



# CALIFORNIA BACTERIA SUMMIT

SEPTEMBER 14-16, 2022

## AGENDA ITEM #1: WELCOME AND OPENING

Jonathan Bishop: State Water Board

Karen Cowan: CASQA

The image features a light gray background with a subtle gradient. In the top-left and bottom-right corners, there are several realistic water droplets of varying sizes, some with highlights and shadows, giving them a three-dimensional appearance. The text "THANK YOU" is centered in the middle of the image.

**THANK YOU**

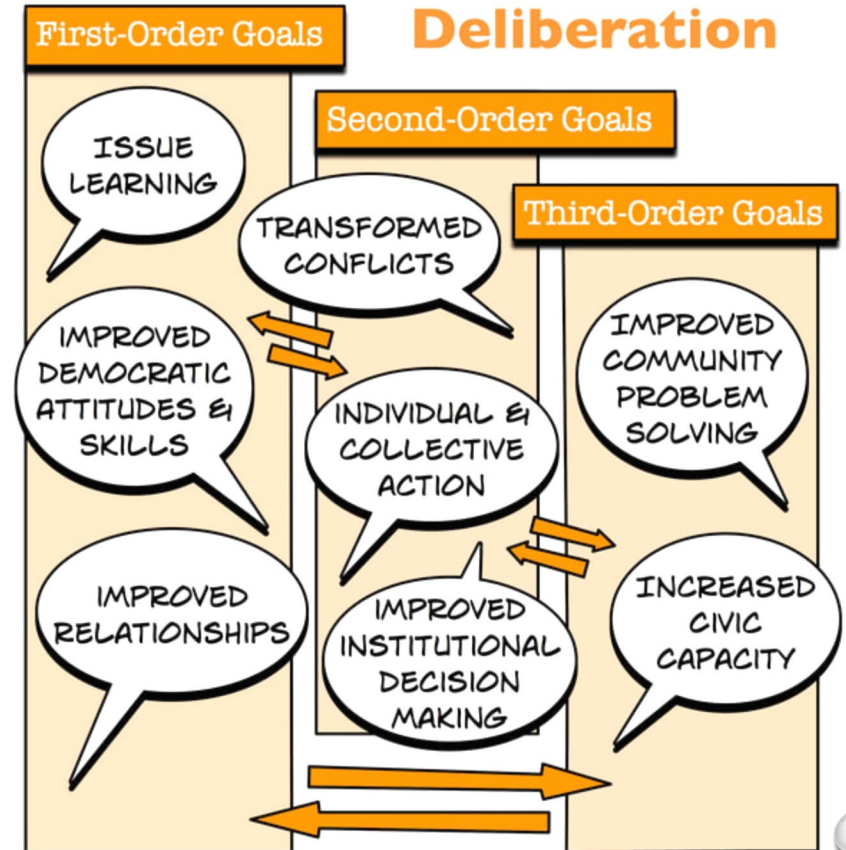
# WHY ARE WE HERE IN A SUMMIT?

## SHARED GOALS:

Waters that are safe to swim;  
Shellfish that are safe to eat

- DIALOGUE AND DELIBERATION (COLLABORATION)  
TO GET US TO OUR GOALS
- SOLUTIONS / COLLECTIVE ACTION

## Goals of Dialogue & Deliberation



Graphic created by Sandy Heierbacher, NCDD (August 2009). Its content is a slightly adapted version of the "Goals of Deliberation" figure in *Beginning with the End in Mind: A Call for Goal-Driven Deliberative Practice* (Summer 2009, Public Agenda's Center for Advances in Public Engagement), by Martin Carcasson of Colorado State University's Center for Public Deliberation, available at [www.publicagenda.org/cape](http://www.publicagenda.org/cape).

