	City of Signal Hill
Submitting Agencies	City of Signal Hill
Project Summary	The Newport-Inglewood Fault runs directly through the City of Signal Hill. This unique geology essentially divides the City on a northwest axis, as well as provides a natural southern boundary for the Central Basin Groundwater Aquifer, preventing seawater intrusion from the south. However, the portion of the Central Basin Groundwater Aquifer that is located directly underneath the city limits, directly north of the earthquake fault has a high concentration of “organic color” within the groundwater. This project will construct an advance water treatment wellhead facility that will remove the organic color and treat this “new water source” for use as potable water supplies within the City
Total Estimated Cost	\$7,750,000
Matching Funds	\$3,000,000



# Proposed Implementation Projects

ID	63
<b>Project Title</b>	<b>Willow Springs Habitat Enhancement, Trail Improvement and Water Quality Improvements</b>
Participating Agencies	0
Submitting Agencies	City of Long Beach, Dept. of Parks, Recreation and Marine
Project Summary	This project will implement an important component of the Willow Springs Park Master Plan by restoring the existing storm water retention basin system to a naturalized system including a water treatment wetland and associated bioswales throughout the site drainage course. The existing concrete-lined detention basin will be restored to provide wetland habitat that will function as storm water retention as well as provide water quality improvements and native habitat. The basin and associated drainage system collects storm water run off from the surrounding 250-acre watershed. The trail system throughout the 48-acre site will also be constructed to provide recreational access to the native habitat and the water quality enhancements.
Total Estimated Cost	\$2,500,000
Matching Funds	\$250,000 (10 % match is proportional to DAC population in service area)



# Proposed Implementation Projects

ID	62
<b>Project Title</b>	<b>Long Beach Graywater Program</b>
Participating Agencies	City of Long Beach,
Submitting Agencies	City of Long Beach, Office of Sustainability
Project Summary	<p>The City of Long Beach is undertaking a pilot program that implements graywater "laundry to landscape" systems at up to 36 homes. To date, 26 homes have received graywater installations. The proposed project would:</p> <ol style="list-style-type: none"> <li>(1) Build on previous experience to expand the Laundry to Landscape program into 99 additional homes in Long Beach disadvantaged communities. Augment existing program to allow for appropriate landscape improvements for which the pilot project demonstrated a need.</li> <li>(2) Conduct 9 additional demonstration projects to study graywater solutions scaled for larger, multi-unit residences, residences with less open space, other uses for water from the Laundry to Landscape Program and other graywater sources (sinks/showers).</li> <li>(3) Monitor existing 36 pilot program installations to study long term maintenance requirements.</li> <li>(4) Include an outreach program to secure participants in qualifying DAC census tracts and block groups.</li> <li>(5) Installations will be conducted by a team that includes a professional plumber, college students pursuing environmental degrees and disadvantaged youth from the local community, thereby creating new knowledge-based skills in the community.</li> </ol>
Total Estimated Cost	\$400,000
Matching Funds	0
Additional Information	A total of of 108 properties will be retrofitted and will save approximately 2.2 AFY of potable water (Based on average of 130 gallons saved per week per installation).



# Proposed Implementation Projects

ID	59
<b>Project Title</b>	<b>Chittick Field</b>
Participating Agencies	City of Long Beach, City of Signal Hill and Los Angeles County Flood Control District
Submitting Agencies	City of Long Beach
Project Summary	Construct additional 1) new Trash Collection Systems (TCS) and/or refurbished TCS at all inlets into the basin, 2) replace the concrete lined "low flow" swales with grass lined swales for bio-filtration, 3) construct a new underground "low flow" pipe network to convey treated water to the basin pump station and 4) replace existing pump station with new low flow pump station.
Total Estimated Cost	\$4,300,000
Matching Funds	\$2,050,000
Additional Information	The Chittick Project Design Package is completed and is ready to be advertised this spring 2013. It is a complete project and can begin construction as early as summer 2013. This project provides the necessary construction of Stormwater Structural BMPs that will meet the requirements of compliance for the Los Angeles River TMDLs. In accomplishing the construction of the BMPs, the Chittick Field can then be used as a recreation facility for the public which serves a large population of the disadvantage community in that parts of Long Beach and Signal Hill as well as the neighboring communities of Compton, Carson and South Los Angeles who come into Long Beach look for recreation facilities for their family, friends and children.



