

# APPENDIX J

## SEDIMENT QUALITY OBJECTIVE (SQO) ASSESSMENT SCORES

2018 RHMP  
SQO Assessment Score  
Summary Table

**Table J-1.**  
**2018 RHMP Sediment Quality Objectives (SQO) Assessment**  
**Integrated SQO Scores**

Harbor	Strata	Station	Sediment Chemistry Exposure	Sediment Toxicity	Benthic Community Exposure	Integrated Station Assessment
Dana Point Harbor	Deep	B18-10068	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
	Freshwater-Influenced	B18-10066	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
	Marina	B18-10067	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
	Shallow	B18-10065	Low Exposure	Low Toxicity	Moderate Disturbance	Possibly impacted
Oceanside Harbor	Deep	B18-10071	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
	Freshwater-Influenced	B18-10070	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
	Marina	B18-10069	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10072	Moderate Exposure	Low Toxicity	Low Disturbance	Possibly impacted
Mission Bay	Deep	B18-10019	Minimal Exposure	Nontoxic	Low Disturbance	Unimpacted
	Freshwater-Influenced	B18-10020	Minimal Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10015	Low Exposure	Nontoxic	High Disturbance	Likely unimpacted
	Marina	B18-10074	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10075	Moderate Exposure	Nontoxic	Reference	Unimpacted
	Shallow	B18-10016	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10017	Low Exposure	Low Toxicity	Low Disturbance	Likely unimpacted
San Diego Bay - North	Deep	B18-10073	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10438	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10022	Low Exposure	Nontoxic	Reference	Unimpacted
		B18-10023	Minimal Exposure	Nontoxic	Reference	Unimpacted
		B18-10024	Low Exposure	Nontoxic	Reference	Unimpacted
		B18-10030	Minimal Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10112	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
	Freshwater-Influenced	B18-10113	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10116	Minimal Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10117	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10029	High Exposure	Nontoxic	Moderate Disturbance	Likely impacted
		B18-10076	Moderate Exposure	Nontoxic	Reference	Unimpacted
	Industrial/Port	B18-10114	Moderate Exposure	Nontoxic	Reference	Unimpacted
		B18-10115	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
	Marina	B18-10078	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10079	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10080	Moderate Exposure	Nontoxic	High Disturbance	Possibly impacted
		B18-10081	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10082	Moderate Exposure	Low Toxicity	Moderate Disturbance	Likely impacted
		B18-10083	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10084	Moderate Exposure	Nontoxic	High Disturbance	Possibly impacted
San Diego Bay - Central	Deep	B18-10077	Low Exposure	Nontoxic	Reference	Unimpacted
		B18-10133	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10141	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
	Freshwater-Influenced	B18-10144	Low Exposure	Low Toxicity	Low Disturbance	Likely unimpacted
		B18-10031	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10178	High Exposure	Low Toxicity	High Disturbance	Likely impacted
	Industrial/Port	B18-10119	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10121	Moderate Exposure	Nontoxic	Reference	Unimpacted
		B18-10123	Moderate Exposure	Nontoxic	Reference	Unimpacted
		B18-10124	High Exposure	Nontoxic	High Disturbance	Likely impacted
		B18-10126	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10127	High Exposure	Nontoxic	High Disturbance	Likely impacted
		B18-10132	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10136	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10137	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10139	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10140	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10142	Moderate Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10143	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
	Shallow	B18-10032	Low Exposure	Nontoxic	Reference	Unimpacted
		B18-10034	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10035	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
San Diego Bay - South	Freshwater-Influenced	B18-10036	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10037	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10040	Minimal Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10044	Low Exposure	Nontoxic	High Disturbance	Likely unimpacted
		B18-10179	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10180	Low Exposure	Nontoxic	High Disturbance	Likely unimpacted
	Marina	B18-10181	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10200	Low Exposure	Low Toxicity	High Disturbance	Possibly impacted
		B18-10085	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
	Shallow	B18-10086	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10087	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10038	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10039	Moderate Exposure	Nontoxic	Moderate Disturbance	Possibly impacted
		B18-10041	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10042	Low Exposure	Nontoxic	Moderate Disturbance	Likely unimpacted
		B18-10043	Low Exposure	Nontoxic	Low Disturbance	Unimpacted
		B18-10088	Moderate Exposure	Low Toxicity	Low Disturbance	Possibly impacted

