# SDRILG COMMENTS ON DRAFT AG ORDER

4/10/2024



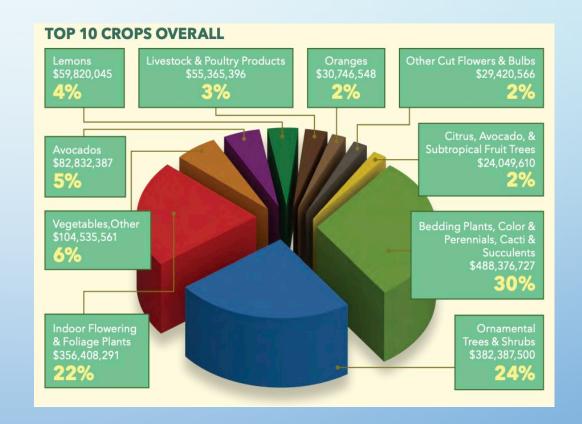
#### SAN DIEGO REGION IRRIGATED LANDS GROUP

- A SAN DIEGO REGIONAL BOARD RECOGNIZED THIRD-PARTY MONITORING GROUP
- THE SAN DIEGO COUNTY FARM BUREAU PROVIDES FARM BUREAU MEMBERS IN SAN DIEGO, SOUTHERN RIVERSIDE, AND SOUTHERN ORANGE COUNTIES (REGION 9) WITH THE OPTION OF GROUP COMPLIANCE THROUGH THE SAN DIEGO REGION IRRIGATED LANDS GROUP, A NON-PROFIT ORGANIZATION
- CURRENT MEMBERSHIP IS ABOUT 1050, (MEMBERSHIP NUMBERS HAVE DROPPED) AND INCLUDES SOME MEMBERS FROM RIVERSIDE AND ORANGE COUNTIES WHO ARE WITHIN THE SAN DIEGO REGION



#### FARMING IN THE SAN DIEGO AREA:

- FOLIAGE, NURSERY, BEDDING PLANTS, AND OTHER
   ORNAMENTAL CROPS ARE ABOUT 70% OF ALL AGRICULTURAL
   PRODUCTION \$\$, THE MAJORITY IN CONTAINER PRODUCTION
- SAN DIEGO IS THE #1 NURSERY COUNTY IN THE US
- AVOCADOS, CITRUS AND OTHER FRUIT AND NUT TREE CROPS ARE ABOUT 20% OF AG VALUE
- SAN DIEGO REGION PRODUCTION AND HARVESTS ARE YEAR-ROUND, NO OFF-SEASON FOR ALMOST ALL CROPS
- MEDIAN FARM SIZE IS 4 ACRES, AND 69% OF FARMS ARE 1-9 ACRES
- WHILE THERE ARE AROUND 5000 FARMS IN SAN DIEGO
   COUNTY (AS PER THE SCHEDULE F), ONLY A SUBSET FIT THE
   IRRIGATED LANDS CATEGORY. IN ADDITION, NOT ALL ACREAGE
   ON ANY FARM IS ACTUALLY IRRIGATED.
- ABOUT 1050 FARMS FIT THE REQUIREMENTS FOR THE IRRIGATED LANDS GROUP





## PREVIOUS WORKSHOPS AND INFORMATION PROVIDED:

- SPRING 2023: GROWERS WERE SURVEYED ABOUT VARIOUS TOPICS RELATED TO THE PROPOSED ORDER. SURVEY RESULTS WERE PROVIDED AT THE 5/10/2023 REGIONAL BOARD MEETING.
- REPRESENTATIVES FROM THE SAN DIEGO REGION IRRIGATED LANDS GROUP ATTENDED THE
  THREE WORKSHOPS IN SUMMER 2023 WHERE THE BOARD STAFF PRESENTED A SERIES OF
  PROPOSED ITEMS TO BE INCLUDED IN THE DRAFT AG ORDER
  - SDRILG MEMBERS PROVIDED COMPREHENSIVE COMMENTS ON THE PROPOSED ITEMS



#### CURRENT DRAFT ORDER COMMENTS FROM SDRILG:

- INITIAL POSITIVE RESPONSES FROM REGIONAL BOARD STAFF:
  - DESIGNATION OF "FIELDS" FOR REPORTING PURPOSES:
    - BOARD STAFF RECOGNIZES THAT TO CALL EACH PLANT TYPE/AGE/PLANTING DATE A DIFFERENT "FIELD"
      WILL NOT WORK FOR SAN DIEGO, AS THIS WOULD RESULT IN THOUSANDS OF "FIELDS" IN A TYPICAL
      NURSERY
  - LACK OF DATA FOR NUTRIENT REPORTING:
    - BOARD STAFF RECOGNIZED THAT DATA FOR NUTRIENT REQUIREMENTS AND N REMOVED ARE NOT AVAILABLE FOR MOST OF THE CROPS GROWN IN SAN DIEGO COUNTY MAKING THE REPORTING OF N REMOVAL IMPOSSIBLE FOR A LARGE PART OF THE AG INDUSTRY
    - STUDIES TO DETERMINE THIS WILL COST MILLIONS OF DOLLARS.