# Regional Groundwater Monitoring





# Review of Existing Ground Water Monitoring Programs

## *PURPOSE & SCOPE*

- Describe Existing Monitoring Networks
- Review Existing and Proposed Monitoring Features and Data Collection Methodology
- Review Measurement and Reporting Frequency
- Identify Data Gaps and Potential Improvements to the Existing Monitoring Networks



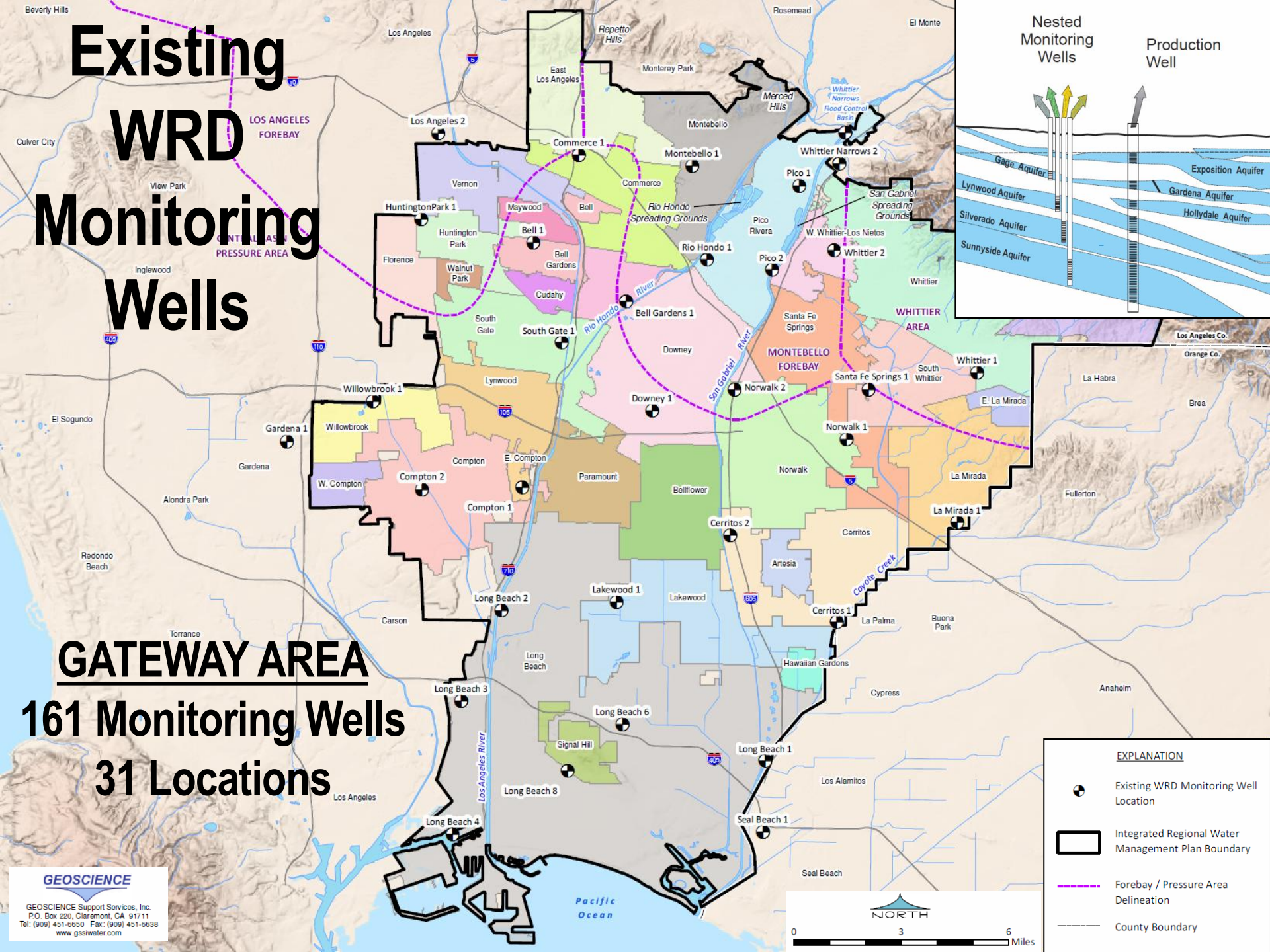
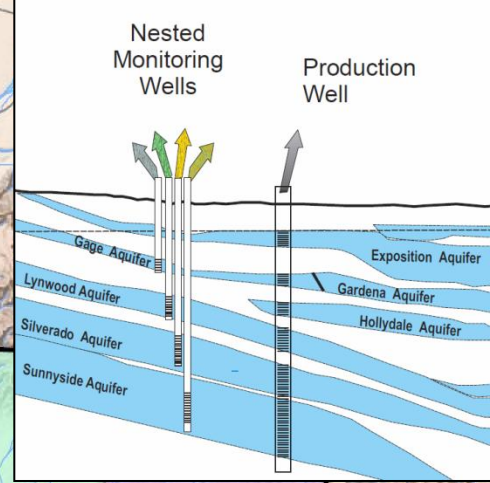
# Review of Existing Ground Water Monitoring Programs