# WHY BACTERIA?

## ASSESSMENT PRIORITY FOR THE STATE

### **2018 Adoption of the Statewide Bacteria Provisions (State Water Board)**

- Resolution commits State Water Board staff to “continued assessment of pathogen indicators and their implementation, accounting for risk, salinity, and California-specific studies”

### **2019 Ocean Plan Review and Work Plan (State Water Board)**

- High priority project: Shellfish beneficial uses and water quality objective

# WHY BACTERIA?

## WATER QUALITY PRIORITY AT THE STATEWIDE SCALE

### CASQA Water Quality Priority Assessment (2019)

CASQA Membership Survey	303(d) List	TMDLs
WQIP Water Quality Priority (MS4s in Region 9)	(E)WMP Limiting Pollutant (MS4s in Region 4)	Water Quality Priority (MS4s in Region 5)
Regional Board Triennial Reviews	Statewide Policy / Regulation / Program	Primary or Secondary MCL
Professional Judgement / Research Findings		

EPA Decision  
Making Tool

**Bacteria**

Trash

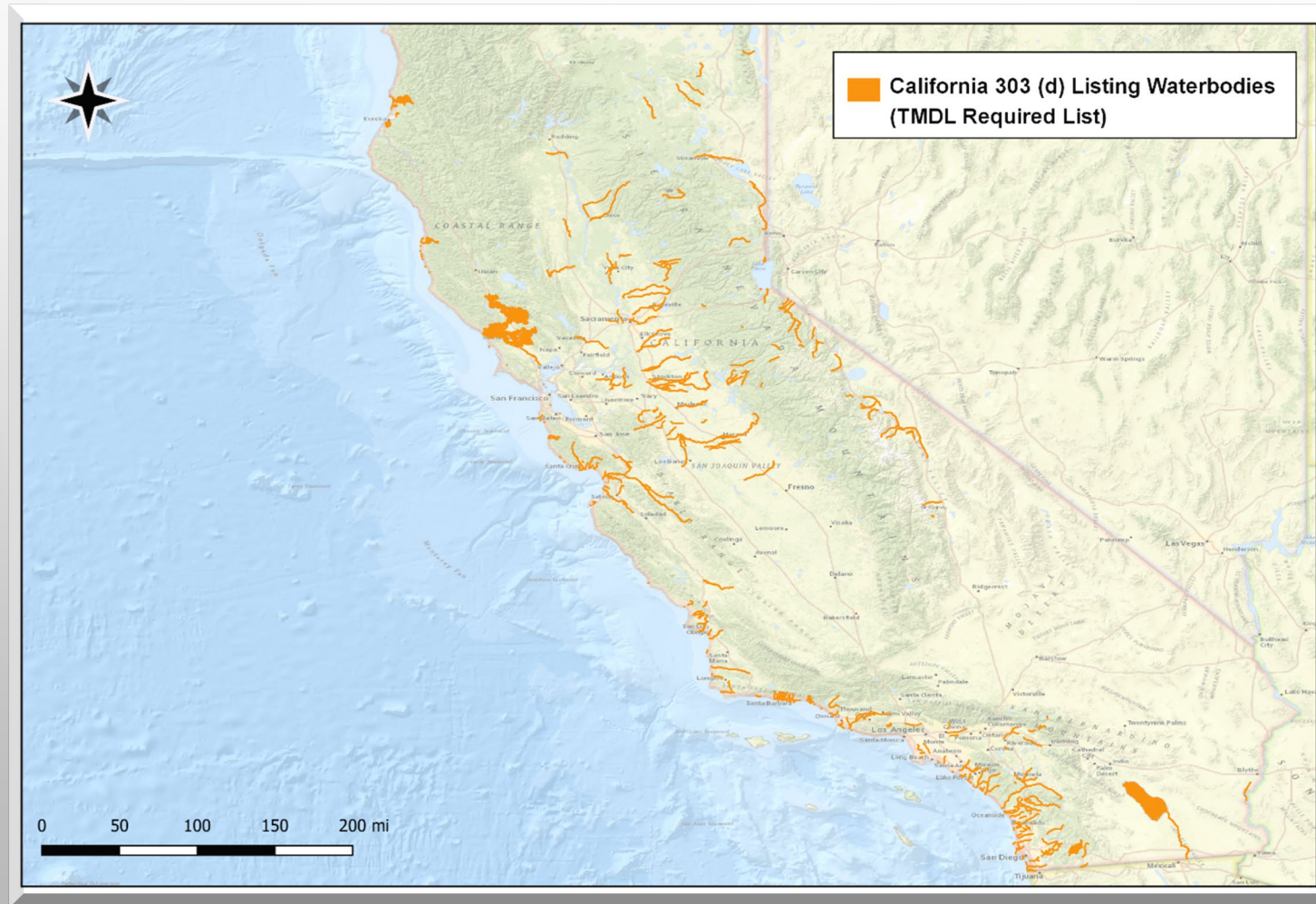
Current Use Pesticides

Biointeg / Biostim



# WHY BACTERIA?

## WATER QUALITY PRIORITY AT THE STATEWIDE SCALE



303(d) Listed  
Waterbodies

# WHAT ARE THE POTENTIAL SOURCES (E.G. PATHWAYS)?

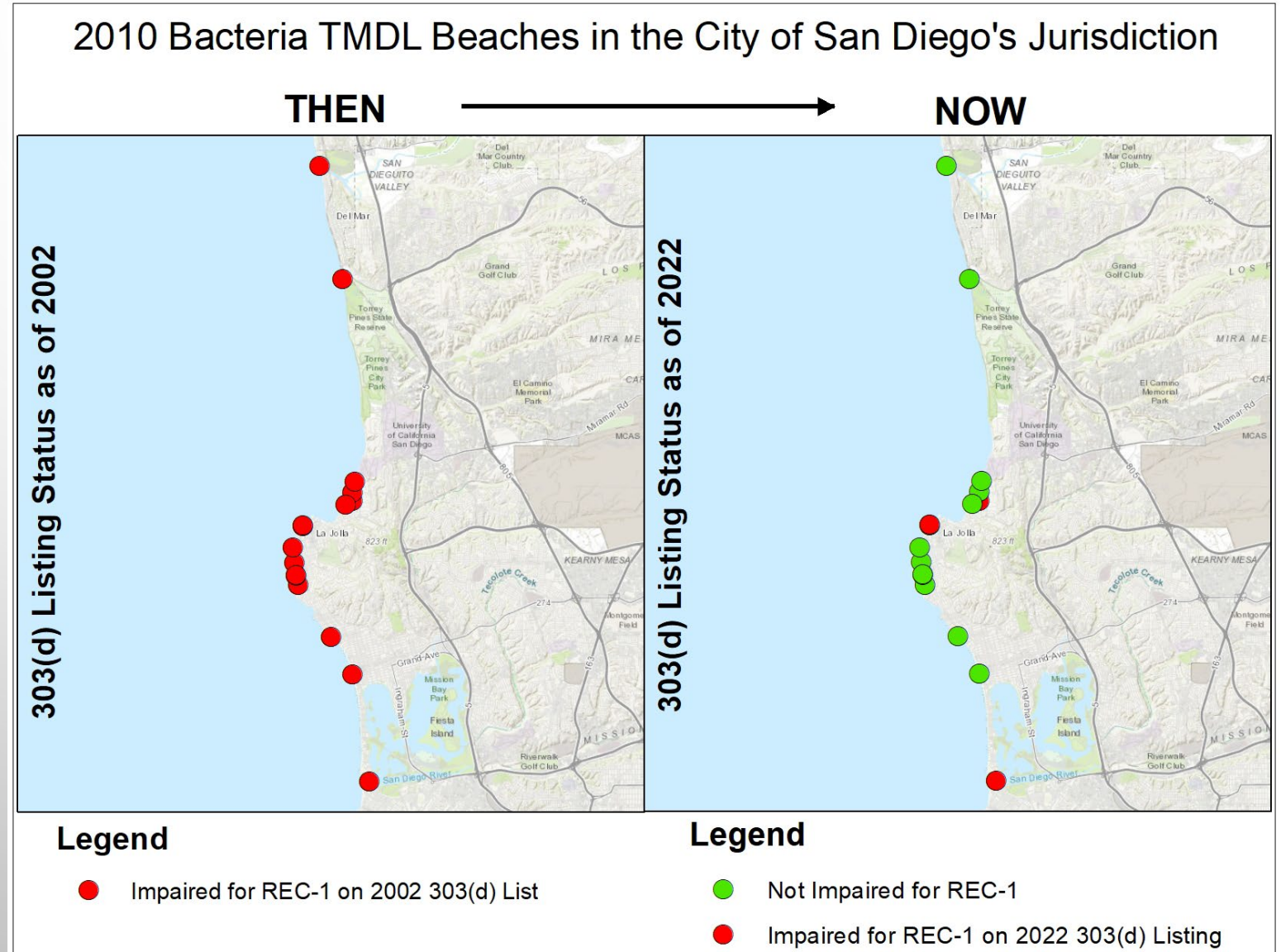
IN ALPHA ORDER...