2018 RHMP  
SQO Assessment Score  
Maps



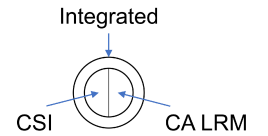
# Chemistry

## SQO LOE

# Dana Point Harbor

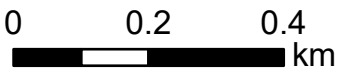


## 2018 RHMP SQO Chemistry LOE



### Exposure Category

- Minimal (Green circle)
- Low (Yellow circle)
- Moderate (Orange circle)
- High (Red circle)

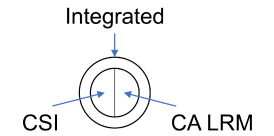




# Oceanside Harbor



## 2018 RHMP SQO Chemistry LOE

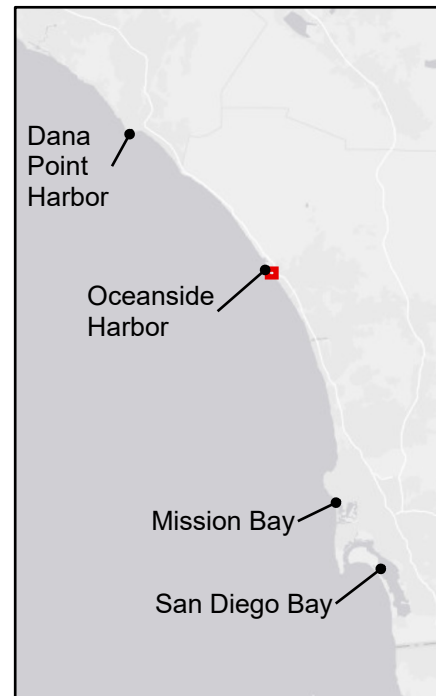


### Exposure Category

- Minimal
- Moderate
- Low
- High

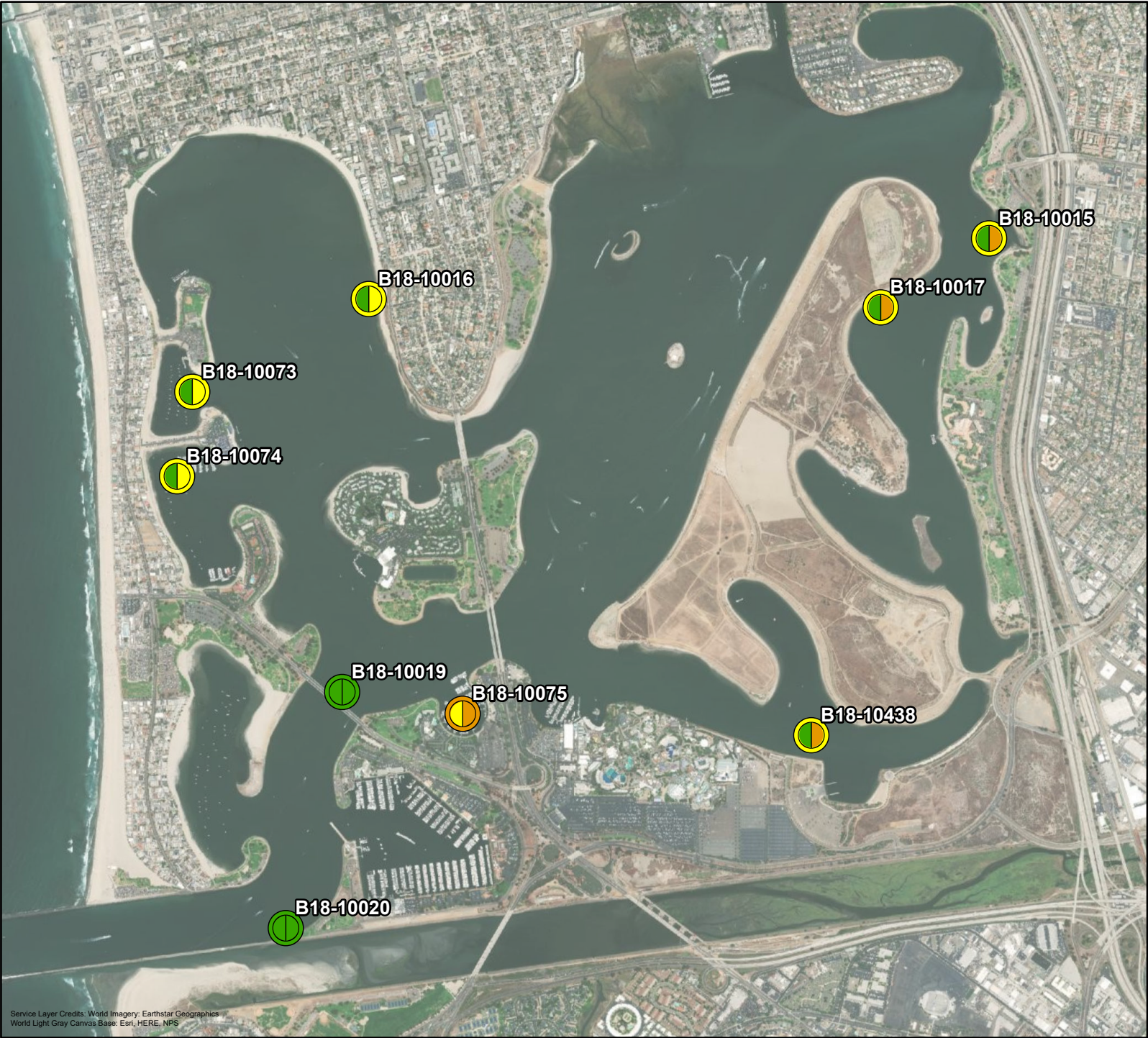


0 0.15 0.3 km

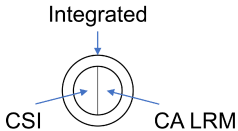




