

# Heal the Bay River Report Card Pilot Project

September 13, 2018

# Method

- CIMP Data
  - LA River Watershed
  - Receiving water stations
  - July 1<sup>st</sup> 2016 – June 20<sup>th</sup> 2017 data
- Data Analysis
  - CCME model (used by Ventura and Orange county stormwater programs)
    - 1) Scope – percentage of water quality guidelines exceeded
    - 2) Frequency – percentage of failed tests
    - 3) Magnitude – maximum (normalized to 100) by which any of the guidelines were exceeded
  - Verified model with hand calculation
  - Sent final data to Green Info Network for GIS/maps

# Parameters

Parameter	Weather	Limit	Reference
E.coli	All	235 MPN/100mL	Basin Plan

Parameter	Weather	Limit	Reference
pH	All	6.5 to 8.5	Basin Plan
Dissolved Oxygen	All	5 mg/L	Basin Plan
Nitrate-N	All	8 mg/L	Basin Plan
Nitrite-N	All	1 mg/L	Basin Plan
Total Cadmium (Cd)	Dry	4.5 ug/L	California Toxics Rule (CTR), chronic, based on average hardness
Total Cadmium (Cd)	Wet	1.8 ug/L	CTR, acute, based on average hardness
Total Lead (Pb)	Dry	7.9 ug/L	CTR, chronic, based on average hardness
Total Lead (Pb)	Wet	24.0 ug/L	CTR, acute, based on average hardness
Total Zinc (Zn)	Dry	253.3 ug/L	CTR, chronic, based on average hardness
Total Zinc (Zn)	Wet	60.7 ug/L	CTR, acute, based on average hardness
Total Copper (Cu)	Dry	19.3 ug/L	CTR, chronic, based on average hardness
Total Copper (Cu)	Wet	6.5 ug/L	CTR, acute, based on average hardness
Total Selenium (Se)	All	5 ug/L	CTR
Ammonia	Wet	14.4 mg/L	LA Basin Plan, acute, based on average pH
Ammonia	Dry	0.383 mg/L	LA Basin Plan, chronic, based on average pH and temperature



# ECOLOGICAL HEALTH | DRY WEATHER

Heal the Bay

Los Angeles River Report Card



# ECOLOGICAL HEALTH | WET WEATHER

Heal the Bay

Los Angeles River Report Card



Sites monitored during dry weather or when there had been no significant rain within the previous 3 days

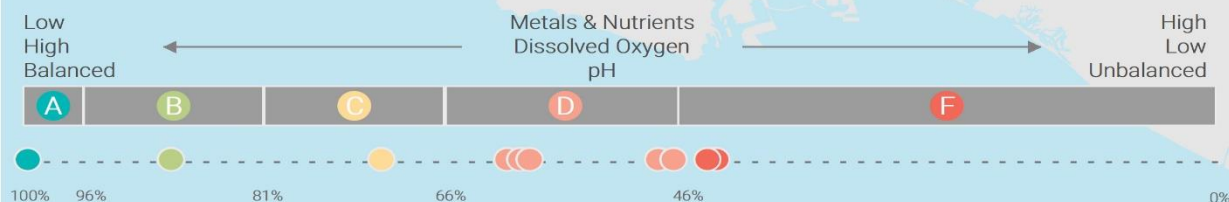


The Ecological Health grade assesses metals (cadmium, copper, lead, selenium, and zinc), nutrients (ammonia, nitrate, and nitrite), and water chemistry (pH, and dissolved oxygen) of sites in the L.A. River Watershed to evaluate the potential harm to the aquatic ecosystem and wildlife that lives there. Grades were calculated using data obtained from required regulatory monitoring that cities do as part of their stormwater permits. Data were obtained from the Los Angeles Regional Water Quality Control Board and cover the time period from July 1, 2016 to June 30, 2017.

Map design by GreenInfo Network | [greeninfo.org](http://greeninfo.org) | 8/2018



Sites monitored during wet weather or within 3 days of significant rainfall



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# HUMAN HEALTH | DRY WEATHER