# GENERAL COMMENTS: 1.SAN DIEGO REGION AGRICULTURE IS VERY DIFFERENT FROM EASTERN SAN JOAQUIN VALLEY AGRICULTURE

- MOST SAN DIEGO REGION FARMS ARE 10 ACRES OR LESS; NOT ALL ACREAGE IS IRRIGATED
  - AVERAGE EASTERN SAN JOAQUIN VALLEY FARM IS APPROX. 375 ACRES.
- SAN DIEGO GROWERS PRODUCE A LARGE NUMBER OF DIFFERENT CROPS, NOT JUST ONE WITH UNIFORM GROWING PRACTICES LIKE IN THE CENTRAL VALLEY. SAN DIEGO REGION AGRICULTURE IS FOCUSED ON SPECIALTY CROPS-IT IS WHAT KEEPS US IN BUSINESS.
- CONTINUOUS CROPPING IS THE NORM IN THE SAN DIEGO REGION, WITH CONTINUOUS INPUTS,
   MULTIPLE GROWING CYCLES AND HARVESTS ALL YEAR ROUND, UNLIKE THE CENTRAL VALLEY
- TERRAIN IS VERY DIFFERENT AS MOST GROWERS IN THE SAN DIEGO REGION GROW ON HILLSIDES,
   SOMETIMES VERY STEEP. FLAT VALLEYS ARE NOT THE NORM AS THEY ARE IN THE CENTRAL VALLEY
- SOME WATER QUALITY PRACTICES REQUIRED BY CENTRAL VALLEY REGULATIONS WILL LIKELY NOT BE EFFECTIVE OR POSSIBLE IN SAN DIEGO BECAUSE OF THESE DIFFERENCES

SAN DIEGO REGION

IRRIGATED LANDS GROUP

#### 2. ONE SIZE DOES NOT FIT ALL:



Agricultural Production in the Eastern San Joaquin Valley is flat, single cropped for miles and is not in the same areas where Housing, parks, recreational turf and other uses exist.

Main crops include tree nuts, average farm size is approx. 300 acres and farms are contiguous



500 acre pistachio farm in Central Valley



2.5 acre organic vegetable farm, Oceanside

## 3. AGRICULTURE IN SAN DIEGO COUNTY IS "INTERSPERSED" WITH OTHER LAND USES

- UNLIKE THE EASTERN SAN JOAQUIN VALLEY AG COMMUNITY, AGRICULTURE IN SAN DIEGO IS "INTERSPERSED"
   WITH OTHER LAND USES
- MANY SINGLE HOMES WITH SMALL ACREAGES THAT ARE NOT IN PRODUCTION AGRICULTURE SURROUND FARMS:
  - LOTS OF LAWN AND LANDSCAPE
  - HOUSING DEVELOPMENTS
  - SPORTS FIELDS, PARKS, GOLF COURSES,
  - PASTURES WITH HORSES AND OTHER ANIMALS
- ALL THESE NON AGRICULTURAL USES CONTRIBUTE TO NUTRIENT RUNOFF BECAUSE THEY USE THE SAME MATERIALS TO MAINTAIN THEIR LANDSCAPES THAT GROWERS USE IN THEIR FARMING OPERATIONS.

#### 3. CONT. "INTERSPERSED" AGRICULTURE

- IT IS OFTEN IMPOSSIBLE TO ASSIGN "BLAME" OR RESPONSIBILITY FOR WATER QUALITY ISSUES TO AG WHEN IT IS GENERALLY THE RESULT OF MIXED USES.
- SUBURBAN HOMES AND THE OTHER LAND USES ADJACENT TO AG OPERATIONS USE THE EXACT SAME FERTILIZERS AND PESTICIDES MOST LIKELY WITH LESS PRECISION AND EDUCATION THAN AG.
- UNLIKE THE SAN JOAQUIN VALLEY, SAN DIEGO IS HILLY, RESULTING IN RUNOFF FROM LAND USES
  ABOVE FARMS RUNNING ONTO FARM OPERATIONS.
- ALL OF THIS WILL BE REFLECTED IN THE WATER QUALITY SAMPLES TAKEN BY MONITORING PROGRAMS AND IS OFTEN ATTRIBUTED ONLY TO AG.
- AGRICULTURE BEARS THE COSTS OF MONITORING, POTENTIAL FOR FINES, AND COSTS OF IMPLEMENTING BEST MANAGEMENT PRACTICES THAT MAY NOT BE NECESSARY