# Mission Bay



## 2018 RHMP SQO Chemistry LOE



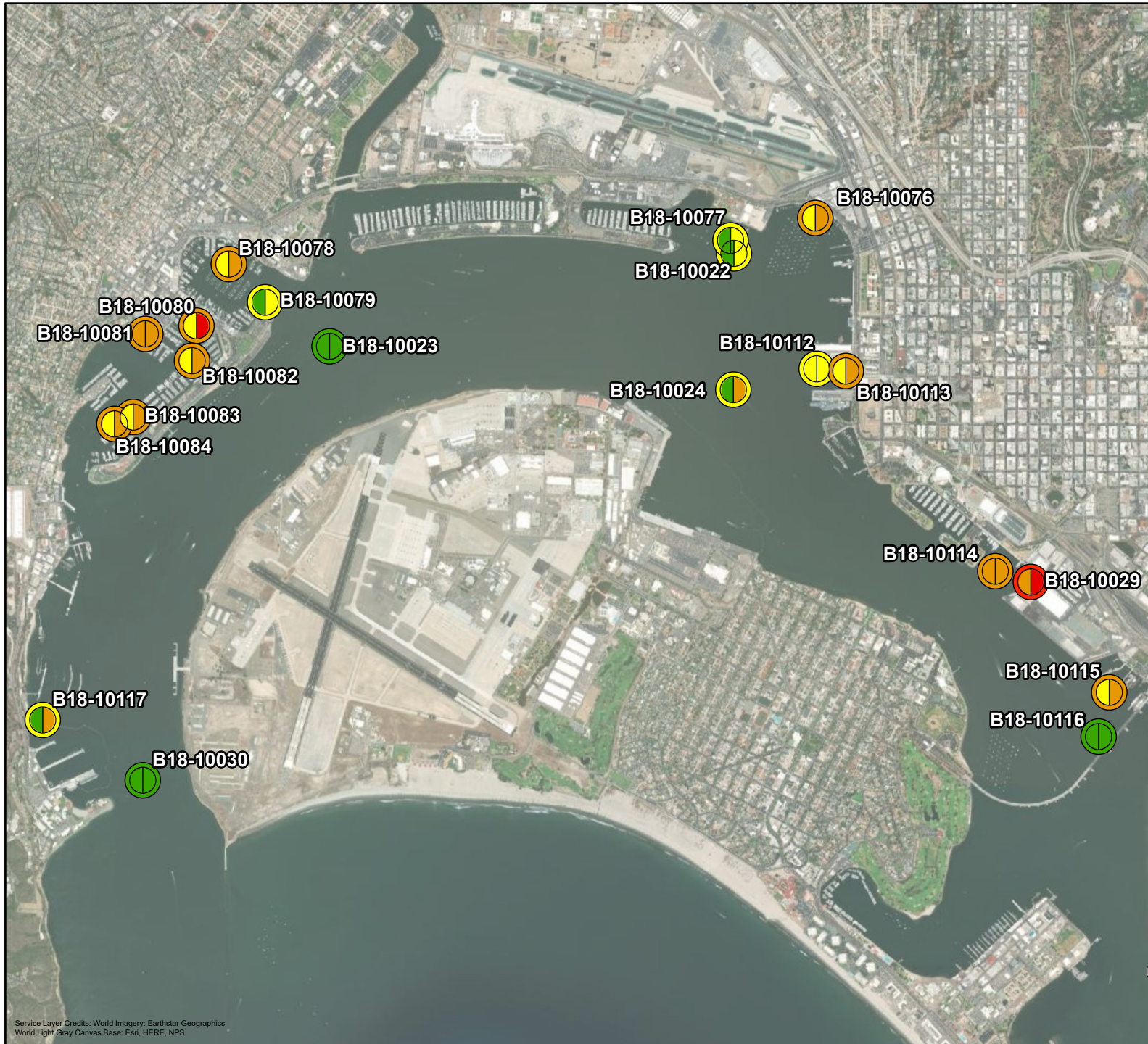
### Exposure Category

- Minimal (Green circle)
- Low (Yellow circle)
- Moderate (Orange circle)
- High (Red circle)

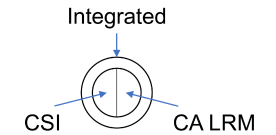




# North San Diego Bay

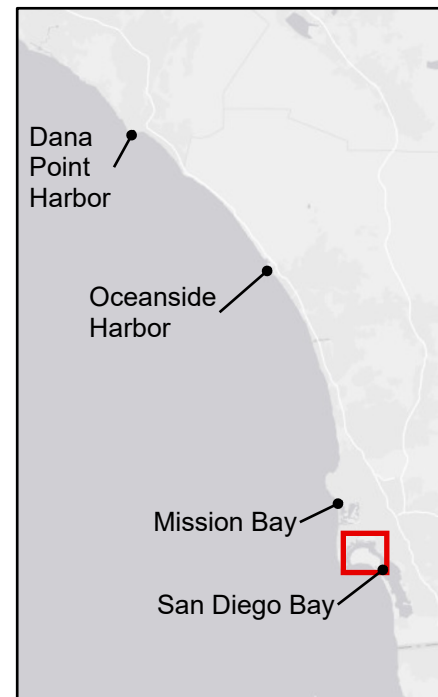
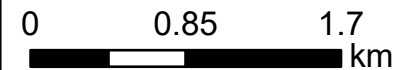