Heal the Bay

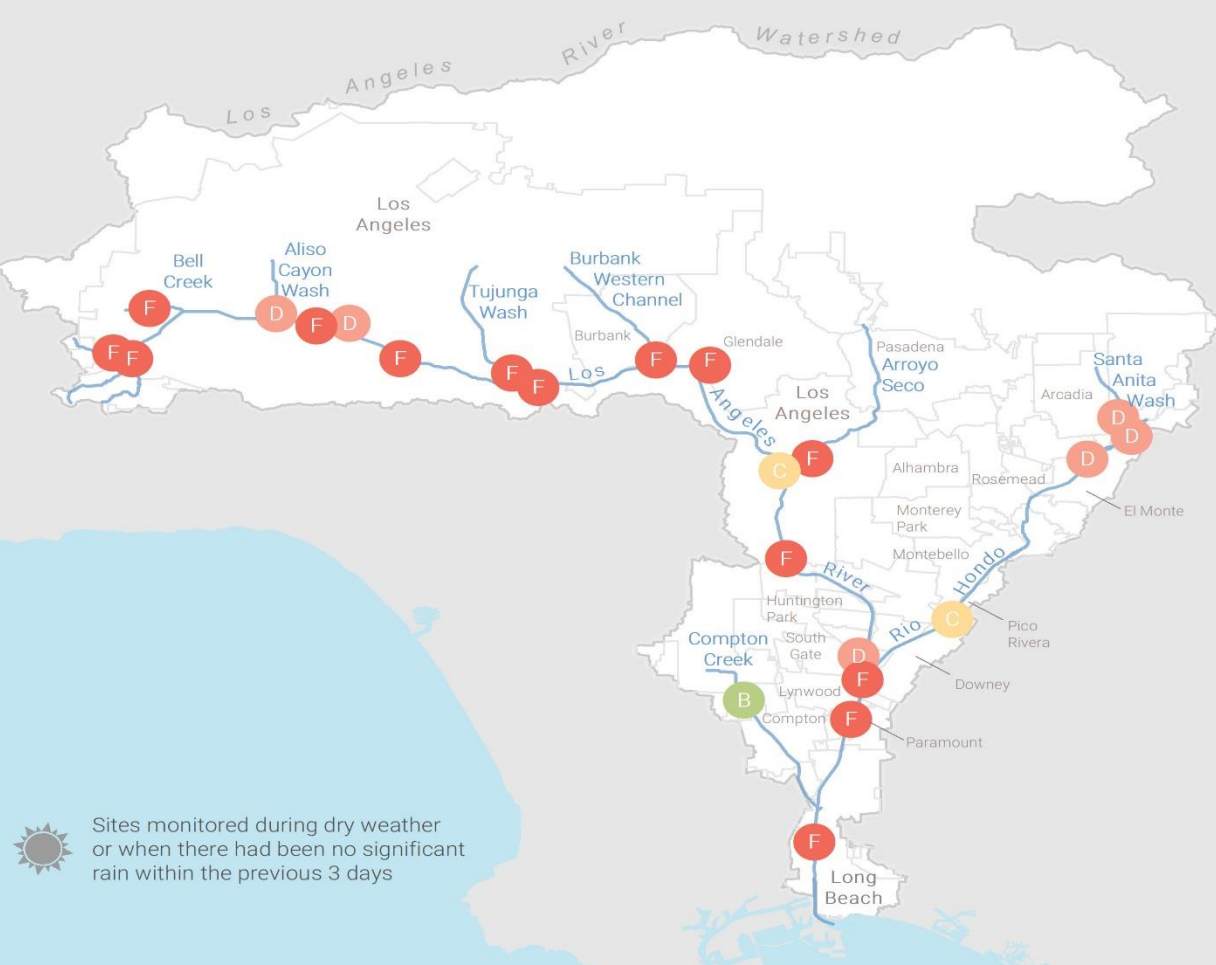
Los Angeles River Report Card



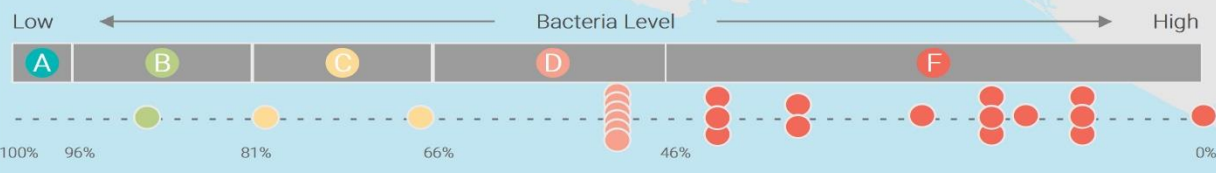
# HUMAN HEALTH | WET WEATHER

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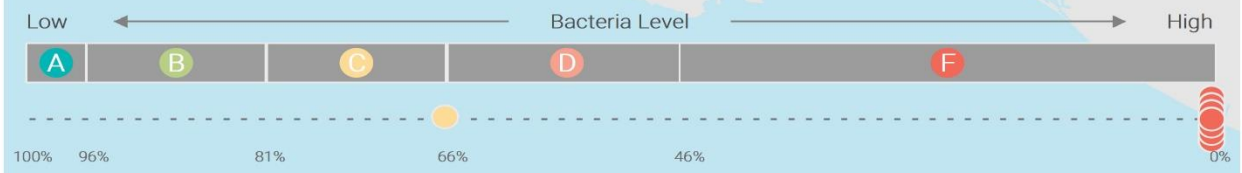
Sites monitored during dry weather or when there had been no significant rain within the previous 3 days



