



**BUILDING
KNOWLEDGE
BUILDING
POWER**

ENSURING THE
HUMAN RIGHT TO
CLEAN WATER

Tuesday December 10, 2019

Presented By:





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Graphics by : theworksLA

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AGENDA

TUESDAY 12/10, 8:30 - 4:30

<u>Time</u>	<u>Activity</u>
8:30 - 9:00AM	Breakfast, Registration
9:00 - 9:15AM	Opening Session
9:15 - 9:30AM	Icebreaker
9:30 - 10:10AM	Drinking Water And Supply Sources
10:10 - 10:20AM	Introduction To The Social Forces Analysis
10:20 - 10:30AM	Break
10:30 - 11:30AM	Water And Health
11:40 - 12:00PM	Who Delivers My Drinking Water?
12:00 - 12:30PM	Mapping My Water Utility
12:30 - 1:15PM	Lunch
1:15 - 1:30PM	Morning Takeaways
1:30 - 2:00PM	Who Regulates My Drinking Water?
2:00 - 2:15PM	Where Are The Public And Private Water Systems?
2:15 - 2:30PM	Break
2:30 - 3:00PM	Green Infrastructure For Drinking Water
3:00 - 3:30PM	Funding Sources for Green Infrastructure
3:30 - 4:00PM	Social Forces Mapping and Next Steps
4:00 - 4:30PM	Evaluation and Thanks!

OVERARCHING GOAL:

Support and build community driven change to clean our drinking water and protect our health, through organizing, education and advocacy for South LA and Southeast LA.

- Create a social forces analysis for Drinking Water Systems & strategic next steps.
- Describe & analyze the regulatory mechanisms we can use to improve our drinking water and its quality and sustainability.
- Discuss funding sources to clean and protect our local water systems.
- Create next steps to clean our drinking water with our respective communities and stakeholders.

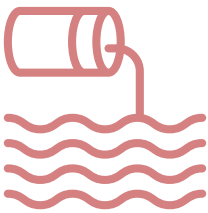
OBJECTIVES

DRINKING WATER, IT'S SOURCES



- Where does our water come from in LA
- The Water Cycle
- Explain water pollution and how it causes a shortage of drinking water
- What is Groundwater/the Water Cycle basics:
 - How does groundwater get contaminated
 - Ground water recharge and current challenges
 - How does Groundwater get to our faucets and showers

WATER AND HEALTH



- Understand the health impacts of contaminated drinking water
- Understand how those impacts affect both adults and children
- Understand the cumulative impacts of contaminants in Southeast LA and South LA
- Discuss the top 5 regional contaminants and specifically local toxics in water

REGULATORY FRAMEWORK AND DRINKING WATER



- Describe the public and privately owned water utilities and who regulates them.
- Overview of how, why and when these local water purveyors were created.
- Understand how local water utilities affect our drinking water (public and private)
- Map the agencies should but sometimes don't protect our water systems
- Understand some of the regulations and laws that should protect our drinking water

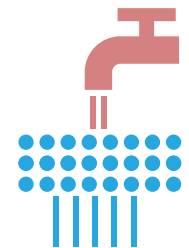
GREEN INFRASTRUCTURE AND OUR DRINKING WATER

- Green Infrastructure, what is it?
- How can Green infrastructure Improve our drinking water?
- How Green Infrastructure can create jobs and economic benefits for our communities
- Share examples of how small businesses can improve our drinking water
- California Metal X and the Wet Dry Cleaners
 - Take the time here to describe how small businesses can and should be our partners in creating solutions and why Government must invest in making them a greener process



FUNDING SOURCES FOR INVESTING IN GREEN INFRASTRUCTURE TO IMPROVE OUR DRINKING WATER

- Why would you advocate for funding of green/clean infrastructure?
- Describe potential funding and capacity building sources
- Identify target funding sources for my community



MOBILIZING OUR COMMUNITY NETWORKS TO ACHIEVE OUR GOALS IN THE LONG TERM

- Who will we engage?
- How can we share this or a similar curriculum to engage more of us to clean our water?
- How can I continue to build my strategy and capacity to share this information
- What are our goals? What do we wish to achieve?





http://bit.ly/psrla_humanbody

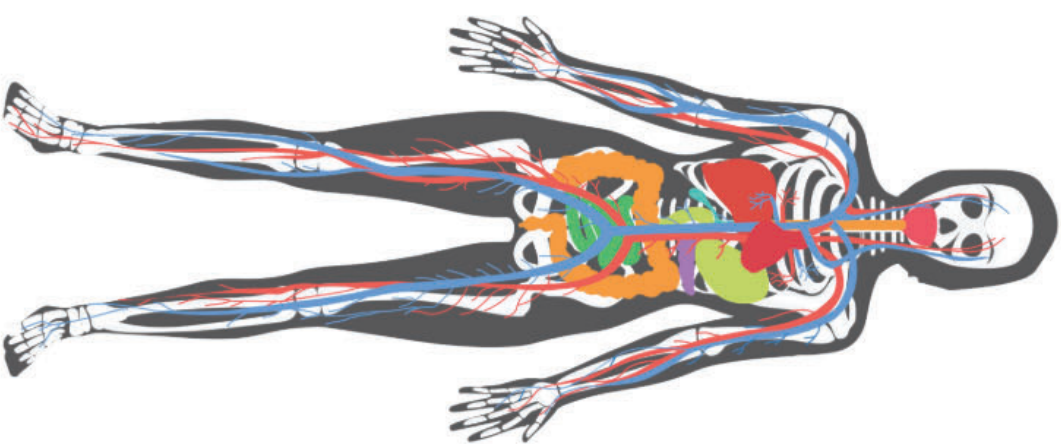
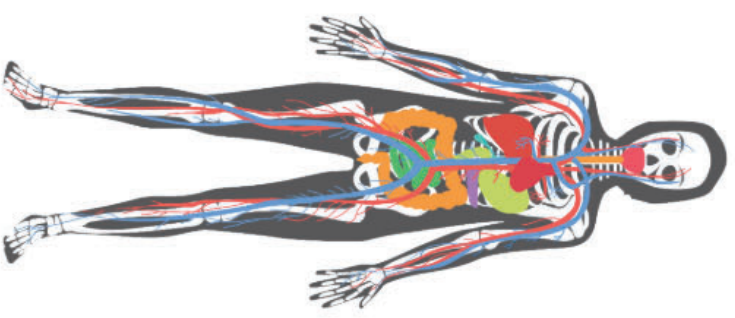
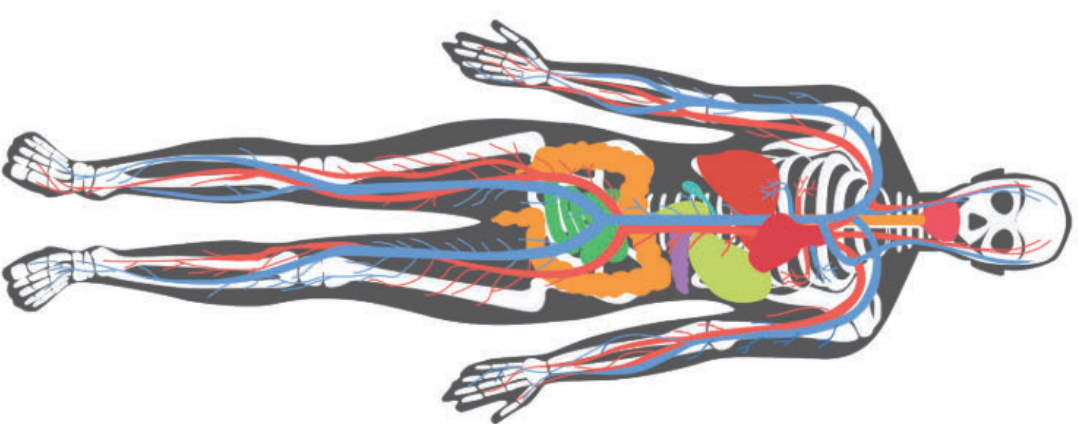