## 2018 RHMP SQO Chemistry LOE



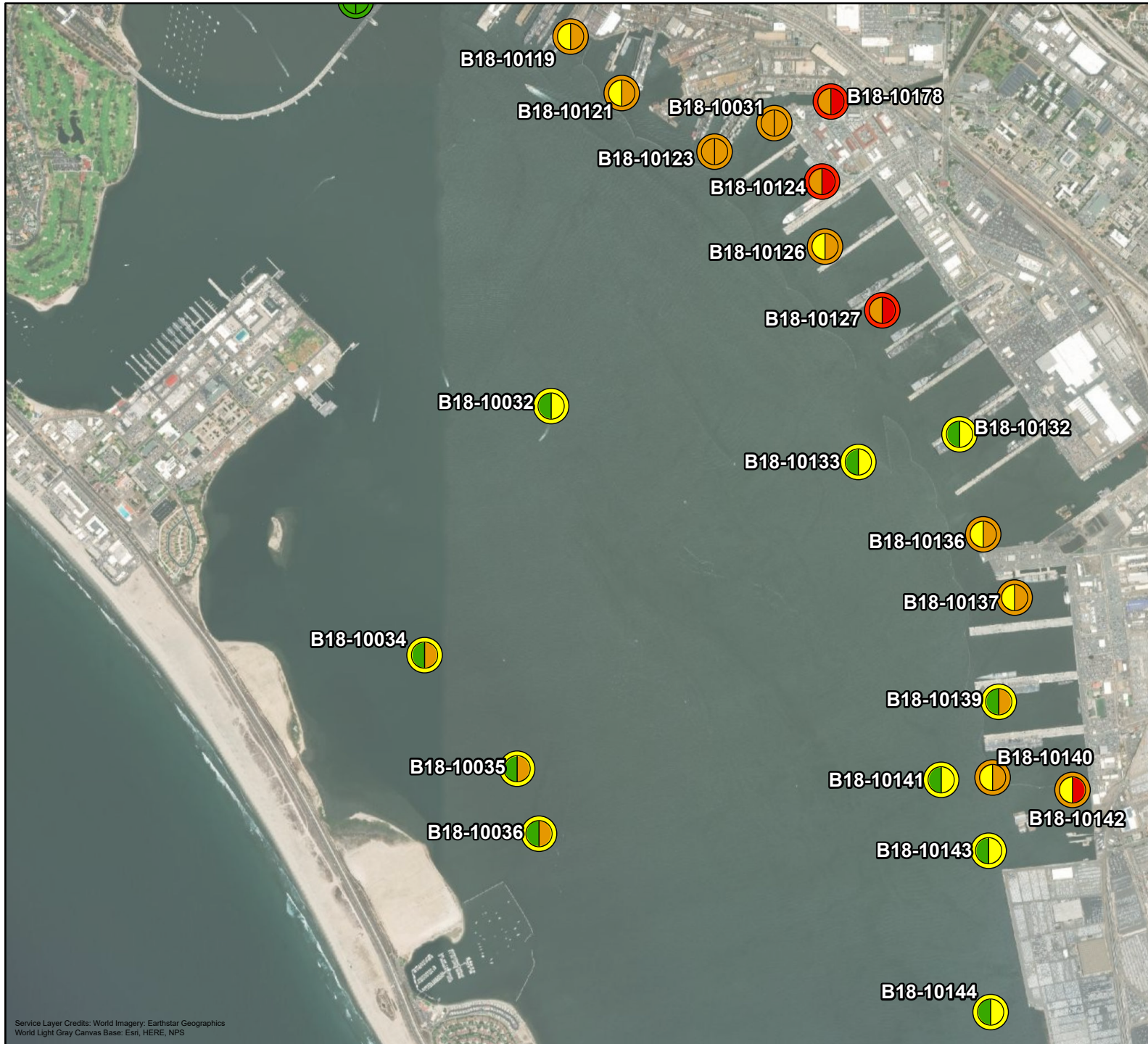
### Exposure Category

- Minimal (Green circle)
- Low (Yellow circle)
- Moderate (Orange circle)
- High (Red circle)