# 3. ORDER CONTINUES TO INCLUDE OVERLAPPING REGULATIONS WITH MULTIPLE INSPECTIONS FOR THE SAME ISSUES

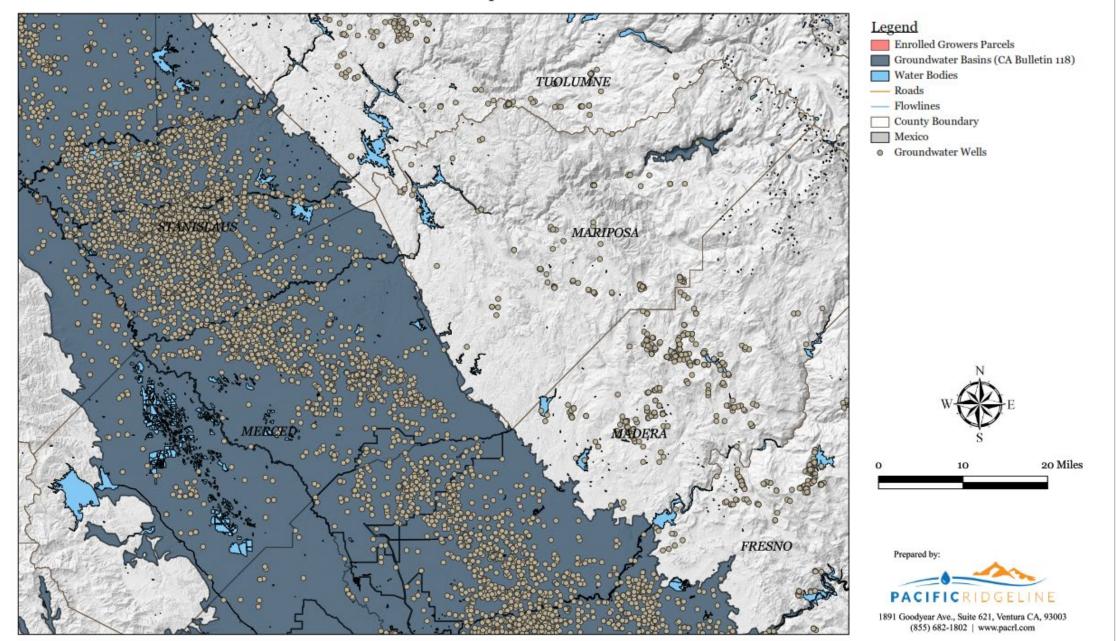
- SAN DIEGO COUNTY DEPARTMENT OF AG WEIGHTS AND MEASURES AS WELL AS
   CITY GOVERNMENTS THROUGHOUT THE REGION ARE ALREADY INSPECTING AG OPERATIONS
   FOR WATER QUALITY ISSUES (AWQ-MS4 PROGRAM)
- IN ADDITION, THE NEW DRAFT AG ORDER INCLUDED A SECTION ON PESTICIDE USE THAT DIRECTLY OVERLAPS WITH AG WEIGHTS AND MEASURES INSPECTIONS THAT ARE ALREADY BEING DONE AND HAVE BEEN IN PLACE FOR DECADES
- THE CA DEPARTMENT OF PESTICIDE REGULATION'S 100% PESTICIDE USE REPORTING
  PROGRAM (BEGAN IN 1990) REQUIRED OF ALL GROWERS USING PESTICIDES SHOULD BE
  UTILIZED BY THE REGULATORS.



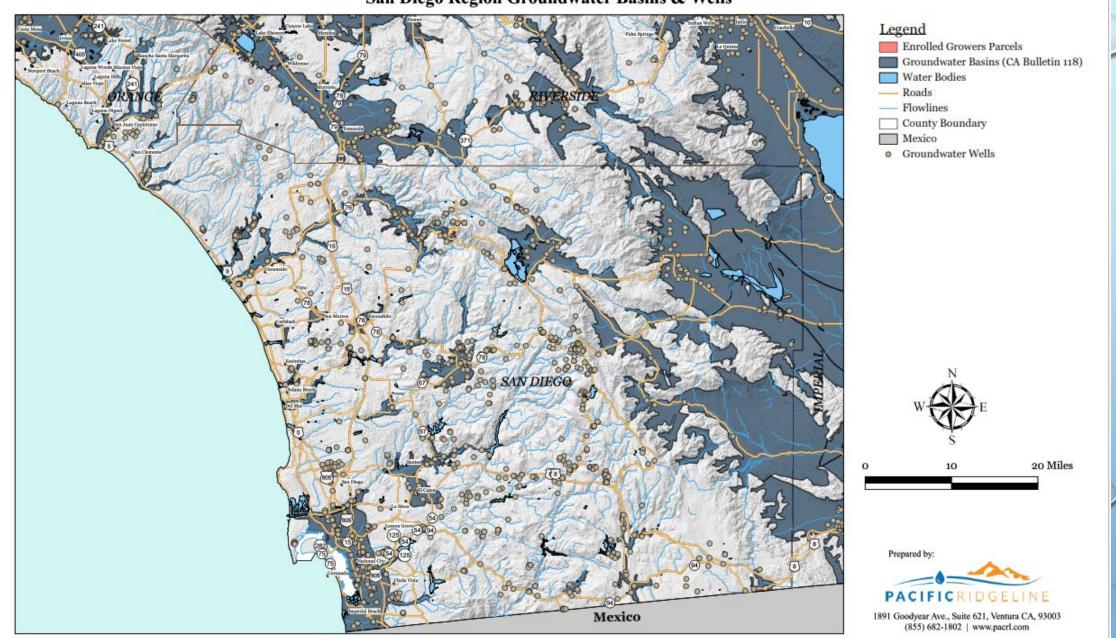
## 4. ENHANCED GROUNDWATER MONITORING REQUIRED IN DRAFT ORDER