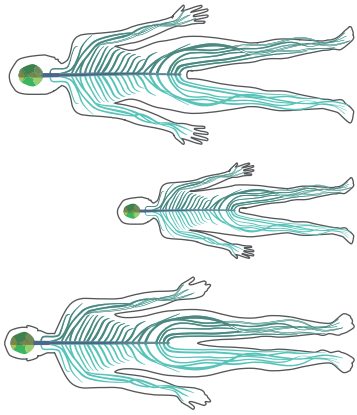
Human Body

Click to see the system on the reference bodies

A tool made by PSR-LA

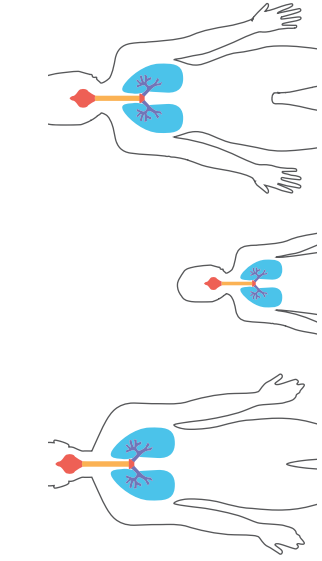
- Body Outline
- Skeletal System
- Nervous System
- Digestive System
- Circulatory System
- Respiratory System
- Reproductive System
- Urinary System





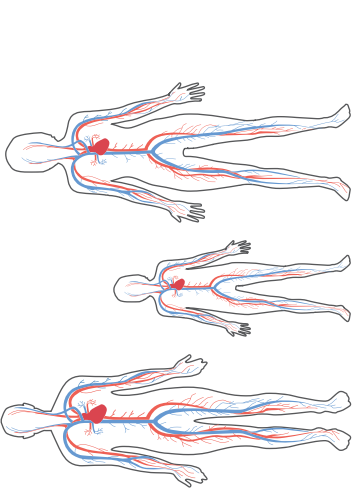
NERVOUS SYSTEM | EL SISTEMA NERVIOSO

BRAIN | CEREBRO
SPINAL CORD | MÉDULA ESPINAL



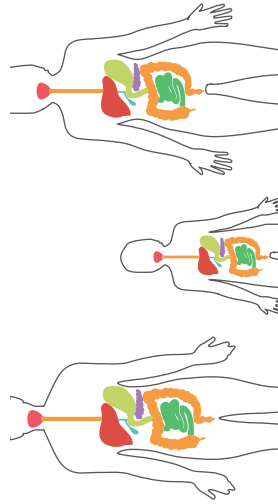
RESPIRATORY SYSTEM | EL SISTEMA RESPIRATORIO

NOSE CAVITY | CAVIDAD NASAL
ORAL CAVITY | CAVIDAD ORAL
PHARYNX | FARINGE
LARYNX | LARINGE
TRACHEA | TRÁQUEA
BRONCHUS | BRONQUIOS
LUNG | PULMÓN
DIAPHRAGM | DIAFRAGMA



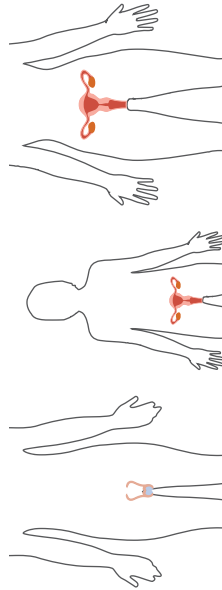
CIRCULATORY SYSTEM | EL SISTEMA CIRCULATORIO

JUGULAR VEIN | VENA YUGULAR
CAROTID ARTERY | ARTERIA CARÓTIDA
HUMERAL ARTERY | ARTERIA HUMERAL
HEART | CORAZÓN
VENA CAVA | VENA CAVA
AORTA | ARTERIA AORTA
ILLIAC VEIN | VENA ILIACA
ILLIAC ARTERY | ARTERIA ILIACA
FEMORAL VEIN | VENA FEMORAL
FEMORAL ARTERY | ARTERIA FEMORAL



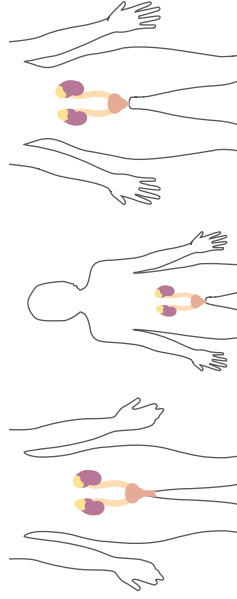
DIGESTIVE SYSTEM | EL SISTEMA DIGESTIVO

LIVER | HÍGADO
GALLBLADDER | VESÍCULA BILIAR
STOMACH | ESTÓMAGO
PANCREAS | PANCREAS
LARGE INTESTINE | INTESTINO GRUESO
SMALL INTESTINE | INTESTINO DELGADO
APPENDIX | APÉNDICE
ANUS | ANO



REPRODUCTIVE SYSTEM | EL SISTEMA REPRODUCTIVO

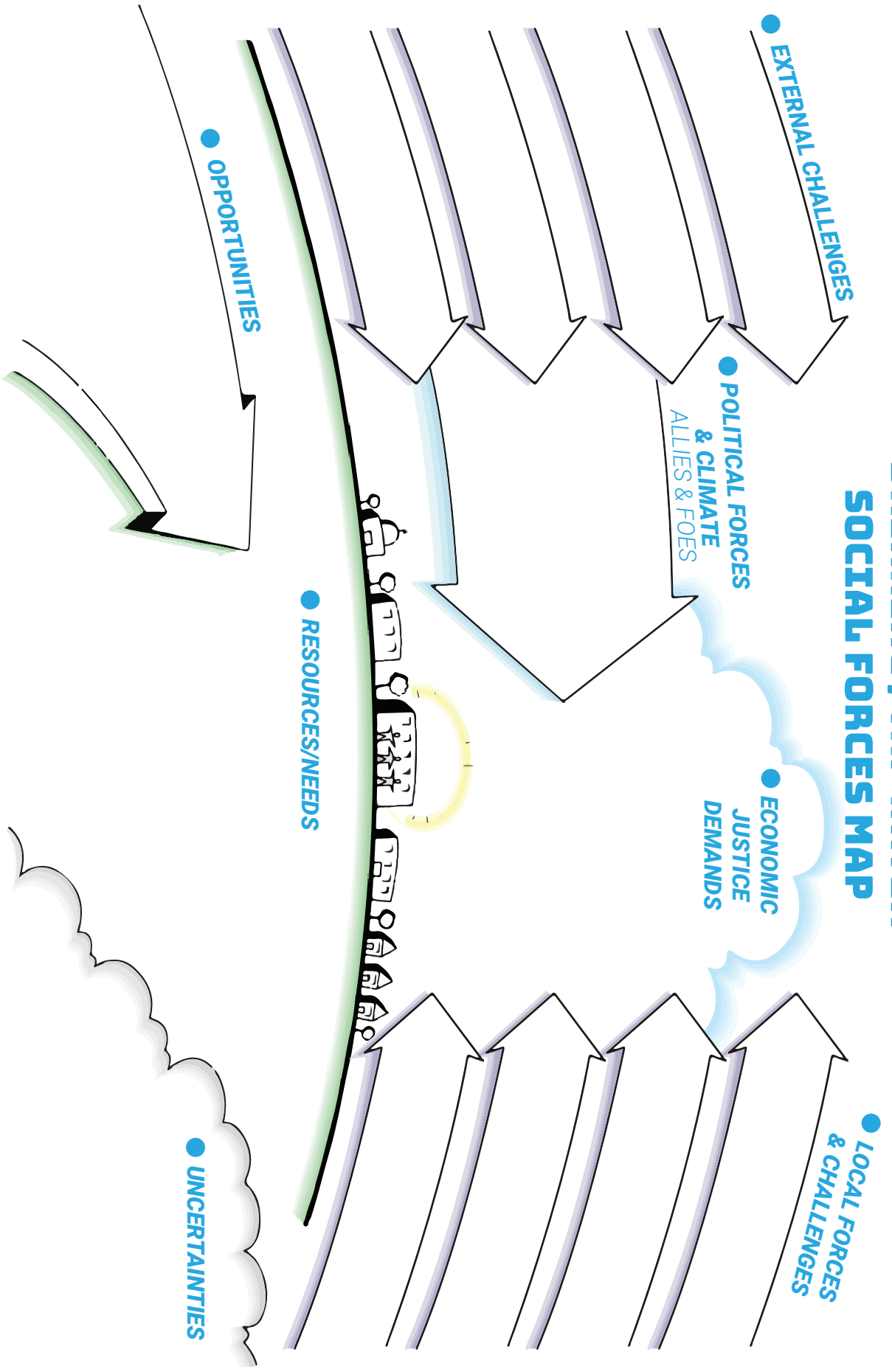
UTERUS | ÚTERO
FALLOPIAN TUBE | TROMPA DE FALLOPIO
OVARY | OVARIO
CERVIX | CUELLO UTERINO
VAGINA | VAGINA
PROSTATE GLAND | GLÁNDULA PROSTÁTICA
VAS DEFERENS | CONDUCTO DEFERENTE
TESTIS | TESTÍCULO
PENIS | PENE



