

# AGENDA ITEM 7B: REGULATORY INITIATIVES AND SCIENCE RELATED UPDATE

- SWRCB
  - Salt and Nutrient Management Plan \$180,000 FY 20/21
  - PFAS \$50,000 FY 20/21,
  - Laboratory Accreditation Standards \$100,000 FY 21/22 FTE
- RWQCB – Region 9 (San Diego)
  - Biological Quality Objectives \$22,000 FY 20/21
  - Plume tracking \$1,000,000 FY 21/22 & FY22/23
  - HF183 \$30,000 FY 20/21
  - SOCWA Natural Bacteria project \$10,000 FY 20/21
- CARB
  - AB2588 Implementation \$12,000 FY 18/19
- Wastewater based epidemiology \$15,000 FY 20/21 and FY 21/22



# SWRCB 2009 AND 2018 POLICIES

- SALT AND NUTRIENT MANAGEMENT PLAN
  - 2009 Intent was to streamline recycled water permitting
  - SOCWA submitted the Final SNMP in July 2014
  - Monitoring plan submitted August 2016
  - Recycled Water Report of Waste Discharge submitted September 2016
  - Administrative draft received May 2017
  - SOCWA FY18/19 & 19/20 5 Year Update Investment
  - Triennial Review started October 2018, start December 2019
  - SNMP Review March 2020 with 2020 SNMP Update
  - Onboarding staff and procedural delays the biggest hurdle



June 2018 SWRCB Meeting regarding 2018 Policy

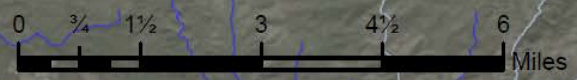
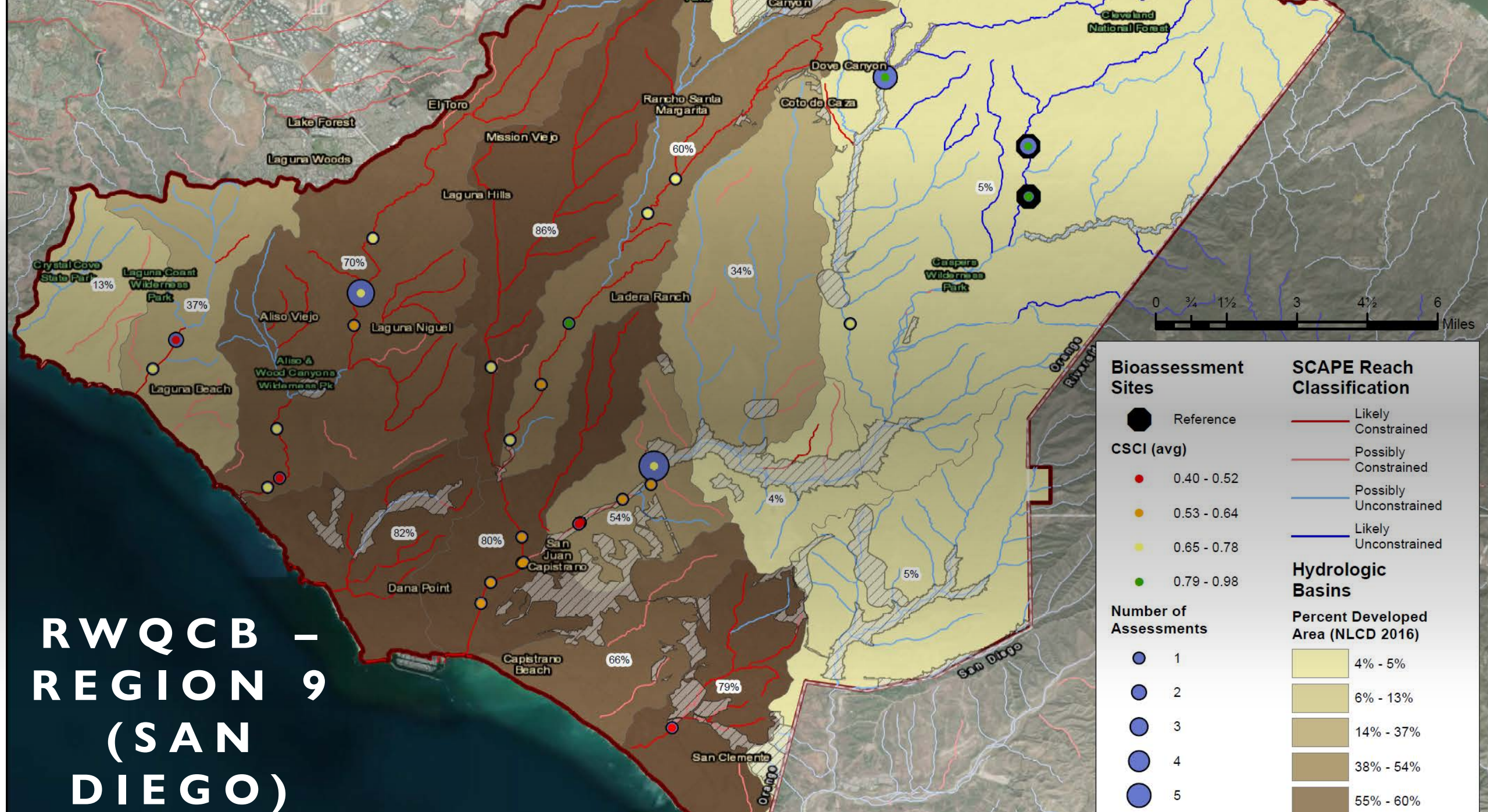
# SWRCB PFAS INVESTIGATIVE ORDER