- WE HAVE VERY LITTLE GROUNDWATER IN SAN DIEGO, ESPECIALLY COMPARED TO THE EASTERN SAN JOAQUIN VALLEY AREA, WHERE THESE REGULATIONS ARE BASED.
- MOST SMALLER GROWERS DO NOT USE GROUNDWATER-THE COST OF DRILLING A WELL IS PROHIBITIVE.
   MANY LARGER GROWERS ALSO DO NOT USE WELL WATER, PARTICULARLY IN THE NURSERY INDUSTRY.
- WE HAVE LESS THAN 7 ACTIVE DRINKING WATER WELLS ON FARMS ENROLLED IN THE IRRIGATED LANDS GROUP.
- SOME FARMS HAVE IRRIGATION WELLS AND THESE WILL NOW BE MONITORED. THIS WATER IS NOT USED FOR DRINKING.
- THIS WILL BE AN INCREASED COST FOR THOSE ENROLLED IN THE IRRIGATED LANDS GROUP. MOST GROWERS
  ALREADY MONITOR THEIR WELLS IF THEY ARE USING THE WATER FOR IRRIGATION.

#### San Diego Region Irrigated Lands Group Eastern San Juaquin Groundwater Basins & Wells



#### San Diego Region Irrigated Lands Group San Diego Region Groundwater Basins & Wells





- 5) Third-Party Groups must develop a Contingency Work Plan as described in this MRP if the surface water monitoring results show a Water Quality Benchmark exceedance(s), as described in Table B-7, for one or more of the constituents listed in Table B-1 to determine the source of the exceedance. For the purposes of the Order, an exceedance occurs when a monitoring result for a constituent at a surface water monitoring location exceeds the Water Quality Benchmark three out of four consecutive sampling events for the same constituent.
- The current Water Quality Benchmarks written into the Order will trigger these workplans almost uniformly across the entire county, regardless of agricultural influence.
- San Diego agriculture is not uniform, and is dispersed with different land uses.
- Why is agriculture on the hook to pay the costs to determine the sources?

The Contingency Work Plan must propose an expanded monitoring and analysis program to investigate the source(s) of the exceedance(s). The additional monitoring must be: (1) conducted concurrently with the approved surface water monitoring described in section II.B.4.b.ii (for Third-Party Groups) or section II.B.4.b.iii (for Dischargers enrolled as an individual), and (2) consistent with the parameters and frequency described in Table B-1 (for Third-Party Groups) or Table B-2 (for Dischargers enrolled as an individual).

A Contingency Work Plan developed by a Third-Party Group must propose actions to fully answer the following study questions:

- Where is the source location(s) within the watershed causing and/or contributing to the exceedance(s) of Water Quality Benchmarks?
- What is the identified land use associated with the source location(s)?
- If the source location(s) is owned/operated by a Member of a Third-Party Group, what actions will the Third-Party Group take to support the Member's compliance with the Order?

 The cost of doing this could be prohibitively high, almost impossible to budget.



- Benchmarks set lower than other Irrigated Lands programs throughout the state.
- Based on a review of data in the CEDEN website, these benchmark are generally being exceeded in developed areas throughout the county regardless of agricultural use.
- Samples collected from the headwaters of running streams and lakes releasing water in the region during dry season sampling events indicate that source water is above benchmarks.
- Some of the municipal supply water, including from treatment plants, is above the benchmark for Total Nitrogen.
- Based on a review of data in the CEDEN website, these benchmark are generally being exceeded in developed areas throughout the county regardless of agricultural use.