URINARY SYSTEM | EL SISTEMA URINARIO

KIDNEY | RIÑÓN
URETER | URÉTER
BLADDER | VEJIGA
URETHRA | URETRA

DRINKING / TAP WATER SOCIAL FORCES MAP



DRINKING / TAP WATER SOCIAL FORCES MAP

EXTERNAL CHALLENGES

Lack Of Agency Coordination
And Enforcement

Fracking/drilling And Oil Industry
& Climate Crisis/droughts

Metal /Industrial Polluters
Bottled Water Vs Tap; Reusable Water
Bottle Movement; "Waterias"; Agricultural
Water Rights in Central Valley

Lack of Agency Coordination, DTSC, CARB,
AQMD, WRD, DGGGR, Watershed Councils

POLITICAL FORCES & CLIMATE ALLIES & FOES

- Trump's EPA
- DTSC/Cal EPA/CEQA
- State & Local Electeds & Water Boards
- SWRCB/RWQCB; (MWD);
Water Wholesaler/Retailers (Utility);
Private vs. Public Utility; CPUC;
- Local Water Boards; Water Rights Holders;
- Corporate Lobbyists
- Governor Newsom
- Building Trades

LOCAL FORCES & CHALLENGES

Local electeds and lack of
Capacity in local govt.

Ej groups & enviros, tenants rights,
Homeowners, churches; need stronger
Groups; african american groups

Accountability of Utilities
and Rate Payer Funds

LA County Fed of Labor and Building Trades

ECONOMIC JUSTICE DEMANDS

- Just transition (clean jobs)
- Clean green infrastructure
- Invest in pipeline for green/clean
Jobs locally
- Anti displacement policies
- Fund curb to tap pipe replacement for
Low income and public housing

RESOURCES/NEEDS

- Water Quality Monitoring
- Investments by local and state agencies for cleaning our water
- Local Planning & Strategy
- Implementation Enforcement
- Inter Agency Coordination
- Human Right to Water (Clean, Safe, Accessible Water)

OPPORTUNITIES

- Measure W & A
- DAC Funding
- Water Bond Funding
- Sativa Accountability under
a new system

UNCERTAINTIES

- Where Is Funding Going To?
- Climate Change Impacts On Water
- Other Toxics In Water
- Cumulative Impacts
- Community Input And Benefits
- Where Will Sativa Land?
- Water Improvement Projects
Impacting Price Of Water.
- Costs To Consumer

Southeast Los Angeles Community Water Systems

In Southeast Los Angeles, there are a total of 28 Community Water Systems, 10 Public Water Purveyors and 18 Private Water Purveyors.

Find your water provider: <https://trackingcalifornia.org/water/map-viewer?>

Find information about your Community Water System:

<https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystems.jsp?PointOfContactType=none&number=&name=&county=Los%20Angeles>

Bell/Bell Gardens

City of Bell Gardens (PUBLIC)

Office: 7100 Garfield Avenue, Bell Gardens, CA 90201.

Participation Opportunities: the Public is invited to attend City Council Meetings on the second and fourth Monday of each month at 6:00PM at 7100 South Garfield Avenue, Bell Gardens, CA 90201. Phone: 562-299-5117, Contact Gabriel Gomez (Water Quality)

Service Area: Northern Bell Gardens, Southern Commerce.

Water Sources: Local Groundwater (80%). The City of Bell Gardens also imports water from the Colorado River and the State Water Project through the Metropolitan Water District.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910108.pdf>

- Contaminant MCL Exceedances: None
 - Contaminant PHG Exceedances: Arsenic, Radium-228
-

Golden State Water Company-Bell (PRIVATE)

Office Information: Central Basin West CSA, 7105-D Eastern Ave, Bell Gardens, CA 90201. Hours: 8am-5pm Monday-Friday. Phone: 1-800-999-4033. Email: customerservice@gswater.com

Participation Opportunities: Contact office to be notified of future public meetings

Service Area: Bell, Bell Gardens, Cudahy, Hollydale, Huntington Park, Paramount, South Gate, Vernon, Willowbrook, and adjacent county territory. 20,000 customers.

Water Sources: Local Groundwater, and imported water from the State Water Project, and the Colorado River (Metropolitan Water District of Southern California).

2018 Consumer Confidence Report: www.gswater.com/bellbellgardensccr/

- Contaminant MCL Exceedances: Iron (secondary)
 - Contaminant PHG Exceedances: Perchloroethylene
-

Bellflower

Bellflower Home Garden Water Company (PRIVATE)

Office Information: 17447 Lakewood Boulevard, Bellflower, CA 90706. Phone: 562-531-8586.

Participation Opportunities: Board meetings the first Monday (subject to change) of every month at 6:00pm. Meetings are held at 8761 Ramona Street, Bellflower, CA 90706.

Service Area: Bellflower, CA.

Water Sources: Local Groundwater.

2016 Consumer Confidence Report (Most Recent): <https://drinc.ca.gov/ear/CCR/CCR2016CA1910012.pdf>

- Contaminant MCL Exceedances: None
 - Contaminant PHG Exceedances: Arsenic, Hexavalent Chromium, Uranium, Turbidity (in Distribution System)
 - Detected: Calcium, 1,4-Dioxane,
-

Bellflower Municipal Water System (PRIVATE)

Office: 10016 Flower Street, Bellflower, CA 90706. Phone: 562-925-6174.

Service Area: Bellflower, CA.

Participation Opportunities: City Council meetings are held at 16600 Civic Center Drive, Bellflower, CA every 2nd and 4th Monday of each month at 7:00pm.

Water Sources: Local Groundwater, Bellflower Municipal Water System also purchases water from Liberty Utilities, and Bellflower Somerset Mutual Water Company.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910018.pdf>

- Contaminant MCL Exceedances: None
 - Contaminant PHG Exceedances: Arsenic, Uranium
 - Detected: 1,4-Dioxane
-

Bellflower Somerset Mutual Water Company (PRIVATE)

Office: 10016 Flower Street, Bellflower, California 90706. Phone: 562-866-9980. Contact: Steve Lenton.

Participation Opportunities: Shareholders and customers are welcome to attend Board meetings at 10016 Flower Street, CA 90706 on every 3rd Monday of the month at 4:30pm.

Service Area: Bellflower, CA.

Water Sources: Local Groundwater, occasionally purchases from Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910013.pdf>

- Contaminant MCL Exceedances: Manganese (Secondary)
- Contaminant PHG Exceedances: Arsenic, Hexavalent Chromium, Uranium
- Detected: 1,4-Dioxane

Liberty Utilities-Bellflower-Norwalk (PRIVATE)

Office Information: 9750 Washburn Road Downey, Compton, CA 90241. Hours: Monday-Friday 8am-5pm. Phone: 1-800-727-5987.

Participation Opportunities: Contact Office for future events.

Service Area: Bell Gardens, CA

Water Sources: Local Groundwater, and imported water from the State Water Project and the Colorado River (Metropolitan Water District of Southern California).

2018 Consumer Confidence Report:

https://california.libertyutilities.com/uploads/Bellflower_Liberty_CCR%20Template_Final.pdf

- Contaminant MCL Exceedances: Aluminum
- Contaminant PHG Exceedances: Perchloroethylene, Uranium, Fluoride
- Detected: 1,4-Dioxane

Compton

Compton City Water Department (PUBLIC)

Office: 205 South Willowbrook Avenue, Compton, CA 90220. Hours: Monday-Friday 7am-6pm. Phone: 310-605-6250.

Participation Opportunities: The public is invited to attend City Council meetings located at the City Council Chambers, 205 South Willowbrook Avenue, Compton CA 90220. Meetings are held every Tuesday of the month at 6:00pm.

Service Area: Compton, Long Beach, Carson.