- Investigative Order WQ-2020-0015 received July 2020
- Requires four quarters of sampling starting Q4 2020
- SOCWA Responsible Agency (NPDES and WDR Permits)
- 10 Member Agencies – draft sampling and analysis plan provided
  - Analytical method, approved laboratory (DoD QSM 5.1 and 5.3), and data package levels
  - Sampling plan – field procedures, contamination minimization protocols, stakeholder responsibilities
  - Navigating conflicting guidance and engagement with the SWRCB
- Cost approximately \$2180 per facility plus labor for influent, effluent, biosolids, and equipment blanks
- 61 total samples for member agencies for Q4 2020
- No approved method, only Department of Defense under performance quality systems manual
- Vetting of labs through SOCWA questionnaires and forum through Clean Water Summit Partners

# LABORATORY ACCREDITATION STANDARDS

- SWRCB Approved the Environmental Laboratory Accreditation Program updates to Title 22 in May 2020. Regulations submitted to Office of Administrative Law September 2020. OAL reviews regulations that are clear, necessary, and legally valid under the Administrative Procedures Act. SOCWA's review focused on necessity.
- SOCWA completed a review of the evidence to support the policy. A total of 935 pages of SOCWA's review were submitted into the record to ELAP. There is no evidence for the need for one lab accreditation standard and is not consistent with the Environmental Laboratory Accreditation Act which formalized the role that ELAP provides for oversight to regulated labs in California.
- For example, three are between 25 and 50 MILLION compliance tests ran each year in State's over 7,000 drinking water systems and 900 wastewater systems.
- For example, SOCWA ran ~6,200 compliance tests last year for one of its member agency's community water system. Extrapolating that out based on the State of California Annual Compliance Report 2018 (7,450 community water systems), there are 17,942,800 million tests ran each year for 40% of the public water systems.
- EPA audits indicate that ELAP is 900% behind in auditing labs, with some labs that have not been audited in over 5 years.
- **Alternative Option:**
- SOCWA worked with industry representatives to create a cost-efficient system in four months that would reduce the administrative burden of the new regulations (California Quality Management System). Industry supported the system. State rejected the system.