Table B-7. Water Quality Benchmarks

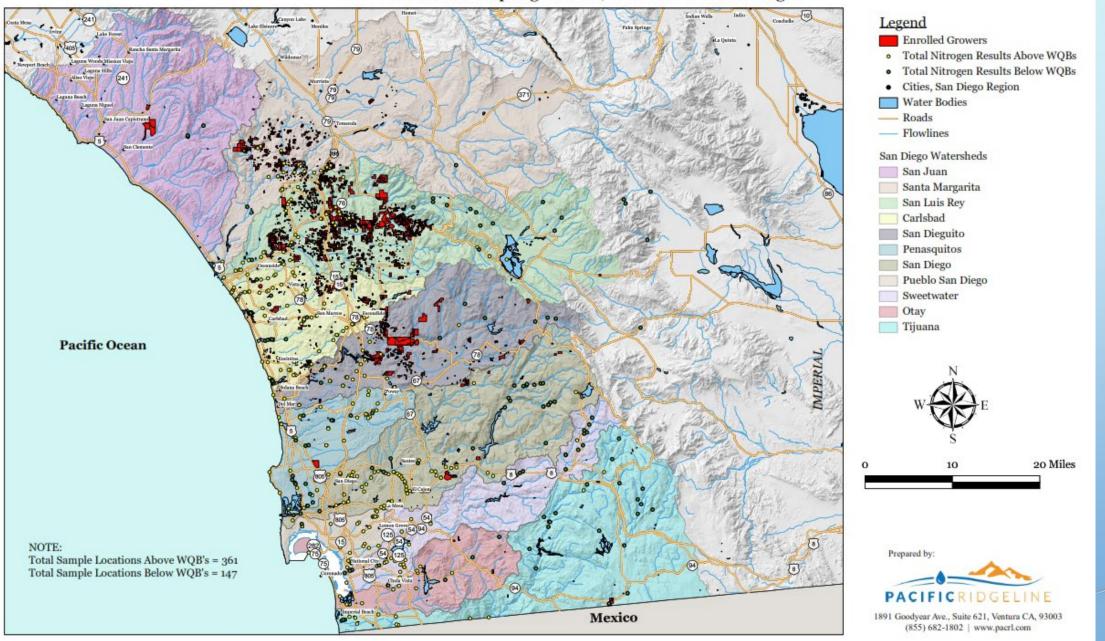
Parameter	Units	Water Quality Benchmark		
рН	standard units	The pH should not change more than 0.2 units from what occurs		
_	.=	naturally.		
Temperature	°F	See Note 11		
Dissolved Oxygen	mg/L	Less than 5.0 or 6.0, Note 1		
Turbidity – Surface water	NTU	20, Note 2		
Turbidity - Groundwater	NTU	5.0, Note 3		
Total Dissolved Solids	mg/L	Note 4		
Total Suspended Solids	mg/L	Cannot be in an amount that causes nuisance or adversely affects beneficial uses.		
Ammonia	mg/L	0.025, Note 5		
Nitrate (as NO <sub>3</sub> ) - Groundwater	mg/L	45 mg/L in groundwaters. 5 mg/L for Warner Valley hydrologic area. Notes 6 and 7		
Nitrate + Nitrite (as N)	mg/L	10, Notes 6 and 8		
Nitrite (as N)	mg/L	1.0, Note 6		
Total Nitrogen	mg/L	1.0, Notes 5 and 8		
Total Phosphorus	mg/L	0.1, Notes 5 and 8		
Sulfate - Surface water	mg/L	Note 4		
Sulfate - Groundwater	mg/L	Note 4		
E. coli	MPN/100 mL	Statistical threshold value of 320 MPN/100 mL that cannot be exceeded more than 10% of the time in the month.  Note 5		
Chronic Toxicity	TUc	1.0, Note 10		