Water Sources: Local groundwater, also imports water from the Metropolitan Water District of Southern California (but has not purchased from MWD since 2016)

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910026.pdf>

- Contaminant MCL Exceedances: Aluminum (Secondary), Iron (Secondary).
 - Contaminant PHG Exceedances: Perchloroethylene, TCE, Aluminum, Arsenic, Gross Alpha, Radium-226, Radium-228, Uranium, Total Coliform Bacteria.
 - Detected: 1,4-Dioxane
-

Golden State Water Company-Southwest (PRIVATE)

Office: Southwest CSA, 1600 W. Redondo Beach Boulevard #101, Gardena, CA 90247. Hours: 8am-5pm Monday-Friday. General Manager Kate Nutting.

Participation Opportunities: Contact office to be notified of future public meetings

Service Area: Gardena and Lawndale, Carson, Compton, El Segundo, Hawthorne, Inglewood, Redondo Beach, Unincorporated Athens, Del Aire, El Camino Village, Lennox and Gardena Heights.

Water Sources: Local Groundwater (from both the West Coast and Central Groundwater Basins). GSWC-Southwest also imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910155.pdf>

- Contaminant MCL Exceedances: Aluminum (Secondary)
 - Contaminant PHG Exceedances: Arsenic, Fluoride, Gross Alpha, Uranium, Bromate
 - Detected: Lead (School Testing)
-

Liberty Utilities-Compton (PRIVATE)

Office: 9750 Washburn Road, Downey, CA 90241. Hours: Monday-Friday 8am-5pm. Phone: 1-800-727-5987.

Participation Opportunities: Contact office for future events.

Service Area: Compton, Willowbrook, and Lynwood.

Water Sources: Local Groundwater (57%), and imported water from the Colorado River and the State Water Project purchased from the Metropolitan Water District of Southern California (43%).

2018 Consumer Confidence Report:

https://california.libertyutilities.com/uploads/Compton_Liberty_CCR%20Template_Final.pdf

- Contaminant MCL Exceedances: Aluminum (Secondary)
 - Contaminant PHG Exceedances: Bromate, Fluoride
-

Sativa County Water District (PUBLIC)

Office: 2015 East Hatchway Street, Compton, CA 90222. Hours: Monday-Thursday 8a,-5pm. Friday 9am-2pm. Phone: 626-458-4334. Contact: Russ Bryden.

Participation Opportunities: Regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30am in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. On Tuesdays following a Monday holiday, the meetings begin at 1:00pm.

Service Area: Compton, CA.

Water Sources: Local Groundwater.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910147.pdf>

- Contaminant MCL Exceedances: Perchloroethylene, Color (secondary)
 - Contaminant PHG Exceedances: Perchloroethylene, Arsenic, Gross Alpha, Radium-226, Radium-228, Uranium
 - Detected: 1,4-Dioxane.
-

Cudahy

Tract 180 Mutual Water Company (PRIVATE)

Office: 4544 Florence Avenue, Cudahy, CA 90201. Phone (323)-771-6682.

Participation Opportunities: Public is invited to attend monthly Board meetings on the second Monday of each month at 1:00pm at 4544 Florence Avenue, Cudahy, CA 90201.

Service Area: Cudahy, South Gate, Bell.

Water Sources: Local Groundwater.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910159.pdf>

- Contaminant MCL Exceedances: None
 - Contaminant PHG Exceedances: Perchloroethylene, TCE, Radium-226, Radium-228, Uranium
 - Detected: 1,4-Dioxane, Chlorate, 1,1-Dichloroethane, Hexavalent Chromium, Total Chromium, Molybdenum Strontium, Vanadium.
-

Tract 349 Mutual Water Company (PRIVATE)

Office: 4630 Santa Ana Street, Cudahy, CA 90201. Phone: 323-560-1601. Contact: Ryan Rosche.

Participation Opportunities: Public is invited to attend Board meetings on the second Wednesday of each month at 1:00pm at 4630 Santa Ana Street, Cudahy, CA 90201.

Service Area: Cudahy, Huntington Park, South Gate.

Water Sources: Local Groundwater.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910160.pdf>

- Contaminant MCL Exceedances: Manganese (Secondary)
 - Contaminant PHG Exceedances: Arsenic, Gross Alpha, Radium-226
 - Detected: 1,4-Dioxane
-

Downey

Downey City Water Department (PUBLIC)

Office: 9252 Stewart & Ray Road, Downey, CA 90241. Phone 562-904-7202. Contact: Bridget Tapia (Water Quality).

Participation Opportunities: Downey City Council Meetings held on the second and fourth Tuesday of each month at 6:30pm, or Public Works Committee Meetings held on the third Thursday of each month at 4:00pm. Both meetings held at Downey City Hall, 11111 Brookshire Avenue.

Service Area: Downey.

Water Sources: Local Groundwater, Downey City Water Department is also connected to the Metropolitan Water District of Southern California if additional water is needed.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910034.pdf>

- Contaminant MCL Exceedances: Total Coliform Bacteria,
 - Contaminant PHG Exceedances: Gross Alpha, Uranium, Perchloroethylene, Arsenic, Hexavalent Chromium
 - Detected: Lead and Copper (Schools)
-

Golden State Water Company-Hollydale (PRIVATE)

Office: Central Basin West CSA, 7105-D Eastern Avenue, Bell Gardens, CA 90201. Hours: Monday-Friday 8am-5pm. General Manager Dave Schickling.

Participation Opportunities: Contact office for future events.

Service Area: Downey.

Water Sources: Local Groundwater.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910195.pdf>

- Contaminant MCL Exceedances: None
- Contaminant PHG Exceedances: Arsenic, Gross Alpha, Uranium, Perchloroethylene
- Detected: 1,4-Dioxane

Florence-Graham

Golden State Water Company-Florence/Graham (PRIVATE)

Office: Central Basin West CSA, 7105-B Eastern Avenue, Bell Gardens, CA 90201. Hours: Monday-Friday 8am-5pm. General Manager Dave Schickling.

Participation Opportunities: Contact office for future events.

Service Area: Florence-Graham, Walnut Park, South Gate, Huntington Park.

Water Sources: Local Groundwater, water is also imported from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910077.pdf>

- Contaminant MCL Exceedances: 1,2-Dichloroethane,
- Contaminant PHG Exceedances: Fluoride, Perchloroethylene, 1,2-Dichloroethane, Combined Radium (Ra-226 and Ra-228), Gross Alpha, Uranium.

Huntington Park

Huntington Park City Water Department (PUBLIC)

Office: 6900 Bissell Street, Huntington Park, CA 90255.

Participation Opportunities: The public is invited to attend City Council meetings the first and third Tuesday of each month at 6:00pm at 6550 Miles Avenue, Huntington Park, CA 90255.

Service Area: Huntington Park, Vernon, Cudahy, Walnut Park.

Water Sources: Local groundwater and surface water. Huntington Park City Water Department also imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910049.pdf>

- Contaminant MCL Exceedances: Color (Secondary)
- Contaminant PHG Exceedances: TCE, Aluminum, Arsenic, Gross Alpha, Radium-226, Radium-228, Uranium

Lynwood

Golden State Water Company-Willowbrook (PRIVATE)

Office: Office: Central Basin West CSA, 7105-B Eastern Avenue, Bell Gardens, CA 90201. Hours: Monday-Friday 8am-5pm. General Manager Dave Schickling.

Participation Opportunities: Contact office for future events.

Service Area: Lynwood, Compton, Willowbrook.

Water Sources: Local Groundwater. GSWC-Willowbrook also imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910072.pdf>

- Contaminant MCL Exceedances: None.
- Contaminant PHG Exceedances: Fluoride, Gross Alpha, Uranium.

Los Angeles Department of Water and Power (PUBLIC)

Office: 919 South Soto Street Suite 10, Los Angeles, CA 90023. Phone:1-800-342-5397.

Participation Opportunities: Public meetings are held at LADWP, 111 North Hope Street, Room 1555H, Los Angeles CA 90012-2694

Service Area: Western Lynwood.

Water Sources: Los Angeles Aqueduct (Owens Valley and the Eastern Sierras) (49%), State Water Project and Colorado River (40%), Local Groundwater (9%), Recycled Water (2%).