# RWQCB - REGION 9 (SAN DIEGO)

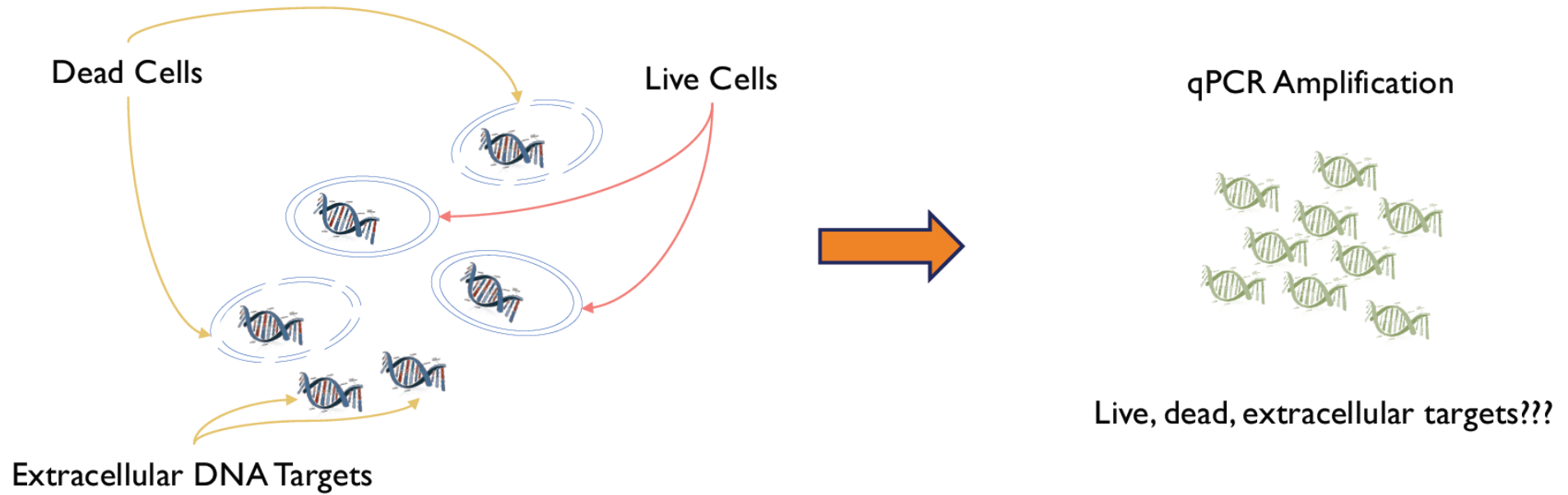


<b>Bioassessment Sites</b>		<b>SCAPE Reach Classification</b>	
	Reference		Likely Constrained
<b>CSCI (avg)</b>			Possibly Constrained
	0.40 - 0.52		Possibly Unconstrained
	0.53 - 0.64		Likely Unconstrained
	0.65 - 0.78		
	0.79 - 0.98		
<b>Number of Assessments</b>		<b>Hydrologic Basins</b>	
	1		Percent Developed Area (NLCD 2016)
	2		4% - 5%
	3		6% - 13%
	4		14% - 37%
	5		38% - 54%
			55% - 60%