## *DATA SOURCES*

- Water Replenishment District of Southern California
- California Department of Public Health
- California State Water Resources Control Board  
Geotracker Website
- United States Environmental Protection Agency

# Existing WRD Monitoring Wells

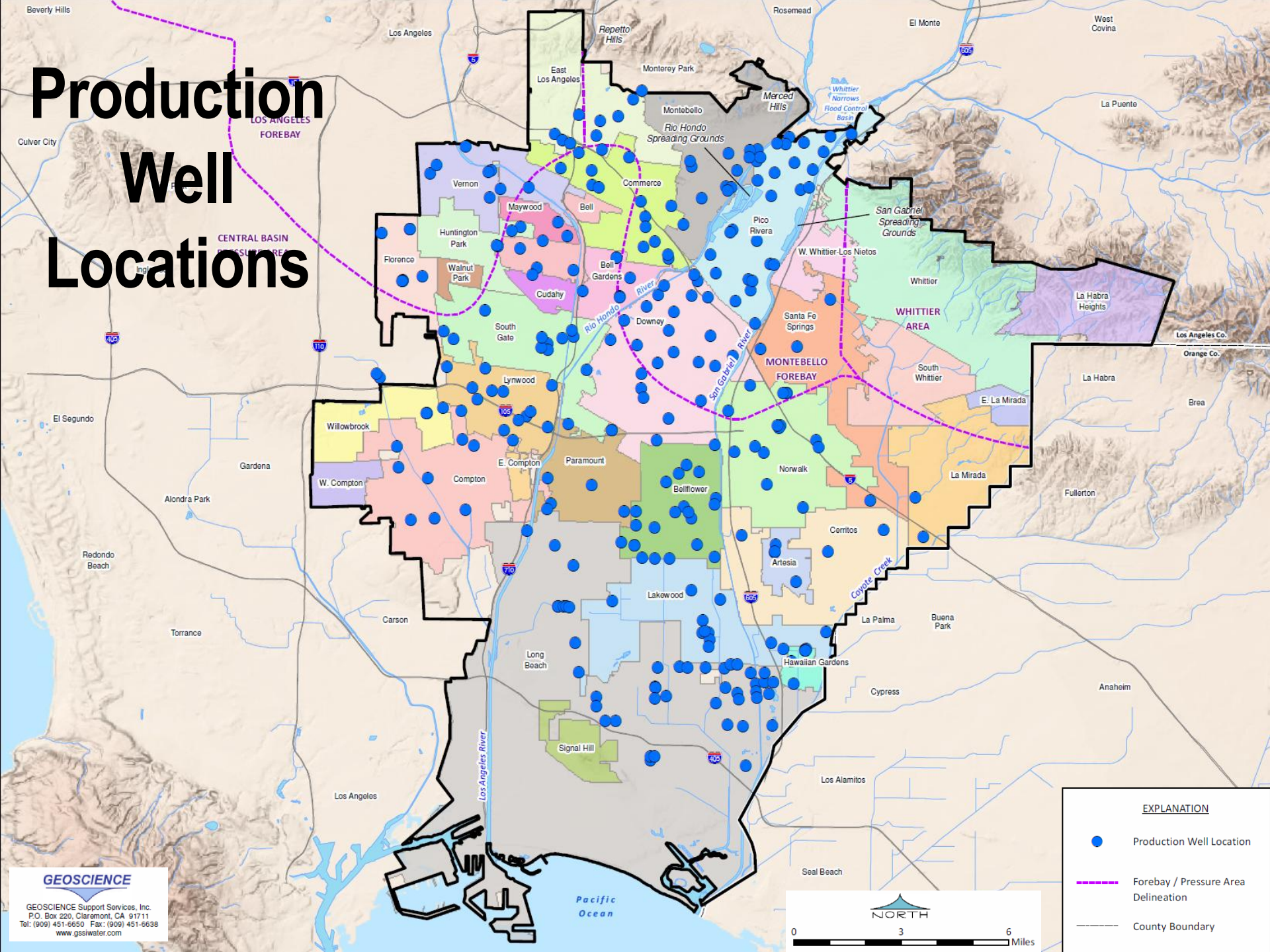
## GATEWAY AREA 161 Monitoring Wells 31 Locations