2018 Consumer Confidence Report:

https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-w-wqreport?_afLoop=237944559157522&_afWindowMode=0&_afWindowId=s8dw85lkl_1#%40%3F_afWindowId%3Ds8dw85lkl_1%26_afLoop%3D237944559157522%26_afWindowMode%3D0%26_adf.ctrl-state%3Ds8dw85lkl_57

- Contaminant MCL Exceedances: Aluminum (Secondary), Odor (Secondary)
- Contaminant PHG Exceedances: Bromate, Gross Alpha, Gross Beta, Total Coliform Bacteria, Hexavalent Chromium.
- Detected: Lead.

Liberty Utilities-Lynwood/Rancho Dominguez (PRIVATE)

Office: 9750 Washburn Road, Downey, CA 90241. Hours: Monday-Friday 8am-5pm. Phone: 1-800-727-5987.

Participation Opportunities: Contact office for future events.

Service Area: Lynwood, Compton.

Water Sources: Local Groundwater (71%). Liberty Utilities-Lynwood/Rancho Dominguez also imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California (29%).

2018 Consumer Confidence Report:

https://california.libertyutilities.com/uploads/Lynwood_Liberty_CCR%20Template_Final.pdf

- Contaminant MCL Exceedances: Odor (Secondary)
 - Contaminant PHG Exceedances: Arsenic, Bromate, Perchloroethylene, Gross Alpha, Uranium, Fluoride
 - Detected: 1,4-Dioxane, Lead.
-

Lynwood City Water Department (PUBLIC)

Office: City of Lynwood, 11330 Bulliss Road, Lynwood, CA 90262. Phone: 310-603-0220, Contact George Cambero (Water Quality).

Participation Opportunities: The public is invited to attend City Council meetings located at Lynwood City Hall, 11330 Bullis Road, Lynwood, CA 90262. Meetings are held on the 1st and 3rd Tuesday of each month at 6:00pm.

Service Area: Lynwood, Northern Compton, Southern South Gate.

Water Sources: Local Groundwater and Surface Water. Lynwood City Water Department also imports water from the Colorado River and the State Water Project through Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCRCERT2018CA1910079.pdf>

- Contaminant MCL Exceedances: Perchloroethylene, TCE
 - Contaminant PHG Exceedances: Perchloroethylene, TCE, Aluminum, Arsenic, Gross Alpha, Gross Beta, Radium-226, Radium-228, Uranium.
 - Detected: 1,4-Dioxane
-

Maywood

California Water Service-East Los Angeles District (PRIVATE)

Office: 2000 South Tubeway Avenue, Commerce, CA 90040. Phone: 323-722-8601.

Participation Opportunities: Contact office for future events.

Service Area: Bell, Commerce, Maywood, Montebello, Monterey Park, Vernon

Water Sources: Local Groundwater. California Water Service-East Los Angeles District also imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910050.pdf>

- Contaminant MCL Exceedances: None
- Contaminant PHG Exceedances: Total Coliform Bacteria, Gross Alpha, Gross Beta, Uranium, Arsenic, Copper.

Maywood Mutual Water Company #1 (PRIVATE)

Office: 5953 Gifford Avenue, Huntington Park, CA 90255. Phone: 323-560-2439

Participation Opportunities: Contact office for future events.

Service Area: Maywood, Huntington Park.

Water Sources: Local groundwater, and connection to Metropolitan Water District of Southern California.

(Most Recent) 2016 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2016CA1910084.pdf>

- Contaminant MCL Exceedances: None
 - Contaminant PHG Exceedances: Aluminum, Arsenic, Gross Alpha, Gross Beta, Radium-226, Radium-228, Uranium.
-

Maywood Mutual Water Company #2 (PRIVATE)

Office: 3521 East Slauson Avenue, Maywood, CA 90270. Phone 323-581-5816, Contact Steven Rojo (Water Quality).

Participation Opportunities: Shareholders are welcome to attend monthly Board of Directors meetings on the fourth Thursday of each month at 4:30pm at 3521 East Slauson Avenue, Maywood CA 90270. Please call the office at least one day prior to the meeting to be placed on the agenda.

Service Area: Maywood

Water Sources: Local groundwater and surface water. Maywood Mutual Water Company #2 also imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910085.pdf>

- Contaminant MCL Exceedances: Aluminum (Secondary), Iron (Secondary), Manganese (Secondary)
 - Contaminant PHG Exceedances: Aluminum, Gross Alpha, Radium-226, Uranium
-

Maywood Mutual Water Company #3 (PRIVATE)

Office: 6151 Heliotrope Avenue, Maywood, CA 90270. Hours: Monday-Friday 8:30am-4pm. Phone: 323-560-3657.

Participation Opportunities: Shareholders are welcome to attend the Board meetings held the last Tuesday of each month, except November and December at 4:30pm at 6151 Heliotrope Avenue, Maywood CA 90270.

Service Area: Maywood, Northern Bell.

Water Sources: Local Groundwater.

(Most Recent) 2016 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2016CA1910086.pdf>

- Contaminant MCL Exceedances: TCE
- Contaminant PHG Exceedances: TCE, Hexavalent Chromium, Gross Alpha, Radium-226, Uranium
- Detect: 1,4-Dioxane

Paramount

Paramount City Water Department (PUBLIC)

Office: Paramount City Hall, 16400 Colorado Avenue, Paramount, CA 90723. Hours: Monday-Friday 8am-5:30pm. Phone: 562-220-2010.

Participation Opportunities: The public is welcome to attend Public Works Commission meetings located at Paramount City Hall, 16400 Colorado Avenue, Paramount, CA 90723. Meetings are held on the 1st Thursday of each month at 6pm.

Service Area: Paramount.

Water Sources: Local Groundwater, and Paramount City Water Department imports water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910105.pdf>

- Contaminant MCL Exceedances: Aluminum (Secondary), Odor (Secondary)
 - Contaminant PHG Exceedances: Arsenic, Gross Alpha, Radium-226, Radium-228, Uranium
 - Detected: 1,4-Dioxane
-

South Gate

South Gate City Water Department (PUBLIC)

Office: 8650 California Avenue, South Gate, CA 90280. Phone: 323-563-5790.

Participation Opportunities: The public is invited to attend City Council meetings on the second and fourth Tuesday of each month at 6:30pm in the City Council Chambers, South Gate City Hall at 8650 California Avenue, South Gate, California 90280.

Service Area: South Gate, Southwest Cudahy, Northern Lynwood.

Water Sources: Local Groundwater.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910152.pdf>

- Contaminant MCL Exceedances: None
- Contaminant PHG Exceedances: Perchloroethylene, Arsenic, Hexavalent Chromium, Gross Alpha, Gross Beta
- Detected: 1,4-Dioxane

Vernon

Vernon City Water Department (PUBLIC)

Office: 4305 Santa Fe Avenue, Cernon, CA 90058. Phone 323-583-8811.

Participation Opportunities: The public is invited to attend City Council meetings the first and third Tuesday of the month at 9am at City Hall in the Council Chambers, 4305 Santa Fe Avenue. Phone: 323-583-8811, Contact Wendell Wall (Water Quality).

Service Area: Vernon, Northern Huntington Park.

Water Sources: Local Groundwater and imported water from the Colorado River and the State Water Project through the Metropolitan Water District of Southern California.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910167.pdf>

- Contaminant MCL Exceedances: Manganese (Secondary)
 - Contaminant PHG Exceedances: Bromate, Gross Alpha, Radium-226, Radium-228, Uranium, Hexavalent Chromium, Total Chromium.
 - Detect: 1,4-Dioxane, Strontium
-

Walnut Park

Walnut Park Mutual Water Company (PRIVATE)

Office: 2460 East Florence Avenue, Huntington Park, CA 90255. Phone: 323-581-3226.

Participation Opportunities: The public is invited to attend Annual Shareholders meetings located at 2460 East Florence Avenue, Walnut Park, CA 90255. There are also monthly Board of Directors Meetings at 1PM. Check website for monthly Board of Directors meetings.

Service Area: Southern Huntington Park, Walnut Park, Northern South Gate.

Water Sources: Local Groundwater.

2018 Consumer Confidence Report: <https://drinc.ca.gov/ear/CCR/CCR2018CA1910169.pdf>

- Contaminant MCL Exceedances:
- Contaminant PHG Exceedances: Hexavalent Chromium, Gross Alpha, Uranium
- Detected: Chlorate, Hexavalent Chromium, Total Chromium, Molybdenum, Strontium, Vanadium.