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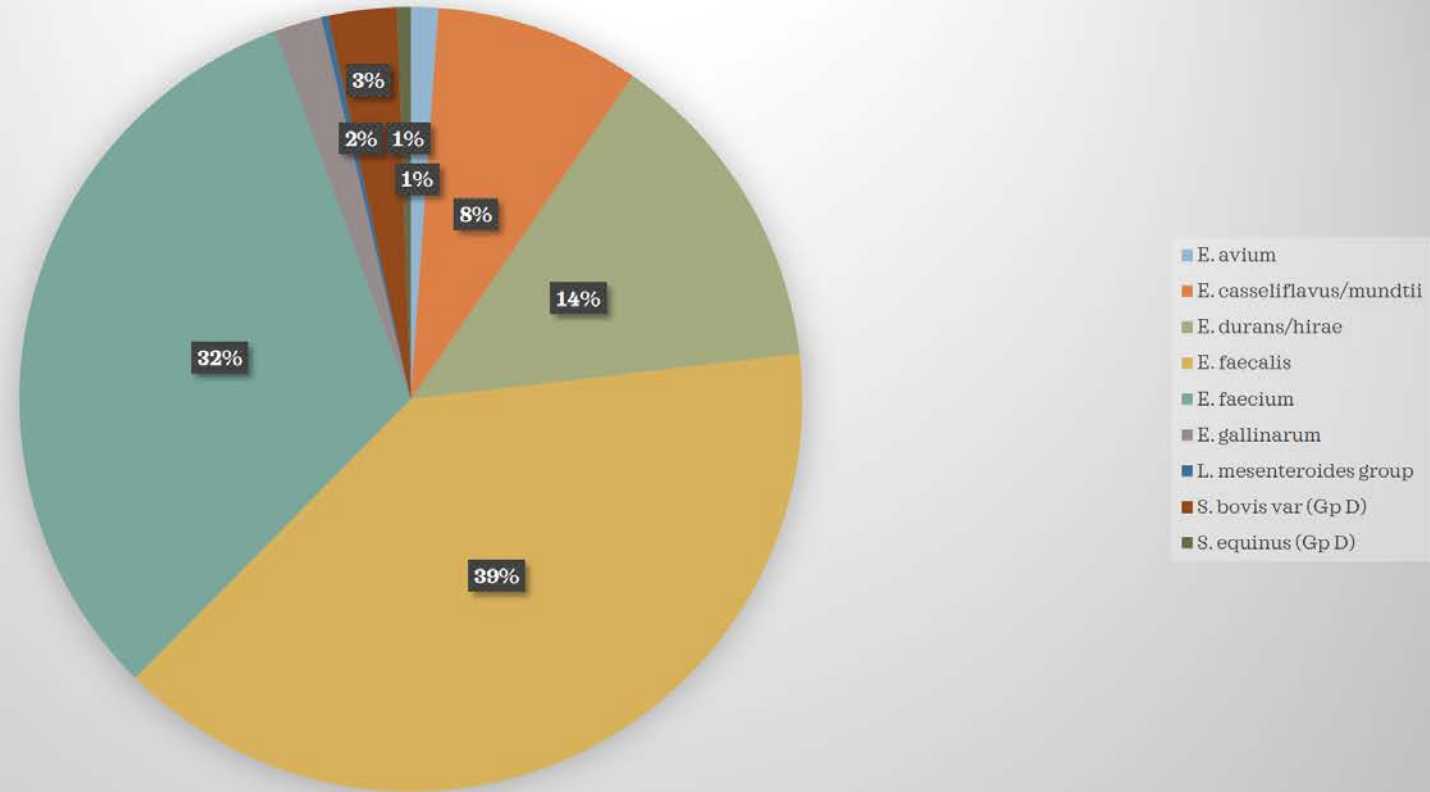
- 2009 SCCWRP Report on the need for plume tracking
- 2016 NPDES renewal representing new requirement for dischargers north of City of San Diego
- SCCWRP proposes ROMS-BEC Model
- Encina JPA proposes monitoring events
- SOCWA investigates the ROMS-BEC with assistance from Dr. Scott Jenkins
  - Key issues:
    - Inability to differentiate anthropogenic loading from natural background
    - Photosynthetic adsorption ratios not accounted for
    - Undulations in algal cycling and predation effects not accounted for
    - BEC portion of the model not validated
- SWRCB is now the oversight authority for the model.

- EPA Method 1696 established a qPCR method (HF183) for *Bacteroides* sp.
  - Used in water samples to identify human fecal contamination
  - Provides information on the presence, absence, and abundance of HF183 gene targets
  - **qPCR on DNA alone is unable to differentiate between live and dead cells**