- CONFINED ANIMALS
- DOMESTIC ANIMALS/LIVESTOCK
- GRAZING
- ILLEGAL DUMPING
- NATURAL SOURCES
- ONSITE WASTEWATER SYSTEMS  
(SEPTIC TANKS)
- STORMWATER RUNOFF
- TRANSIENT ENCAMPMENTS
- WASTEWATER & LEAKING SEWERS

... AND MORE

# WHAT PROGRESS HAS BEEN MADE?

CITY OF  
SAN DIEGO:  
  
SIGNIFICANT  
REDUCTION IN  
303(D) LISTINGS





# WHAT PROGRESS HAS BEEN MADE?

## LOS ANGELES COUNTY

- 41 DRY WEATHER DIVERSIONS
- DRY WEATHER EXCEEDANCES HAVE BEEN **REDUCED BY 70%** OVER THE PAST 18 YEARS
- WET WEATHER DIVERSION PROJECTS IN PLANNING PHASE

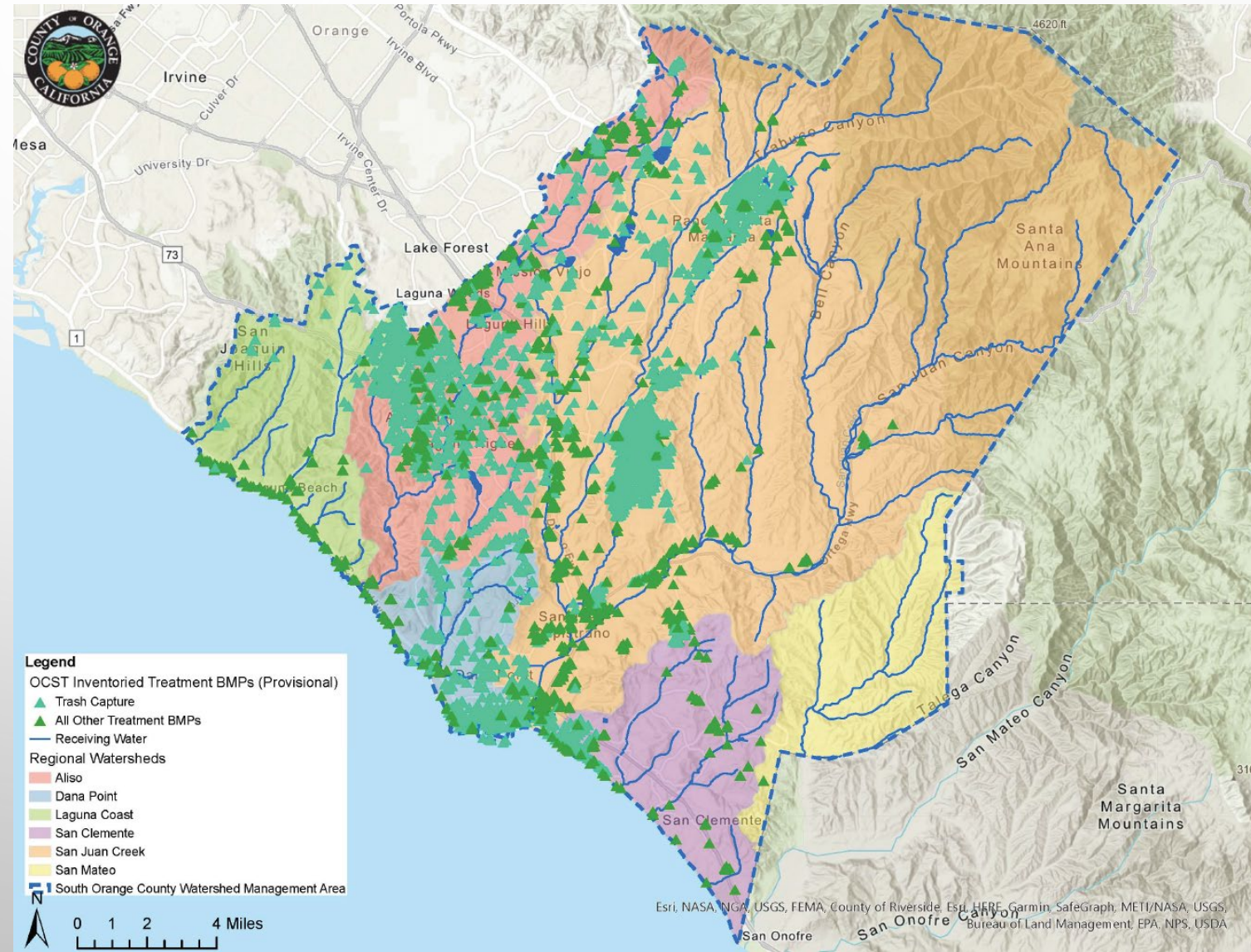




# WHAT PROGRESS HAS BEEN MADE?




## SOUTH ORANGE COUNTY: TMDL LOAD REDUCTIONS

- REDUCTIONS IN BACTERIAL LOADINGS FROM 2003 TO 2020
  - TOTAL COLIFORM:  