APPENDIX C

FACILITATOR LIST OF NAMES

Physicians For Responsibility Los Angeles (PSR-LA)

Martha Dina Arguello
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marguello@psr-la.org

Michael Rincon
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Guest Experts

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MD, Harbor UCLA
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Caryn Mandelbaum
Public Interest Attorney and Sustainable
Water Conservation Expert
Carynmandelbaum@gmail.com

APPENDIX D

LIST OF ADDITIONAL FUNDING SOURCES:

Proposition 50 (CDPH) | ~\$500,000,000

Types of Project: CWS, Small Systems (monitoring, treatment, infrastructure), Grants for treatment and contaminant removal, Grants for water quality monitoring, source water protection, Colorado River Use Reduction, Contaminant treatment, UV/Ozone Maximum Contaminant Level (MCL) Violation.

State Revolving Fund (CDPH) | ~\$150,000,000

Types of Project: Water treatment facilities, other infrastructure, planning, consolidation.

Proposition 50 (DWR) | ~\$250,000,000

Types of project: Integrated Regional Water Management Planning and implementation

Proposition 50 (State Water Board) | ~\$450,000,000

Types of Projects: Pollution prevention, reclamation, water quality improvement, blending and exchanging project, source protection, restore/protect surface and groundwater, Integrated Regional Water Management Planning and Implementation.

American Reinvestment and Recovery Act (ARRA) | ~\$450,000,000

Types of Projects: Pollution prevention, reclamation, water quality improvement, blending and exchanging project, source protection, restore/protect surface and groundwater, Integrated Regional Water Management Planning and Implementation.

Proposition 1 (Water Quality, Supply, and Infrastructure Improvement Act)

Proposition 84 (CDPH) | ~\$250,000,000

Types of Project: Emergency Clean Water Grants, Small community infrastructure and nitrate, grants to reduce or prevent contamination of groundwater that serves as a source of drinking water.

Proposition 84 (DWR) | ~\$1,000,000,000

Types of Project: Integrated Regional Water Management Planning and Implementation

Measure W

State Water Resource Board (SWR)

Transformative Climate Communities

SWR Watershed Protection Grants & Loans

Proposition-1 DAC-Involvement Program

SWR Human Right to Water Fund

Measure A

How to Read Your Consumer Confidence Report

Look here to find the dates that the water was tested.

This is the average level of each contaminant detected in your water.

Look here to see the highest and lowest levels detected in different samples.

This is the legal limit (also sometimes called Action Levels). Check to see how this compares to the level detected.

This is the public health goal, the safe level for a contaminant. Compare to the level detected.

Look here to find out what types of sources this contaminant may come from in your area.

Look here to find the contaminants that your water system has tested for.

TEST RESULTS: DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Dibromochloropropane (DBCP), ppt	9/28/06	9.5	ND to 38	200	1.7	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Nitrate as NO ₃ , ppm	9/28/06 11/29/06 12/25/07 4/26/07 5/23/07	48	34.1 to 65	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Arsenic, ppb	1/20/05 9/28/06	5	2 to 8	10	.004	Erosion of natural deposits; runoff from orchards
Fluoride, ppm	1/20/05 9/28/06	.25	0.20 to 0.30	2.00	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Barium, ppm	1/20/05 9/28/06	0.84	0.33 to 1.35	1	NA	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits

Nitrate is over both the public health goal (PHG) and the maximum contaminant level (MCL), and therefore should be a concern. Look in your CCR for an explanation of what your system is doing to fix the problem.

The average sample of Barium was not over the MCL, but one sample was over the MCL. So you may want to follow-up with your water system to find out what is being done to make sure no one is exposed to levels over the MCL.

Arsenic is not over the MCL, but is over the PHG. Therefore, while there is not a violation, you may want to take precautions, particularly if you have vulnerable people in your home such as pregnant women or children.

Cómo leer su Informe de Confianza al Consumidor

Aquí encontrará las fechas en las que se efectuaron los análisis del agua.

Aquí encontrará los contaminantes que su sistema de agua ha analizado.

Este es el nivel promedio de cada contaminante que se detectó en su agua.

Aquí se muestran los niveles mayores y menores que se detectaron en diferentes muestras

Este es el límite legal (a veces también conocido como Nivel de Acción). Compare este valor con el del nivel detectado.

Esta es la Meta de Salud Pública, el nivel considerado seguro para un contaminante. Compare este valor con el del nivel

Aquí encontrará las posibles fuentes de donde este contaminante podría provenir en su zona

RESULTADOS DE LOS ANÁLISIS: DETECCIÓN DE CONTAMINANTES CON UN ESTÁNDAR PRIMARIO DEL AGUA POTABLE

Compuesto o Componente (y unidades con que se reporta)	Fecha de Muestreo	Nivel Detectado	Ámbito de Detección	MCL [MRDL]	PHG (MCLG) [MRDLG]	Fuentes más comunes de la contaminación
Dibromocloro-propano (DBCP), ppt	9/28/06	9.5	ND a 38	200	1.7	Nematicida prohibido que podría encontrarse aun en el suelo debido a usos previos en cultivos como soya, algodón, uva, tomate y árboles frutales, y que es arrastrado por escorrentía o se filtra en el suelo.
Nitrato como NO ₃ , ppm	9/28/06 11/29/06 12/25/07 4/26/07 5/23/07	48	34.1 a 65	45	45	Escorrentía y filtración de los fertilizantes aplicados; filtraciones de tanques sépticos y alcantarillado; erosión de depósitos naturales
Arsénico, ppb	1/20/05 9/28/06	5	2 a 8	10	.004	Erosión de depósitos naturales; escorrentía desde los huertos de frutales
Fluoruro, ppm	1/20/05 9/28/06	.25	0.20 a 0.30	2.00	1	Erosión de depósitos naturales; aditivo en el agua para reforzar los dientes; descargas de fábricas de fertilizantes y aluminio.
Bario, ppm	1/20/05 9/28/06	0.84	0.33 a 1.35	1	NA	Descargas de desechos de la perforación petrolera y de refinerías de metales; erosión de depósitos naturales.

El nivel de nitrato excede tanto la Meta de Salud Pública (PHG) como el Nivel Máximo de Contaminante (MCL), por lo cual debe causar preocupación. Busque en el CCR la explicación que su sistema de agua le ofrece sobre lo que está haciendo para resolver el problema.

El arsénico no supera el MCL aunque sí supera la PHG. Por lo tanto, si bien no se incurre en una contravención, es mejor que tome precauciones, en especial si hay personas vulnerables en su casa, como mujeres embarazadas o niños.

El nivel promediado de las muestras de bario no excedió el MCL, aunque una de las muestras sí lo excedió. Así que es mejor que consulte con su sistema de agua y averigüe qué medidas se han tomado para garantizar que nadie esté expuesto a niveles superiores al MCL.

EXECUTIVE SUMMARY

The Sustainable LA Grand Challenge (SLA GC) Environmental Report Card (ERC) for Los Angeles County (L.A. County) is the only comprehensive environmental report card for a megacity in the world. This 2019 ERC on Water provides an in-depth look at the region's efforts in moving toward a more resilient local water supply, which requires maximizing high-quality local water supplies, improving water conveyance and treatment infrastructure, reducing water consumption, and implementing innovative technology and policy solutions. Twenty indicators were assessed across eight categories. Many of these indicators are new areas of assessment for the ERC and will provide a more comprehensive picture of current conditions compared to the 2015 ERC that last assessed L.A. County's water. Grades were assigned in each category based on compliance with environmental laws or numeric standards where applicable, on our best professional judgment, and on historical improvements and context. This year's grades range from D/ incomplete to B+, and although there has been great progress in some areas, others still require significant improvement to raise the county's C+ average.





WATER SUPPLY & CONSUMPTION:

C+

- In 2017, 59% of the Metropolitan Water District (MWD)-supplied water used in L.A. County was sourced from outside the region. Local recycled water made up only 9% of the county's 2017 water supply, while groundwater resources provided 32%.
- In 2018, the City of L.A. imported an estimated 307,949 acre-feet of water (above average) despite the fact that the Eastern Sierras had an average year of snowpack. Overall, the city imported well over 90% of its water from distant sources.
- The volume of reused water in the county increased by approximately 31% from 2006 to 2016 (ca. 55.8 to 73 billion gallons).
- The largest increase in reused water in L.A. County occurred between 2006 and 2007, with more modest year-to-year increases (and occasional decreases) since then.
- The percent of total wastewater treatment effluent reused in the county increased from 16.6% in 2006 to 28.5% in 2016, the highest value over the 11-year period.
- Between 2000 and 2017, countywide per capita water demand dropped by more than 27%. In 2017, total annual water consumption was 418 billion gallons, compared to 483 billion gallons in 2013 – a drop of 13.5%.
- Total annual water consumption in L.A. County decreased from 2013 to 2016, but then rose in 2017 drawing closer to the 2013 benchmark consumption level.
- All but two reporting water suppliers in L.A. County reduced water use in July 2017 compared to July 2013; however, many suppliers saw increased water use between 2016 and 2017.
- Water pricing varies widely across the nearly 300 public water systems,

and drought charges brought cost above the affordability threshold for low-income households.