HF183

## Enterococcus Speciation March 4, 2020 through September 22, 2020

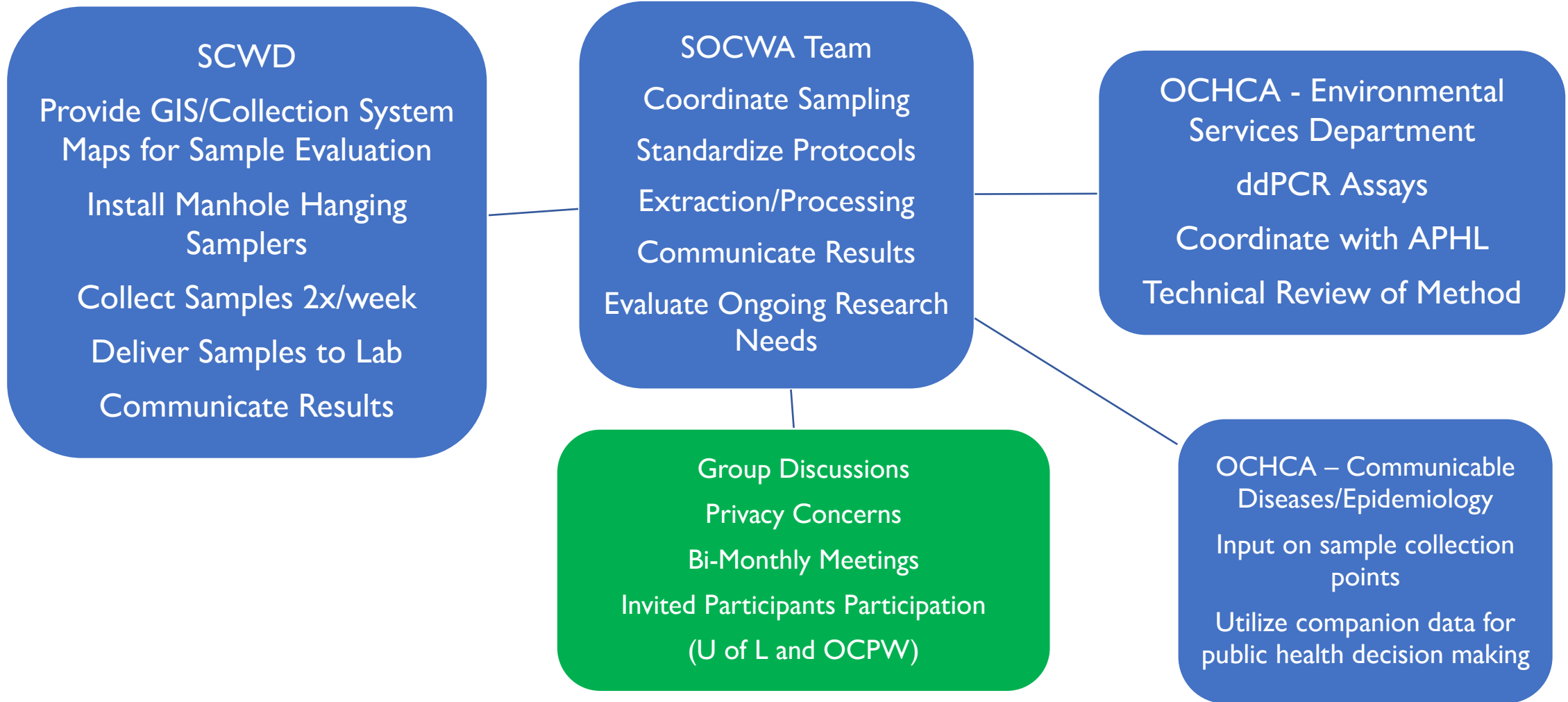


NATURAL BACTERIA  
SPECIATION PROJECT



# CARB – AB2588

- Issue: Tentatively Identified AB 2588 Appendix A-1 Compounds from WWTP Influent Head Space Samples.
- CARB identified compounds in A-1 that they wanted to collect more routine data for under AB2588 (The Air Toxics Reporting Rule) from stationary source emissions, enhance the public access to information on toxic pollutant emissions and require the reduction of localized health risks at facilities.
- All existing compounds in the AB 2588 Appendix A-1 (~500 compounds) will be required to be reported in 2023. In addition, 100 new Appendix A-1 compounds will be required to be reported in 2023. The remaining ~600 compounds will be required to be reported in 2027. (*Unless a formal CARB-approved screening process is performed to exclude compounds*).
- The 100 new Appendix A-1 compounds are generally those previously exempted by air districts.
- SOCWA and four other WWTPS took samples for volatiles and total inorganic carbon analysis to determine if compounds existed as proposed in the proposed Appendix A-1.
- SOCWA WWTP odor scrubbers effective at reducing volatile organics.
- Raw data helped to refine CARB's list on the ability to analyze for some constituents on A-1 list that cannot be quantified.
- Participation in the study also helping to update emission factors for annual air emission testing.



# WASTEWATER BASED EPIDEMIOLOGY