EXPLANATION	
	Existing WRD Monitoring Well Location
	Integrated Regional Water Management Plan Boundary
	Forebay / Pressure Area Delineation
	County Boundary



# Production Well Locations



**EXPLANATION**

- Production Well Location
- Forebay / Pressure Area Delineation
- County Boundary





# Review of Existing Ground Water Monitoring Programs

## *MEASUREMENT AND REPORTING FREQUENCY*

- **Ground Water Levels - WRD**
  - Wireline Measurements (every 3 Months)
  - Some Wells Equipped with Pressure Transducers (Daily)
- **Ground Water Quality**
  - WRD Sampling (Semiannual)
  - Purveyor Title 22 Compliance Sampling (every 3 Years)
- **Reporting**
  - WRD Annual Regional Groundwater Monitoring Report



# Review of Existing Ground Water Monitoring Programs

## *Water Quality Constituents*

- 18 Constituents in Excess of Regulatory Levels at 10 or more Locations Between 2002-1012

### **Not Reported in WRD's Annual Monitoring Report**

Color	Aluminum
Odor	Arsenic
pH	1,2-Dichloroethane
Turbidity	Carbon Tetrachloride
Specific Conductance	Tetrachloroethylene (PCE)
Total Dissolved Solids	Trichloroethylene (TCE)
Iron	<b>1,4-Dioxane</b>
Manganese	<b>N-Nitrosodimethylamine (NDMA)</b>