Approximately 60% of water used in L.A. County is imported from outside the region, and that number rises to 90% for the City of L.A. Although the volume of reused water has been increasing, the county has a long way to go to meet its water needs with local water resources. The region significantly reduced its water consumption from its 2013 baseline in response to Governor Brown's mandatory conservation measures implemented in 2015 due to the major drought. However, water consumption crept up after the drought was declared "over" in 2017, demonstrating that progress was lost due to inattention and decreased public focus. Recently, precipitation patterns have been highly variable – oscillating between drought and extreme precipitation – demonstrating the vulnerability of the state's water infrastructure and the need to maximize local, sustainable, and resilient water supplies.



DRINKING WATER QUALITY:

B+/ Incomplete

- Overall, nearly everyone in L.A. County has been provided with clean water at the point of delivery (but, see notes below about available data and monitoring points).
- Primary Maximum Contaminant Level (MCL) violations in L.A. County were less than 2.5% of the total for all California public water systems each year from 2012-2017.
- Most L.A. County MCL violations were for elevated levels of arsenic or coliform bacteria.
- In 2017, seven public water systems in L.A. County serving a total of over 60,000 residents had a combined total of 10 primary MCL violations.
- MCL violations affected 74,931 people in 2012 and 61,641 people in 2017, while only between

3,850 and 2,909 people in the intervening years. This variation in the number of people affected depended on which water systems had violations.

- Four public water systems failed to report an MCL violation to constituents on their annual Consumer Confidence Report between 2012 and 2016. No water system failed to report more than once over the five-year period.
- There are multiple, well-documented accounts of discolored, foul-smelling and poor-tasting water coming out of taps in largely disadvantaged communities served by publicly-regulated drinking water systems across L.A. County.

Available monitoring data shows that L.A. County's drinking water is meeting most health-based standards and communicating most instances of standards-based contamination to consumers. Primary MCL violations are infrequent and impact a small percentage of residents. However, many people are still receiving smelly, discolored tap water. Without publicly-available data on exceedances of secondary MCLs, it is difficult to evaluate the scope of this problem. In addition, drinking water quality monitoring typically occurs just after the water is treated rather than after it is delivered to the consumer at the tap, which means that even effectively-treated water is vulnerable to contamination such as lead that may enter the water supply from old pipes on private property. Fortunately, new monitoring requirements are at least testing school tap water for lead. However, there are more areas of responsibility to examine in order to ensure that L.A. is living up to California's new Human Right to Water bill, promising every individual the right to safe, clean, and affordable drinking water.



LOCAL WATER INFRASTRUCTURE:

C+

- With one exception, urban water retailers serving more than 100,000 people had fewer than 50 gallons

per connections per day real water losses in 2016, the first year of reporting.

- In 2016, all but two retailers serving more than 100,000 people achieved an Infrastructure Leakage Index score within a good range (< 3.0).
- As of 2017, there were 35 spreading ground facilities in L.A. County with a combined total of 21,259 acre-feet in surface storage capacity.
- The average annual volume of conserved stormwater from 2004-2017 was 190,227 acre-feet; the highest recorded amount was 662,862 acre-feet in 2004-2005, and the lowest amount was 37,542 acre-feet in 2013-2014. Variation in annual volumes of water conserved correlated strongly with annual rainfall.
- A total of \$129 million of state funds were provided to L.A. County for 71 Integrated Regional Water Management projects through California bond measures Proposition 50 (2002) and Proposition 84 (2006).
- Grant funds were invested in projects that improved water supply and groundwater (76% of projects), water quality (19%), habitat, open space, and recreation projects (3%), and flood projects (2%).
- In 2017 there were 302 reported sewage spills, of which 92 reached waterbodies. These spills represented nearly 600,000 gallons of sewage in total, with approximately 380,000 gallons of that volume reaching waterbodies. Over half of the 2017 spills reaching waterbodies were considered small.

The County's water infrastructure is aging, but investments have been made by the state and local jurisdictions to reduce water loss, decrease sewage spills, and improve water capture and infiltration. Nearly half of the county water projects funded through Propositions 50 and 84 have been completed. However, there is room for significant infrastructure improvements through new projects focused on an integrated regional water recycling system and stormwater infiltration, treatment, and capture infrastructure with funds anticipated through Measure W in 2020.

INDUSTRIAL AND SEWAGE TREATMENT PLANT DISCHARGES:

B-

- There is no clear trend in violations of National Pollutant Discharge Elimination System (NPDES) permits for 2009-2016. Since 2009, the annual number of Class 2 violations ranged from a low of 35 to a high of 110. There were no Class 1 violations.
- There were 70 Class 2 violations (posing a moderate, indirect, or cumulative threat to water quality) of NPDES permits in 2016 across 6 facilities.
- Overall discharge volumes from all 13 Publicly Owned Treatment Works (POTWs) facilities analyzed were just over 216 billion gallons in 2016, compared to just under 244 billion gallons in 2013, an 11% decrease.
- From 2013 to 2016, total lead mass discharges decreased by approximately 16%; arsenic decreased by 2.6%; and nitrate + nitrite decreased by over 23%. Copper mass discharges increased by approximately 47% and ammonia remained relatively constant despite the decrease in sewage volumes, indicating a general increase in concentrations.

- The total number of non-sewage hazardous materials spills to water each year between 2012 – 2016 varied from a low of 350 (in 2014) to a high of 457 (in 2013). The number of spills in 2016 (286) was nearly equal to the average value from 2012-2016. There was no clear trend in number of spills over time.
- Between 2012-2016, the total volume of spills was lowest in 2012 (~226,000 gallons). The volume spilled in 2016 (315,620 gallons) was greater than the volume spilled over the previous three years combined. Note that this excludes two single incidents of extremely large spills of relatively clean substances (20 million gallons of drinking water and 10-100 million gallons of secondary treated wastewater in 2014 and 2015, respectively).

Data on discharges of pollutants to receiving waters supplement surface water quality information for a more complete picture of the state of the region's receiving waters. Although conditions have vastly improved over the last several decades, there is still room for improvement. Pollutant loads



GROUNDWATER:

C-

- Spring and fall groundwater elevations in wells across L.A. County generally rose in 2016-17: 34% of wells increased by more than 2.5 feet in spring, and 40% increased by the same margin in fall.
- Due to historic drought, both spring and fall groundwater levels were also considerably lower in 2017 than they were in 2012: in spring, almost 47% of wells were more than 10 feet lower compared to 2012, and fall elevations in 2017 decreased by more than 2.5 feet in 63% of wells.
- Compared to statewide trends, fewer L.A. County wells showed increases in groundwater levels in both the spring and fall seasons between 2012 and 2017.
- In 2018-19, 23 of the 39 pollutants examined exceeded their MCLs or comparison concentrations in one or more groundwater wells. Note, well contaminant levels do not equate to drinking water quality.
- 1,4-Dioxane had the largest percentage of wells in exceedance for all three periods of analysis between 2014 and 2019. Exceedances decreased from 46% to 35.6% between 2017 and 2018-19.
- Nitrate as N was detected in more than 80% of wells in 2017, but has the lowest maximum relative concentration amongst the top ten pollutants exceeding their MCL or comparison concentration in 2017. Cr6 was detected in almost 60% of wells and had one of the highest maximum relative concentrations.
- In 2017, 83 sites threatened groundwater in L.A. County; 54% of these sites were Leaking Underground Storage Tank (LUST) Cleanup Sites, and 45% were Cleanup Program Sites.
- The number of groundwater threats increased annually from

2013 to a high of 428 in 2015, and then decreased in 2016 and 2017. It is not clear whether this represents an actual surge of new releases in the earlier years with cleanup in subsequent years, or whether this pattern is a result of changes in enforcement, tracking, or reporting.