The Human Health grade assesses the bacterial pollution (*E. coli*) of sites in the L.A. River Watershed to evaluate the potential risk of human illness with water contact. Grades were calculated using data obtained from required regulatory monitoring that cities do as part of their stormwater permits. Data were obtained from the Los Angeles Regional Water Quality Control Board and cover the time period from July 1, 2016 to June 30, 2017.



Sites monitored during wet weather or within 3 days of significant rainfall



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# Ecological Health Grades

Station	Index Period (Season)	Water Body	CCME Score	Grade
BWC_Riv	Dry	Burbank Western Channel	88.1	B
CC_ELS	Dry	Compton Creek	42.0	F
Compton Creek	Wet	Compton Creek	45.4	F
LAR_02_WAS	Dry	Los Angeles River (LAR)	89.9	A
LAR_02_WAS	Wet	LAR	46.0	F
LAR_03_FIG	Dry	LAR	91.5	A
LAR_03_FIG	Wet	LAR	46.5	F
LAR_03_ZOO	Dry	LAR	90.2	A
LAR_04_TUJ	Dry	LAR	93.9	A
LAR_04_TUJ	Wet	LAR	59.6	D
LAR_05_SEP	Dry	LAR	90.1	A
LAR_06_WHI	Dry	LAR	76.8	C
LAR_06_WHI	Wet	LAR	44.2	F
LARUR2RW	Dry	LAR	78.3	C
LARUR2RW	Wet	LAR	60.9	D
LLAR-LAR1-10	Dry	Rio Hondo	71.5	C
LLAR-LAR1-9	Dry	LAR	100	A
LLAR-S10	Dry	LAR	93	A
LLAR-S10	Wet	LAR	58.8	F
RH_SLA	Dry	Rio Hondo	70.9	C
RHSGRRH3ARC	Dry	Arcadia Wash	80.9	B
RHSGRRH3ARC	Wet	Arcadia Wash	72.2	C
RHSGRSANDD	Dry	Santa Anita Wash	72.7	C
RHSGRSANDD	Wet	Santa Anita Wash	100	A
RHSGRSAWPR	Dry	Sawpit Wash	72.8	C
RHSGRSAWPR	Wet	Sawpit Wash	89.6	B
TW_MOO	Dry	Tujunga Wash	72.4	C

# Human Health Grades

Station	Index Period (Season)	Water Body	Percentage Non-Exceedance	Grade	LAR_06_WHI	Dry	LAR	33.3	F
ACW_VAN	Dry	Aliso Canyon Wash	50	F	LARUR2RW	Wet	LAR	0	F
AS_SAN	Dry	Arroyo Seco	8.3	F	LARUR2RW	Dry	LAR	50	F
BEL_FAL	Dry	Bell Creek	41.7	F	LLAR-LARB2	Dry	LAR	8.3	F
BUL_VIC	Dry	Bull Creek	50	F	LLAR-LARB7	Dry	LAR	0	F
BWC_RIV	Dry	Burbank Western Channel	41.7	F	LLAR-S10	Wet	LAR	0	F
CC_ELS	Dry	Compton Creek	91.7	A	LLAR-S10	Dry	LAR	14.3	F
Compton	Wet	Compton Creek	66.7	D	MCC_VAL	Dry	McCoy Canyon Creek	16.7	F
DCC_VEN	Dry	Dry Canyon Creek	25	F	RH_SLA	Dry	Rio Hondo	80	B
LAR_02_WAS	Wet	LAR	0	F	RHSGRRH3ARC	Dry	Arcadia Wash	50	F
LAR_02_WAS	Dry	LAR	33.3	F	RHSGRRH3ARC	Wet	Arcadia Wash	0	F
LAR_03_FIG	Dry	LAR	66.7	D	RHSGRSANDD	Dry	Santa Anita Wash	50	F
LAR_04_TUJ	Wet	LAR	0	F	RHSGRSANDD	Wet	Santa Anita Wash	0	F
LAR_04_TUJ	Dry	LAR	16.7	F	RHSGRSAWPR	Dry	Sawpit Wash	50	F
LAR_05_SEP	Dry	LAR	41.7	F	RHSGRSAWPR	Wet	Sawpit Wash	0	F
					TW_MOO	Dry	Tujunga Wash	8.3	F
					VW_CON	Dry	Verdugo Wash	16.7	F