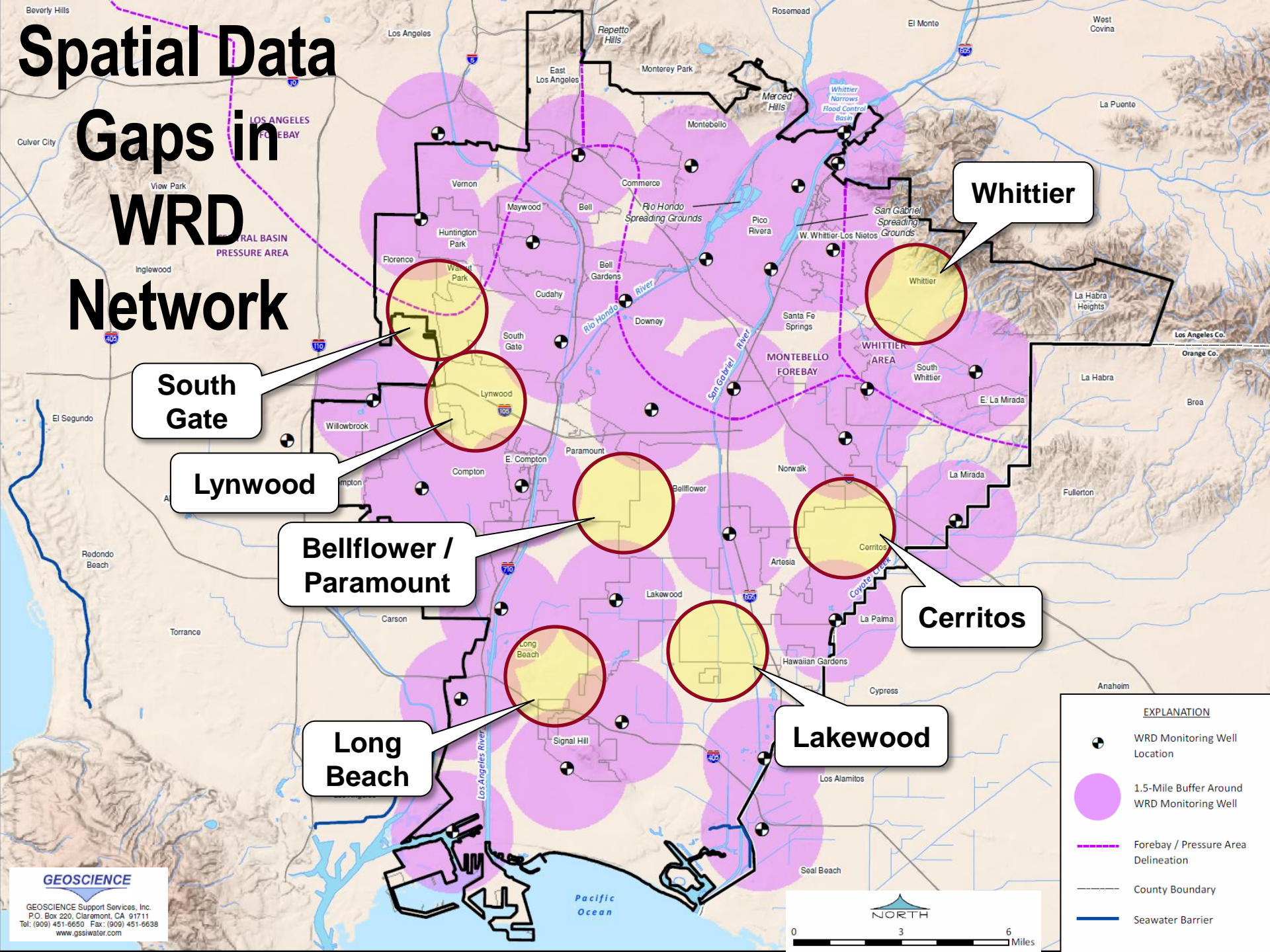


# Review of Existing Ground Water Monitoring Programs

## *Water Quality Constituents*

- Constituents Not Included Reported in WRD RGWMR
  - 1,4-dioxane
  - NDMA
  - Gross Alpha
- Contaminants of Emerging Concern Not Reported in WRD RGWMR
  - 1,2,3-Trichloropropane (TCP)
  - Tert-Butyl-Alcohol (TBA)
  - Pharmaceuticals