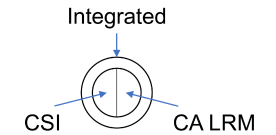




# Central San Diego Bay

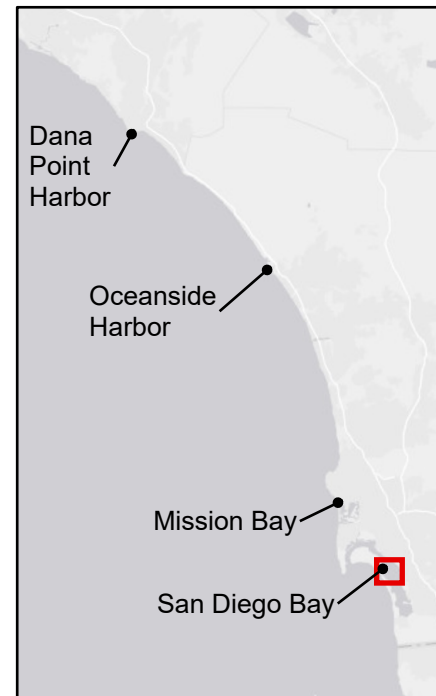
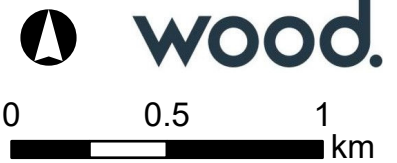