# Ecological Health Completeness – Pb, Cu, Zn

Station	Index Period (Season)	Water Body	Sample Size – Pb, Cu, Zn	Completeness – Pb, Cu, Zn
BWC_Riv	Dry	Burbank Western Channel	4	Complete
CC_ELS	Dry	Compton Creek	4	Complete
Compton Creek	Dry	Compton Creek	0	Missing 2
Compton Creek	Wet	Compton Creek	2	Complete
LAR_02_WAS	Dry	Los Angeles River (LAR)	4	Complete
LAR_02_WAS	Wet	LAR	3	Complete
LAR_03_FIG	Dry	LAR	4	Complete
LAR_03_FIG	Wet	LAR	2	Complete
LAR_03_ZOO	Dry	LAR	4	Complete
LAR_04_TUJ	Dry	LAR	4	Complete
LAR_04_TUJ	Wet	LAR	3	Complete
LAR_05_SEP	Dry	LAR	4	Complete
LAR_06_WHI	Dry	LAR	4	Complete
LAR_06_WHI	Wet	LAR	3	Complete
LARUR2RW	Dry	LAR	2	Complete
LARUR2RW	Wet	LAR	3	Complete
LLAR-LAR1-10	Dry	Rio Hondo	1	Missing 3
LLAR-LAR1-9	Dry	LAR	1	Missing 3
LLAR-S10	Dry	LAR	3	Complete
LLAR-S10	Wet	LAR	4	Complete
RH_SLA	Dry	Rio Hondo	2	Complete
RHSGRRH3ARC	Dry	Arcadia Wash	2	Complete
RHSGRRH3ARC	Wet	Arcadia Wash	3	Complete
RHSGRSANDD	Dry	Santa Anita Wash	2	Complete
RHSGRSANDD	Wet	Santa Anita Wash	3	Complete
RHSGRSAWPR	Dry	Sawpit Wash	2	Complete
RHSGRSAWPR	Wet	Sawpit Wash	3	Complete
TW_MOO	Dry	Tujunga Wash	9	Complete



# Human Health Completeness

Station	Index Period (Season)	Water Body	Sample Size	Completeness	LAR_06_WHI	Dry	LAR	12	Complete
					LARUR2RW	Wet	LAR	3	Complete
ACW_VAN	Dry	Aliso Canyon Wash	12	Complete	LARUR2RW	Dry	LAR	2	Complete
					LLAR-LARB2	Dry	LAR	12	Complete
					LLAR-LARB7	Dry	LAR	7	Missing 5
AS_SAN	Dry	Arroyo Seco	12	Complete	LLAR-S10	Wet	LAR	3	Complete
					LLAR-S10	Dry	LAR	14	Complete
BEL_FAL	Dry	Bell Creek	12	Complete	MCC_VAL	Dry	McCoy Canyon Creek	12	Complete
BUL_VIC	Dry	Bull Creek	12	Complete					
BWC_RIV	Dry	Burbank Western Channel	12	Complete	RH_SLA	Dry	Rio Hondo	5	Complete
					RHSGRRH3ARC	Dry	Arcadia Wash	2	Missing 7
CC_ELS	Dry	Compton Creek	12	Complete	RHSGRRH3ARC	Wet	Arcadia Wash	3	Complete
Compton	Wet	Compton Creek	3	Complete					
Compton	Dry	Compton Creek	0	Missing 2	RHSGRSANDD	Dry	Santa Anita Wash	2	Missing 7
Compton R2	Dry	Compton Creek	0	Missing 2	RHSGRSANDD	Wet	Santa Anita Wash	3	Complete
DCC_VEN	Dry	Dry Canyon Creek	12	Complete	RHSGRSAWPR	Dry	Sawpit Wash	2	Missing 7
LAR_02_WAS	Wet	LAR	3	Complete					
LAR_02_WAS	Dry	LAR	12	Complete	RHSGRSAWPR	Wet	Sawpit Wash	3	Complete
LAR_03_FIG	Dry	LAR	2	Complete	TW_MOO	Dry	Tujunga Wash	12	Complete
LAR_04_TUJ	Wet	LAR	3	Complete					
LAR_04_TUJ	Dry	LAR	12	Complete	VW_CON	Dry	Verdugo Wash	12	Complete
LAR_05_SEP	Dry	LAR	12	Complete					

# Questions?