#### Table B-7 Notes:

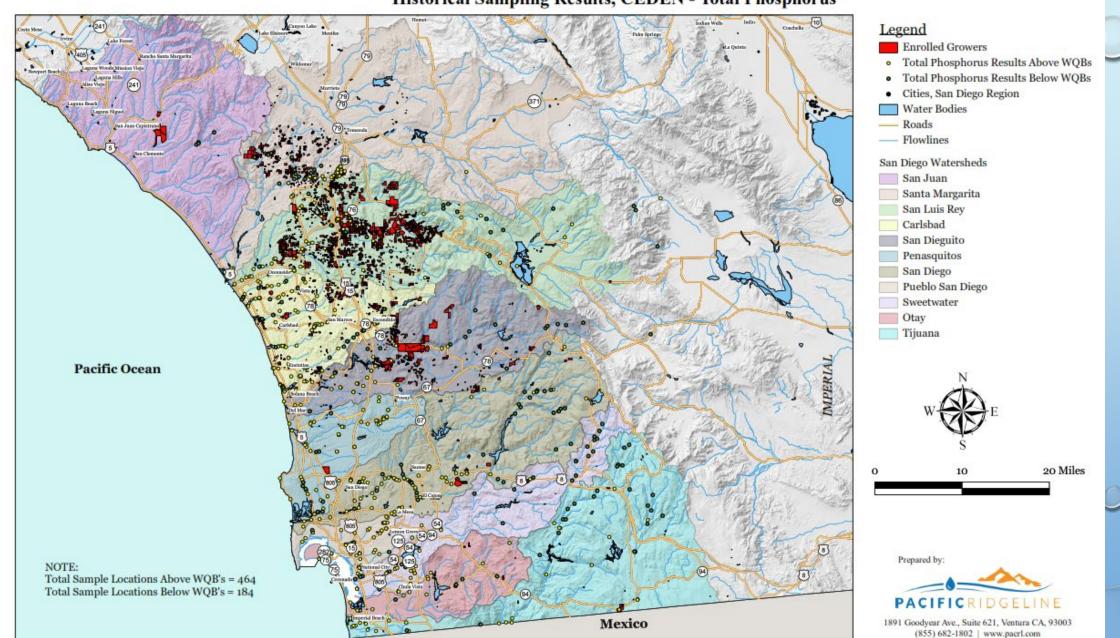
- Note 1. 5.0 mg/L for waters designated with MAR and WARM beneficial uses. 6.0 mg/L for waters designated with COLD beneficial use.
- Note 2. Does not apply to Coronado hydrologic area.
- Note 3. Does not apply to the following hydrologic areas: Domenigoni, Loma Alta, Scripps, Tecolote, Point Loma, San Diego Mesa, Coronado, Otay Valley, and Tijuana Valley.

	Central Valley	Central Coast	Los Angeles		
Parameter	Benchmarks	Benchmarks	Benchmarks		
pH	6.5-8.5	7-8.5	6.5-8.5		
Temperature	Narrative	Natural background	Narrative		
Dissolved Oxygen	5 (Warm) 7 (Cold)	>5	5 (Warm) 7 (Cold)		
Turbidity	Narrative	Natural background	Narrative		
TDS	Varies based on waterbody		Varies based on Geology up to 500		
TSS	Narrative	Narrative	Narrative		
Ammonia	Narrative	Un-ionized Ammonia <0.025	Temperature and pH Dependent		
Nitrate (as NO3) - Groundwater			10		
Nitrate+Nitrite (as N)	10	<10	Varies based on stream, generally 8-10		
Nitrite (as N)					
Total Nitrogen					
Total Phosphorus					
Sulfate - Surface Water			Varies based on Geology up to 2,000		
Sulfate - Groundwater					
E. Coli	235	TMDL	235 / 576		
Chronic Toxicity	% Survival	Narrative	Pass/Fail & %		