**92.2%**
  - FECAL COLIFORM:  
**95.3%**
  - ENTEROCOCCUS:  
**95.7%**

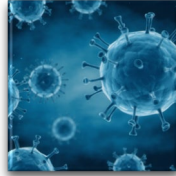


# WHAT PROGRESS HAS BEEN MADE?

## WHAT ARE THE SUCCESS STORIES?

5 YEAR AVERAGE	Summer Dry 		Winter Dry 		Wet Weather 	
GRADE	#	%	#	%	#	%
A	401	88%	293	81%	219	49%
B	32	7%	31	8%	48	11%
C	12	3%	17	5%	31	7%
D	6	1%	6	2%	30	7%
F	8	2%	15	4%	119	27%
A+B	432	94%	324	90%	266	60%
C,D,F	26	6%	38	10%	180	40%

# WHAT ARE THE CHALLENGES?



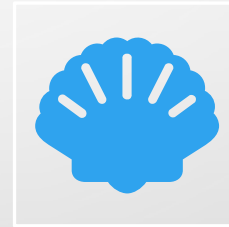
Pathogen Indicator



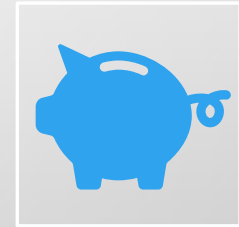
Objectives



Sources /  
Pathways



SHELL & REC



Resources

# WHY IT MATTERS

## SHARED GOALS:

Waters that are safe to swim;  
Shellfish that are safe to eat

Will our actions result in  
achieving our goals?