  - Personal Care Products

# Spatial Data Gaps in WRD Network



**South Gate**

**Lynwood**

**Bellflower / Paramount**

**Long Beach**

**Lakewood**

**Cerritos**

**Whittier**

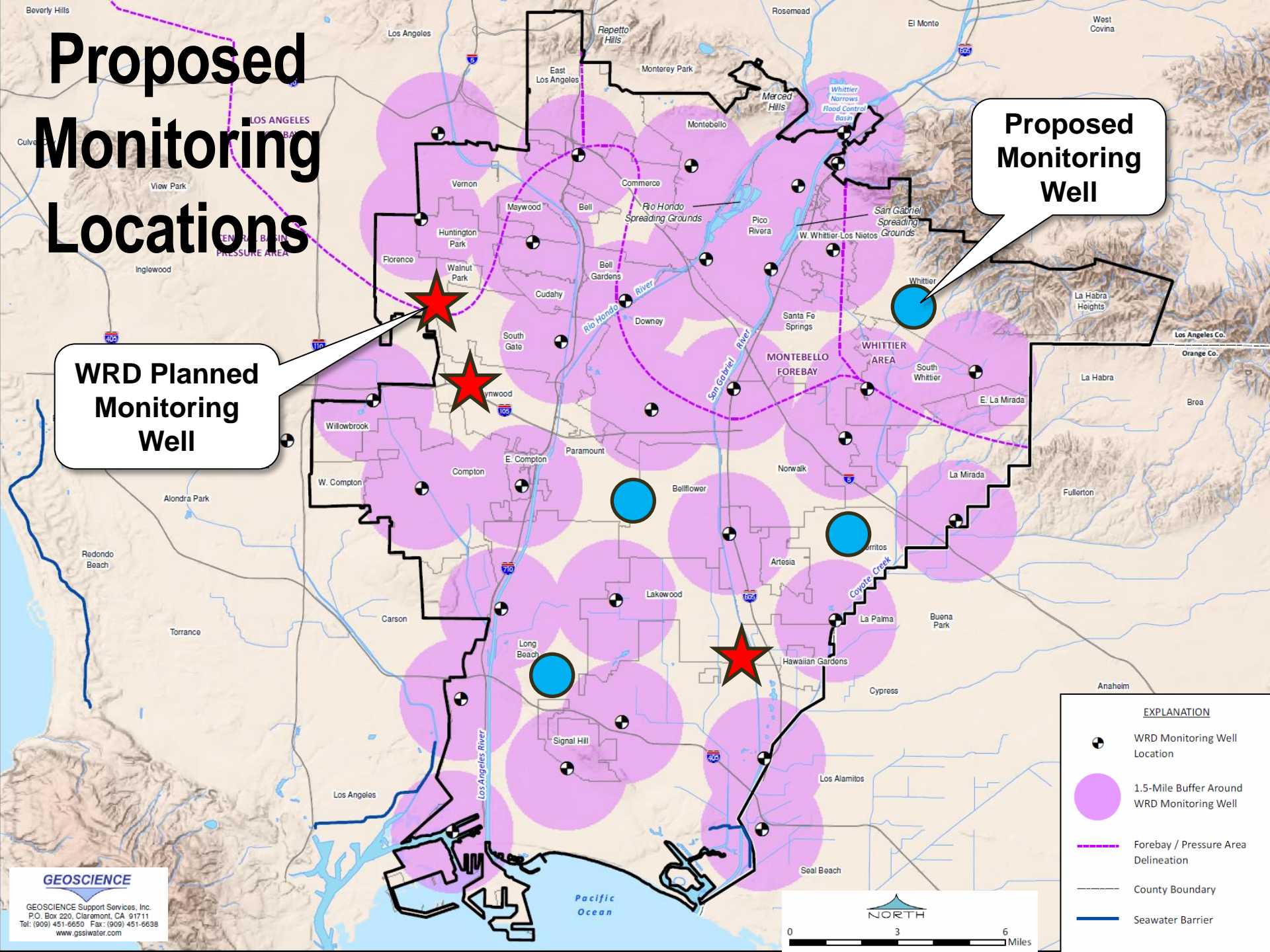
EXPLANATION	
	WRD Monitoring Well Location
	1.5-Mile Buffer Around WRD Monitoring Well
	Forebay / Pressure Area Delineation
	County Boundary
	Seawater Barrier