#### San Diego Region Irrigated Lands Group Historical Sampling Results, CEDEN - Total Nitrogen



#### San Diego Region Irrigated Lands Group Historical Sampling Results, CEDEN - Total Phosphorus



### Municipal Water Supply

The Metropolitan Water District of Southern California

### GENERAL MINERAL AND PHYSICAL ANALYSIS OF METROPOLITAN'S WATER SUPPLIES TABLE D July 2021

Nitrate is one component of Total Nitrogen

Suly 2021														
		SOURCE WATERS					TR	EATMENT	PLANT	<b>EFFLUEN</b>	TS			
		LAKE	SAN	LAKE	CASTAIC	SILVER-	LAKE	DIAMOND	LAKE	WEY-				
CONSTITUENTS	UNITS	HAVASU	<b>JACINTO</b>	MATHEWS	LAKE	WOOD	PERRIS	VALLEY	SKINNER	MOUTH	DIEMER	<b>JENSEN</b>	SKINNER	MILLS
	7000		TUNNEL			LAKE		LAKE						
SILICA	mg/L	7.4	6.8	6.9	11.5	8.0	0.9	5.9	6.7	7.2	7.2	11.8	6.2	6.5
CALCIUM	mg/L	67	70	70	29	26	25	25	69	<b>69</b> ડુ <sup>0</sup> )	69	27	70	26
MAGNESIUM	mg/L	24	26	26	12	10	14	13	25	24	24	11	25	12
SODIUM	mg/L	83	88	91	59	70	61	53	88	101	99	62	100	64
POTASSIUM	mg/L	4.1	4.2	4.5	2.8	2.8	3.3	3.4	4.6	4.5	4.6	2.7	4.6	3.5
CARBONATE	mg/L	0	1	0	0	0	0	0	1	0	0	0	0	0
BICARBONATE	mg/L	170	163	161	102	109	115	101	161	155	155	109	151	105
SULFATE	mg/L	197	197	204	50	53	41	47	195	211	208	54	209	52
CHLORIDE	mg/L	86	87	89	66	82	80	69	87	93	91	70	92	72
NITRATE	mg/L	1.4	1.1	1.0	1.9	1.7	<0.1	1.1	0.6	1.0	1.1	2.0	0.7	1.3
FLUORIDE	mg/L	0.3	0.3	0.3	0.1	0.1	0.1	0.1	0.3	0.7	0.7	0.7	0.7	0.8
TOTAL DISSOLVED SOLIDS (TDS)	mg/L	555	563	573	283	308	283	268	558	589	582	296	584	291
TOTAL HARDNESS AS CaCO <sub>3</sub>	mg/L	277	265	267	119	105	112	108	265	275	276	116	275	116
TOTAL ALKALINITY AS CaCO <sub>3</sub>	mg/L	139	136	132	84	89	94	83	134	127	127	89	124	86
FREE CARBON DIOXIDE	mg/L	2.2	1.2	1.2	3.6	1.1	0.5	4.2	1.2	2.0	2.0	1.2	1.8	0.9
pH	pH	8.10	8.37	8.34	7.68	8.23	8.58	7.60	8.36	8.12	8.11	8.17	8.14	8.31
SPECIFIC CONDUCTANCE	μS/cm	914	918	937	511	559	534	490	919	970	963	530	960	528
COLOR	CU	3	2	3	1	5	3	5	3	1	1	2	1	1
TURBIDITY	NTU	0.47	0.25	0.42	1.8	0.76	0.72	0.29	0.70	0.04	0.04	0.04	0.06	0.04
TEMPERATURE	°C	24	28	24	14	20	24	15	26	24	26	22	30	23
BROMIDE	mg/L	0.07	0.07	0.08	0.23	0.27	0.25	0.22	0.08					
TOTAL ORGANIC CARBON	mg/L	2.99	3.09	3.24	2.31	2.66	4.18	2.42	3.07					
SATURATION INDEX										0.64	0.66	0.18	0.74	0.30
STATE PROJECT WATER	%	0	0	0	100	100	100	100	0	0	0	100	0	100

### **Upstream Sampling**



#### Coming from Reservoir

Table 7. Turner Lake Discharge

	-	MC-3(S)		
Constituent	Units	9/2/2021		
		Dry Season		
Stream Depth	ft	Varies		
Stream Width	ft	5		
Stream Cross Sectional Area	ft <sup>2</sup>	na		
Stream Velocity	ft/sec	na		
Flow Volume	ft <sup>3</sup> /sec	~8		
Temperature	°C	24.55		
pН	pH units	8.4		
Dissolved Oxygen	mg/L	7.53		
Turbidity	NTU	63		
Sulfate	mg/L	240		
Hardness (as CaCO3)	mg/L	390		
Nitrate+Nitrite as N	mg/L	0.26		
Total Dissolved Solids	mg/L	1100		
Total Suspended Solids	mg/L	4		
Total N	mg/L	3.46		
Total Kjeldahl Nitrogen	mg/L	3.2		
Ammonia as N	mg/L	0.45		
Total Phosphorous	mg/L	2		
Total Coliform	MPN/100 mL	>2419.6		
E. coli	MPN/100 mL	5.2		
Enterococci	MPN/100 mL	11		
Fecal Coliform	MPN/100 mL	6.3		
Chronic Toxicity	TUc	na		

BOLD values are over current benchmarks

mg/L milligrams per Liter ft feet
MPN Most Probable Number sec second

Degrees Celsius

NTU Nephelometric Turbidity Units

TUe Toxicity Units

#### Groundwater spring

Table 10. Live Oak Creek - Headwater

		HB-SLR-1(S)			
Constituent	Units	9/2/2021			
		Dry Season			
Stream Depth	ft	0.5"			
Stream Width	ft	5"			
Stream Cross Sectional Area	ft <sup>2</sup>	na			
Stream Velocity	ft/sec	0.7			
Flow Volume	ft <sup>3</sup> /sec	0.1-1			
Temperature	°C	18.99			
pН	pH units	8.04			
Dissolved Oxygen	mg/L	6.68			
Turbidity	NTU	0			
Sulfate	mg/L	600			
Hardness (as CaCO3)	mg/L	1000			
Nitrate+Nitrite as N	mg/L	23.022			
Total Dissolved Solids	mg/L	1,800			
Total Suspended Solids	mg/L	10			
Total N	mg/L	23.562			
Total Kjeldahl Nitrogen	mg/L	0.54			
Ammonia as N	mg/L	0.12			
Total Phosphorous	mg/L	0.060			
Total Coliform	MPN/100 mL	>2419.6			
E. coli	MPN/100 mL	280.9			
Enterococci	MPN/100 mL	730			
Fecal Coliform	MPN/100 mL	81.6			
Chronic Toxicity	TUc	na			