## 2018 RHMP SQO Chemistry LOE



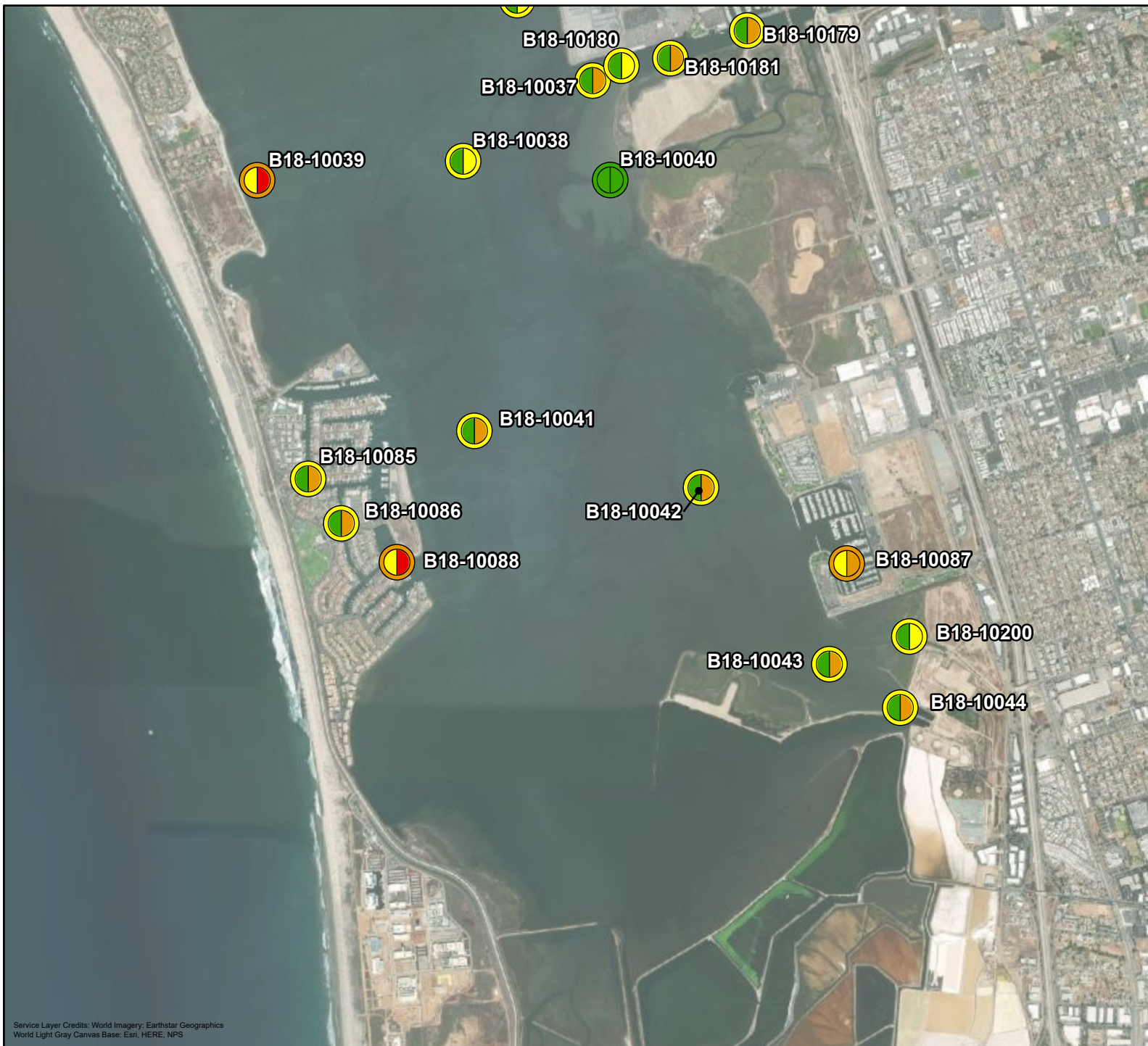
### Exposure Category

- Minimal (Green circle)
- Low (Yellow circle)
- Moderate (Orange circle)
- High (Red circle)

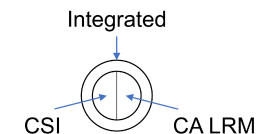




# South San Diego Bay



## 2018 RHMP SQO Chemistry LOE

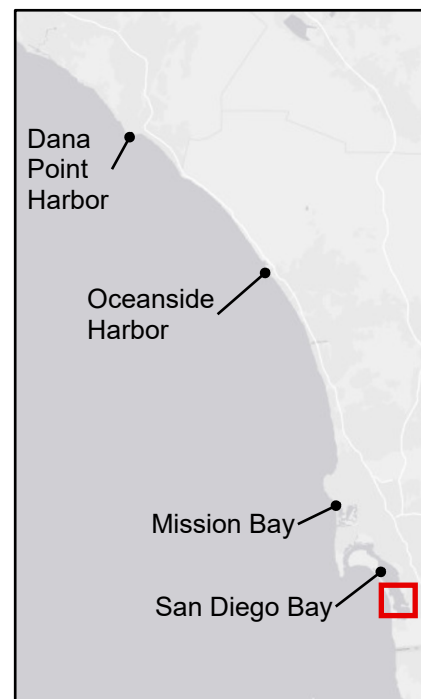


### Exposure Category



wood.