# Proposed Monitoring Locations

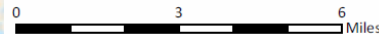
Proposed Monitoring Well

WRD Planned Monitoring Well








**GEOSCIENCE**

GEOSCIENCE Support Services, Inc.  
 P.O. Box 220, Claremont, CA 91711  
 Tel: (909) 451-6650 Fax: (909) 451-6638  
 www.gssiwater.com



**EXPLANATION**

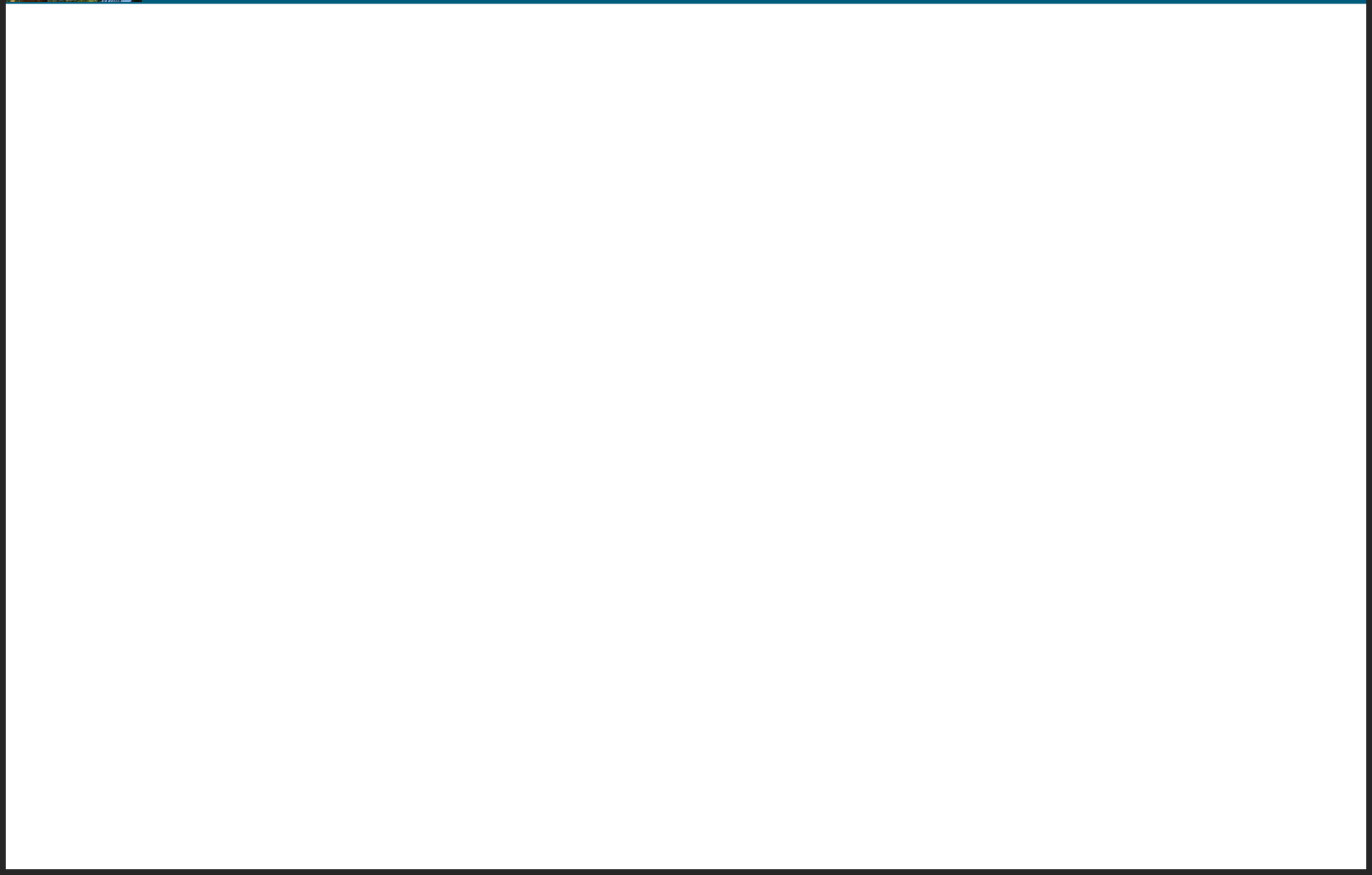
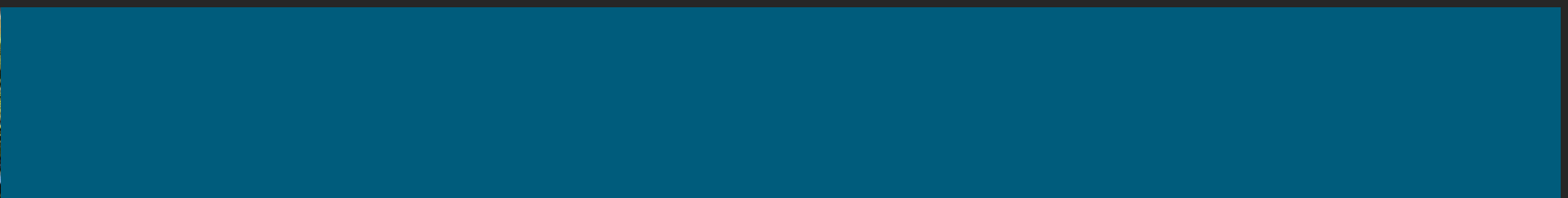
-  WRD Monitoring Well Location
-  1.5-Mile Buffer Around WRD Monitoring Well
-  Forebay / Pressure Area Delineation
-  County Boundary
-  Seawater Barrier