While L.A. County is fortunate to have significant groundwater resources, these resources are under threat from pollution, and for coastal aquifers, seawater intrusion. Cleaning up and protecting groundwater resources is critical to moving the region toward local water reliance. Although groundwater basins are largely managed well through adjudications, more comprehensive data on absolute amounts of groundwater and groundwater storage volume in the county are necessary to accurately quantify groundwater and more sustainably manage the basins. Regular assessment of groundwater quality is also important given the prevalence of contamination and the number of contamination sites that threaten county aquifers. When groundwater aquifers are used for drinking water, contamination means that additional energy and resources must be expended to utilize this local water resource.



SURFACE WATER QUALITY:

D / Incomplete

- No new water body assessment data has been processed by the State or Regional Boards since 2010.
- 99% of assessed bays, harbors, estuaries, lakes, reservoirs, and wetlands were impaired in 2010, compared to 100% impairment in 2007. However, 2010 impairments included an additional 512 acres compared to 2007.
- 59% of assessed shorelines, rivers, and streams were impaired in 2010, down from just under 85% in 2007. Note, however, that the total assessed miles greatly increased from 600 in 2007 to 992 in 2010; and the absolute length of impairments increased from 509 to 582 miles.

- The fecal indicator bacteria, metals/metalloids, and pH + miscellaneous pollutant categories each impair over 20% of the assessed water body lengths, while toxicity, nutrients, salinity and trash impair over 10% of assessed water body lengths.
- Results for 2016-17 year of stormwater quality monitoring data at the mass emissions stations showed Water Quality Objective (WQO) exceedances for several parameters in Ballona Creek, Malibu Creek, Dominguez Channel, and the Santa Clara River. Results also show one WQO exceedance for the L.A. River and none in Coyote Creek or the San Gabriel River. This is surprising given historic trends and concurrent data from other monitoring programs.
- The most common parameters exceeding WQOs at mass emission stations in 2016-17 were E. coli, dissolved oxygen, dissolved copper, and dissolved zinc.
- The number of total exceedances during wet weather monitoring greatly exceeded those during dry weather across all years (2009-17), because stormwater discharges scour pollutants off impermeable surfaces, thereby increasing pollutant loads entering water bodies.

L.A. County's surface waters regularly exceed water quality standards. The majority of local water bodies are polluted to the point of being unsafe for primary uses such as recreation, drinking water supply, or as aquatic life habitat. Without regular assessments by the state, it is unclear whether water quality is improving or worsening, and there has been no new assessment data released since 2010. Stormwater quality monitoring data shows multiple rivers and creeks frequently exceed water quality standards for toxic heavy metals and fecal indicator bacteria. L.A. County's Measure W (2018) has the potential to enable improvement projects, but will require strategic implementation to help water bodies meet relevant water quality standards.



from sewage treatment plants have decreased or remained constant and the number of sewage spills has remained relatively constant over the last few years. And although there were no Class 1 violations by large industrial dischargers from 2009-2016, there was no decrease in the overall number of Class 2 violations. Unfortunately, there are still hundreds of petroleum spills annually, and chemical spills, although less frequent, are still a major concern. Furthermore, the database of hazardous materials spills is insufficient to support accountability and trend assessment.



WATER-ENERGY NEXUS:

C+

- The energy intensity (kilowatt hours per acre-foot [kWh/AF]) for each water source is constant from year-to-year. However, greenhouse gas emissions vary annually based on changes in the power portfolio and water supply volumes.
- The State Water Project (SWP) is the county's most energy-intensive source, consuming over 2,500 kWh/AF, even when accounting for hydroelectricity generated by the SWP. The Colorado River Aqueduct (CRA) has the second-highest energy requirement. The Los Angeles Aqueduct (LAA) does not require any energy for pumping or conveyance since it is entirely gravity-powered. Recycled water represents almost a halving of energy intensity compared to the CRA, and less than one-third of the SWP, while stormwater has an intensity of about 15% of recycled water.
- Overall, L.A. County has decreased its water supply-related GHG emissions by 33% between 2010-2016, due primarily to a shift away from the use of coal for energy generation.

Due to the climate crisis, there is increasing focus to reduce greenhouse gas (GHG) emissions and energy use in all sectors, including water supply. Pumping water from

distant sources is energy-intensive, and shifting from fossil fuel energy generation to GHG emission-free renewables and increasing reliance on local water supplies are both key strategies to reducing the impact of L.A. County's water supply on the climate. However, one must also consider the energy intensity of local water/wastewater treatment, which varies widely depending on the quality of the source water, the intended end-use, and the specific treatment technologies employed. There is a need for more explicit, integrated consideration of energy demand in water supply planning.



BEACH WATER QUALITY:

B+

- According to Heal the Bay's annual Beach Report Card, summer 2017 dry weather beach water quality in L.A. County was excellent with 97% A or B grades and zero F grades, better than the average over the last 5 years. The 2018 summer grades were slightly worse with 97% A's and B's and 0% F grades.
- Water dry weather grades for 2017-18 were slightly better than the average over the previous five years, with 97% A or B grades and 0% F grades. However, the 2018-19 winter grades were much worse with 70% A's and B's and 0% F's.
- Wet weather water quality continues to be an area of concern, with only 60% of beaches receiving A or B grades, and 26% receiving F grades in 2017-18. This is an improvement over 2016-17, and better than the average over the previous 5 years. The 2018-19 report card demonstrated that L.A. County beaches had the poorest wet weather water quality in years with only 30% A and B beaches and 56% of beaches receiving F grades. In particular, the Malibu beaches downstream of the Woodsey Fire had extremely poor grades after the fire.
- There were three beach closures due to sewage spills or other contamination events (such as oil or fuel spills) in 2017, all

occurring within the Long Beach Department of Health's jurisdiction.

- There were fewer than five beach closures annually between 2012-2017.
- The number of beach closures are an order of magnitude less than the number of sewage spills that reached water bodies for each year.
- There is no centralized data source for specifically identifying beach closures in the state.

L.A. County's beaches led the region's robust coastal economy and provide more than 50 million residents and visitors with swimming and surfing enjoyment annually. Maintaining high levels of water quality is vital for public safety and enjoyment. Beach water quality tends to be excellent during dry summer weather and poorer during wet weather, when precipitation sends contaminants coastward. Although the number of closure days remains low, with fewer than five closure days each year from 2012 to 2017, this information lacks a centralized data source for aggregation and examination.

CONCLUSIONS

L.A. County's average grade on water is a C+, but there is reason to believe that this grade will improve with recent local water target setting by the City and County in their sustainability plans, and with new projects funded through Measure W starting in 2020. This funding has great potential to clean up surface water and localize the water supply.

The County demonstrated that it can reduce its water demand when faced with a major drought, but once Governor Brown declared the drought over, consumption increased. More needs to be done to make water conservation a way of life in the region. Furthermore, L.A. County still imports around 60% of its water supply, and the City over 90% the last two years. In order to meet the City, County, and UCLA's Sustainable LA Grand Challenge local water goals in the coming decades, the region must develop an integrated regional water recycling system and accelerate the execution of stormwater projects.

Investments in regional water runoff diversions, runoff capture and storage projects, and runoff treatment plants have dramatically

improved beach water quality over the past decades, but we still see some poor beach water quality when we have wet weather. Drinking water quality is also quite good throughout the County, but far too many people still receive discolored, smelly water from the tap. The lack of publicly available data on exceedances of secondary MCLs makes it very difficult to adequately assess the county's drinking water quality.

Surfacewater quality in the County needs significant improvement, with a large majority of local waterbodies listed as impaired for a variety of pollutants. The state has not been adequately assessing the status of these impaired waters, so the public does not have clear picture of whether surface waters are improving or worsening over the past decade.

Another area in need of major improvement is the County's groundwater basins. Although these groundwater basins are managed well through adjudications, poor groundwater quality continues to be prevalent in local aquifers. Strong, health-based standards are necessary to ensure pollutant concentrations are reduced to safe levels. L.A. County requires commitment to reducing groundwater threats and remediating contaminated aquifers to fully capitalize upon the local supply of groundwater resources.

This 2019 Sustainable LA Grand Challenge Environmental Report Card on L.A. County Water demonstrates that despite the promise of goals and plans for sourcing water locally, recycling wastewater, and constructing stormwater capture and cleaning projects, L.A. County has a long way to go to implement these plans before becoming an A student.



Our Funders



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