Requires Significant Investment:

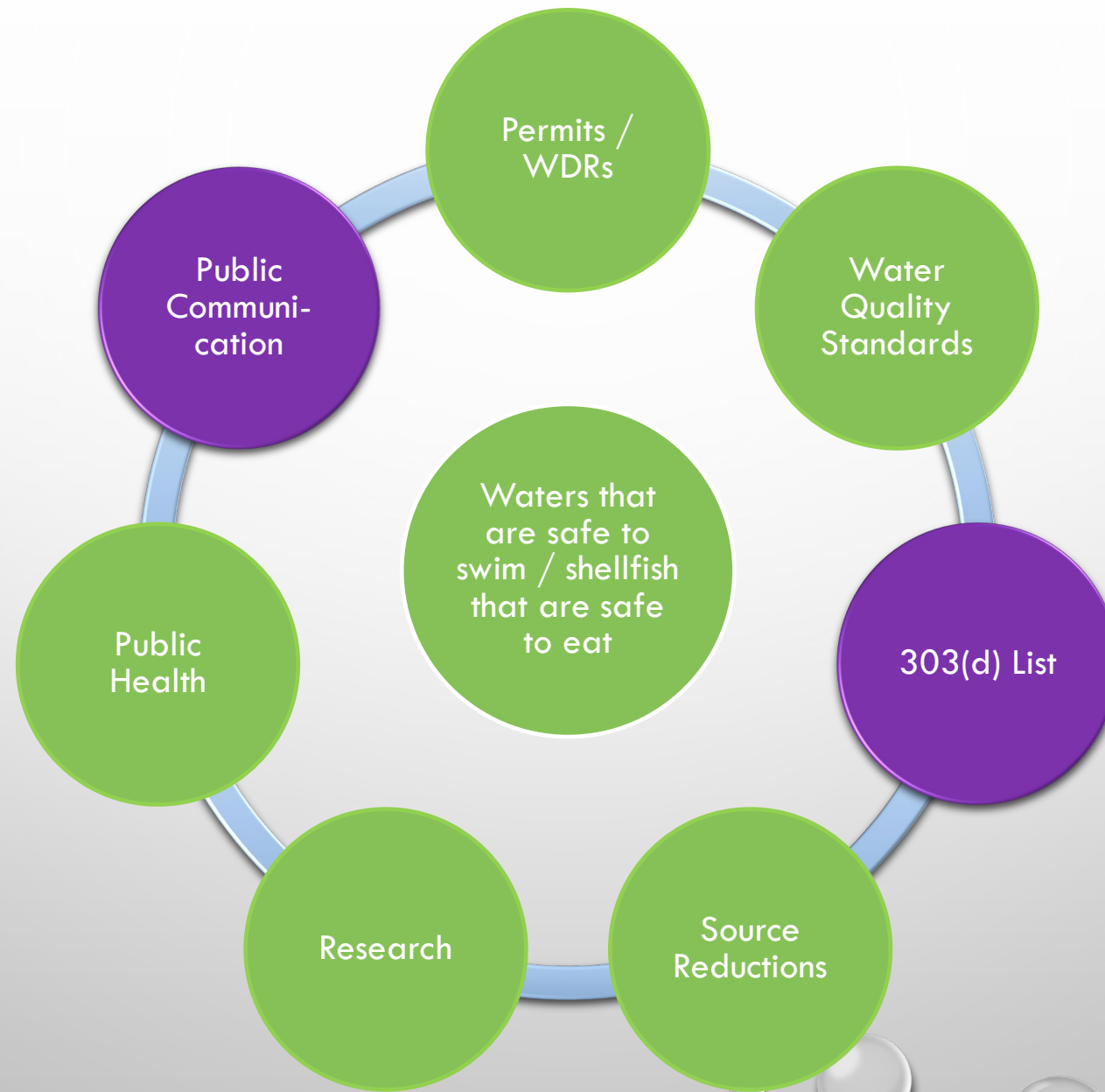
Infrastructure, research,  
regulations, permits, public  
health notices, etc.

Compliance schedules and  
permit requirements









# WHAT DO WE HOPE TO ACHIEVE?

- **ISSUE LEARNING AND IMPROVED RELATIONSHIPS**
  - BUILD A TEAM OF ENGAGED AND COLLABORATIVE PROBLEM SOLVERS
- **PRIORITY ACTIONS (INDIVIDUAL AND COLLECTIVE)**
  - LONG-TERM TO ACHIEVE OUR GOALS
  - SHORT-TERM TO ALIGN WITH LONG-TERM GOALS



**Waters that are safe to swim**  
**Shellfish that are safe to eat**