BOLD values are over current benchmarks

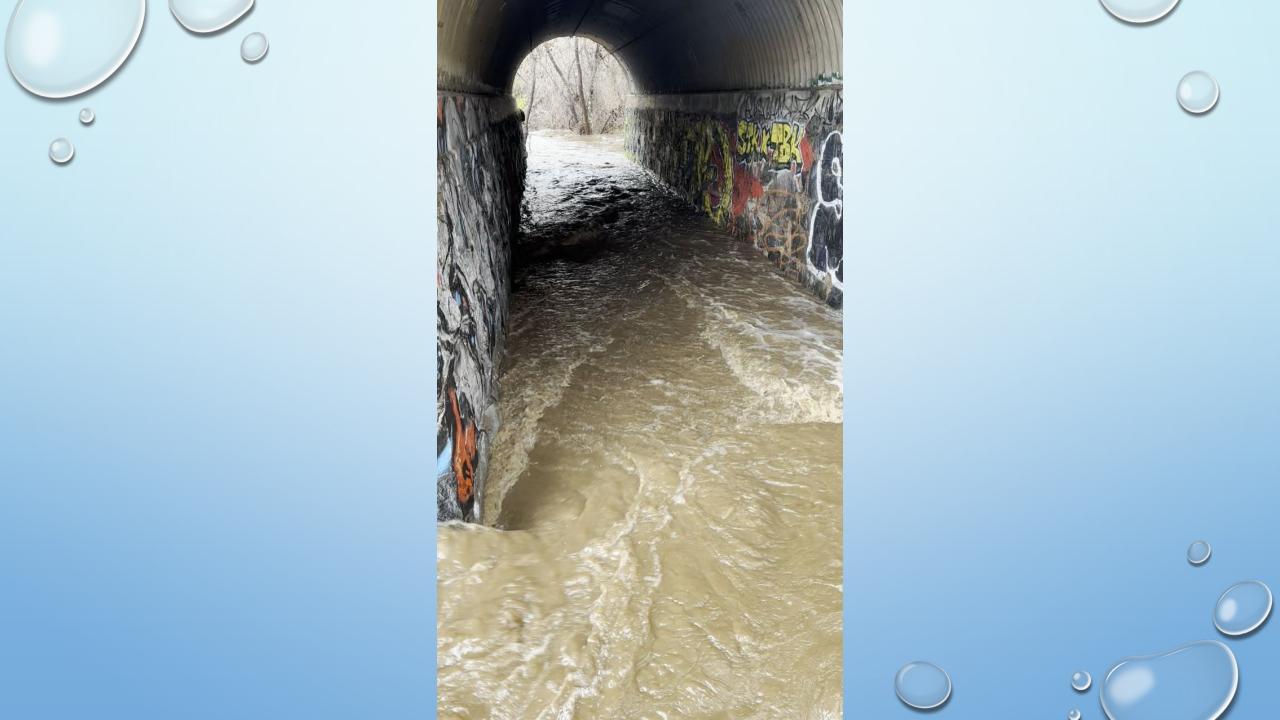
mg/L milligrams per Liter ft feet
MPN Most Probable Number sec second

°C Degrees Celsius

NTU Nephelometric Turbidity Units

TUc Toxicity Units

= over benchmarks





#### **ADDITIONAL MONITORING**

- 3) If Third-Party Groups are unable to collect a sample from any of the established surface water monitoring location(s) during: the first qualifying storm event of the wet season, the Third-Party Group must return to the surface water monitoring location during the subsequent qualifying storm event(s) of the wet season until the Third-Party Group is able to collect a sample from each established surface water monitoring location. Third-Party Groups must document, with photos, when the surface water body did not have enough water to collect samples at a surface water monitoring location and must include the observation and photos in the Annual Monitoring Report.
- With a trigger of 0.5-inches for a qualifying storm event, this could be dozens of additional sampling trips.
- Some locations only run during heavy, sustained rains, and some have never run.
- Impossible to budget for, completely dependent on weather.



#### **ADDITIONAL MONITORING**

- 4) If Third-Party Groups are unable to collect a sample from any of the established surface water monitoring location(s) during the dry season because the surface water body does not have enough water, the Third-Party Group must: (1) document, with photos, that the surface water body does not have enough water to collect samples, (2) include the observation in the Annual Monitoring Report and (3) return to surface water monitoring location(s) a second time to attempt to collect a sample. If Third-Party Groups are still unable to collect a sample due to the lack of water, Third-Party Groups must: (1) document, with photos, that the surface water body does not have enough water to collect samples and (2) include the observation in the Annual Monitoring Report. Third-Party Groups are only required to attempt to collect samples from each surface water monitoring location twice during the dry season.
- Why would a site have water later in the summer for a second sampling event? Most are dependent on groundwater flow or releases from dams.