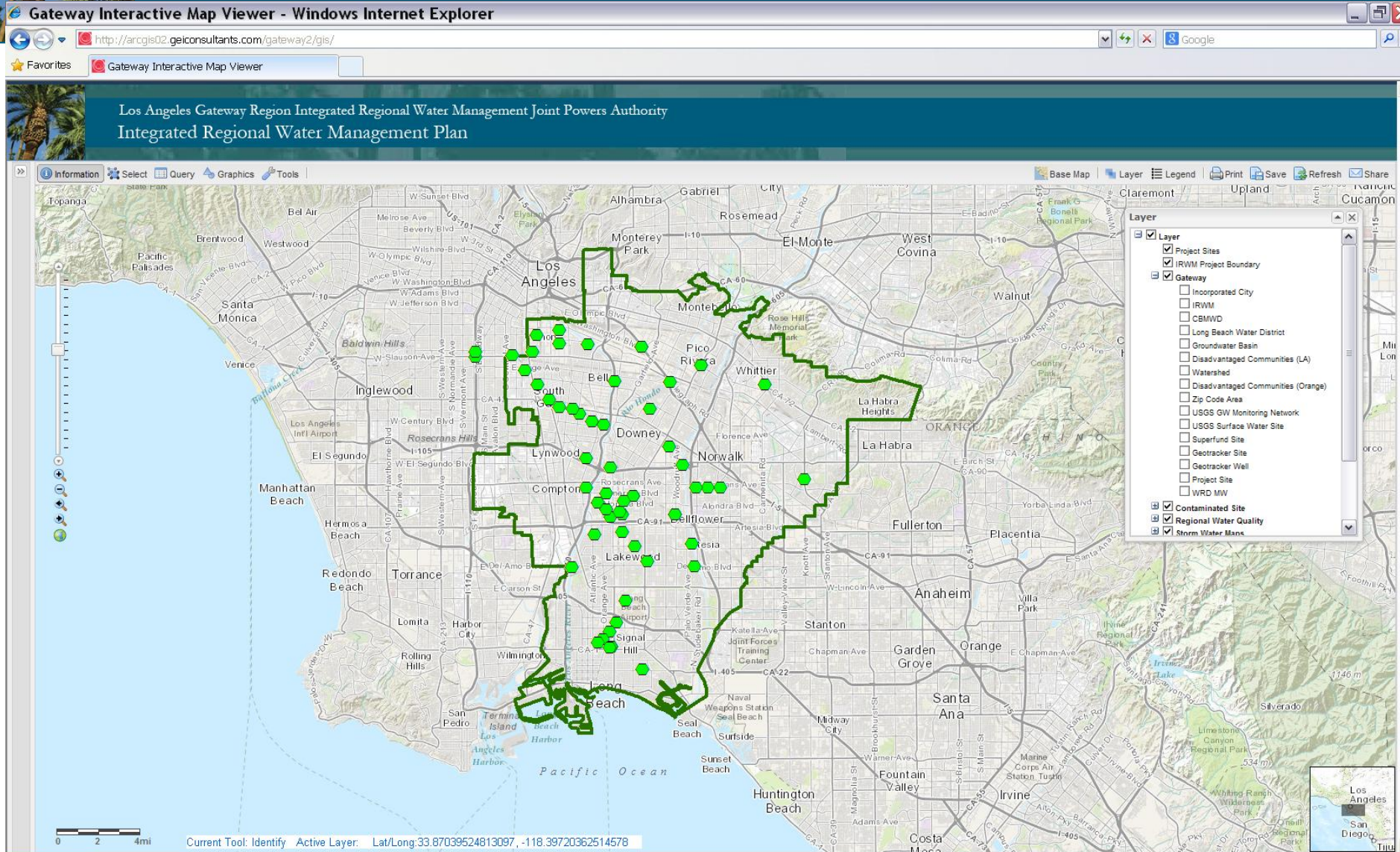
# Review of Existing Ground Water Monitoring Programs

## *RECOMMENDATIONS*

- Consider Construction of Four (4) Monitoring Wells to WRD in Addition to the Three (3) Already Planned
- Consider Reporting Additional Constituents of Concern in WRD RGWMR
  - 1,4-Dioxane
  - NDMA
  - Gross Alpha
- Consider Reporting Contaminants of Emerging Concern in WRD RGWMR



# Correcting Project Locations





- Not all coordinates were correct for the projects that were submitted
- Some plotting in the ocean
- Requesting check on some
  - Looking for Latitude/Longitude in Decimal Degrees, but
  - Can use street address
  - Can use Degrees-Minutes-Seconds
- Sent out e-mails; please answer promptly



# In-kind Work Accounting

**GWMA In-Kind Expense Rate Certification**

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Email: \_\_\_\_\_

I hereby certify that I am a paid employee of \_\_\_\_\_ actively represent that organization in the Gateway IRWMP project participation for that organization would constitute In-Kind expense development.

My hourly charge rate for that organization, including related overhead is \_\_\_\_\_

My electronic signature is \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Gateway IRWMP In-Kind Timesheet**

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

Period: \_\_\_\_\_

Date mm/dd/yy	Hours*	Task	Description of Work**
<b>TOTAL IN-KIND HOURS</b>	<b>0</b>		

\*nearest 1/2 hour  
 \*\*if meeting, give purpose

I certify this accounting as true and correct,

\_\_\_\_\_  
 Signature

Note: Electronic signature must be on file

# Next Steps

- Write-up Administrative Draft Plan
- Follow-up on In-Kind Timesheets
  
- **Next Stakeholders Meeting March 14**