0 0.65 1.3 km



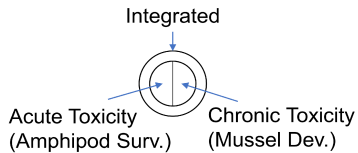
Toxicity  
SQO LOE



# Dana Point Harbor



## 2018 RHMP SQO Toxicity LOE



### Toxicity Category

- Nontoxic
- Low
- Moderate
- High



0 0.2 0.4 km

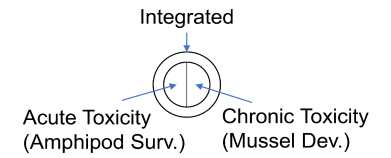




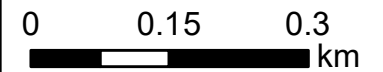
# Oceanside Harbor



## 2018 RHMP SQO Toxicity LOE



### Toxicity Category



Dana Point Harbor

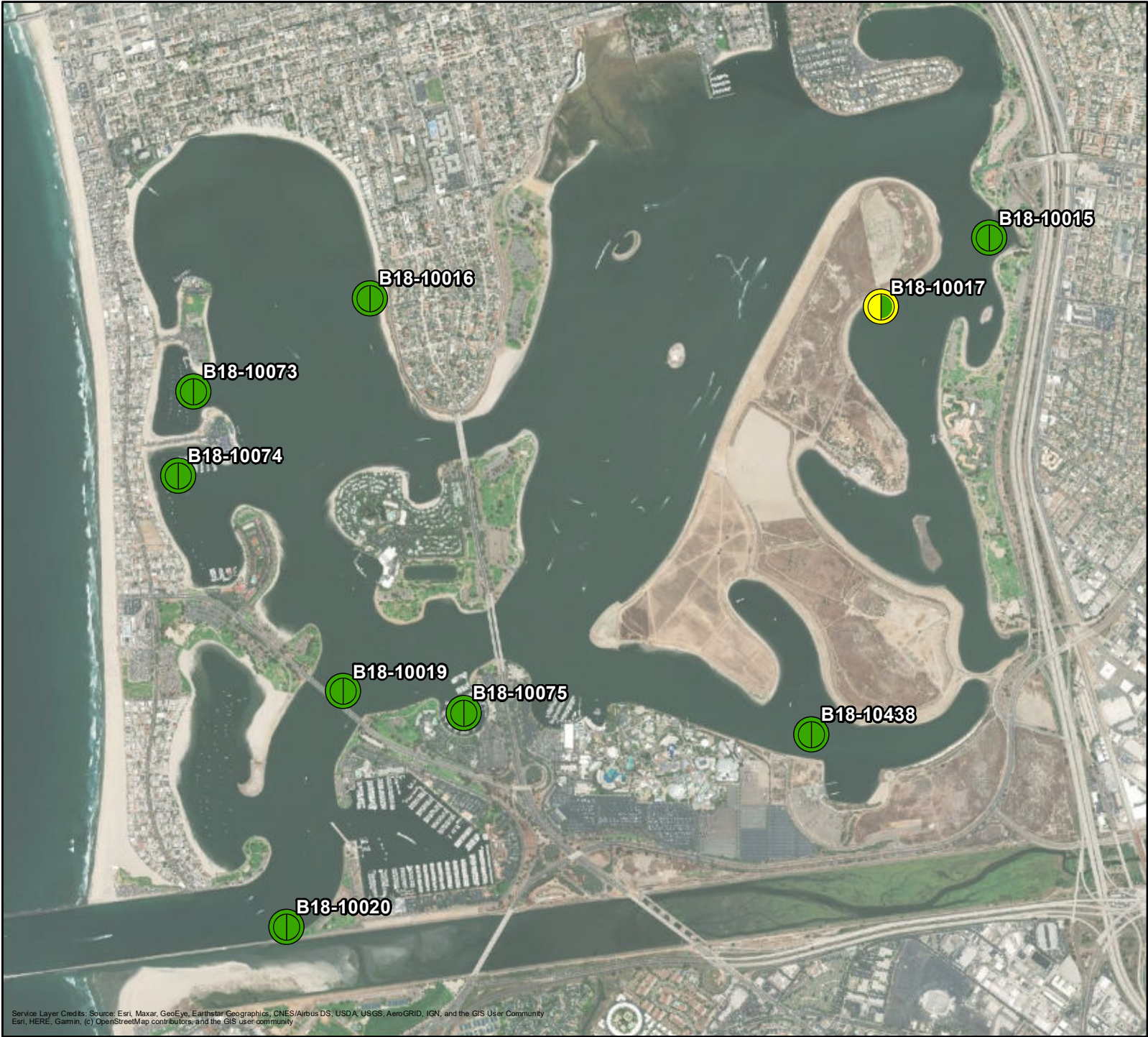
Oceanside Harbor

Mission Bay

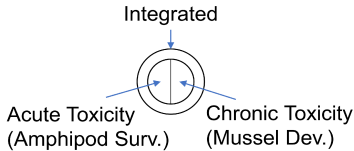
San Diego Bay



# Mission Bay



## 2018 RHMP SQO Toxicity LOE



### Toxicity Category

- Nontoxic
- Low
- Moderate
- High

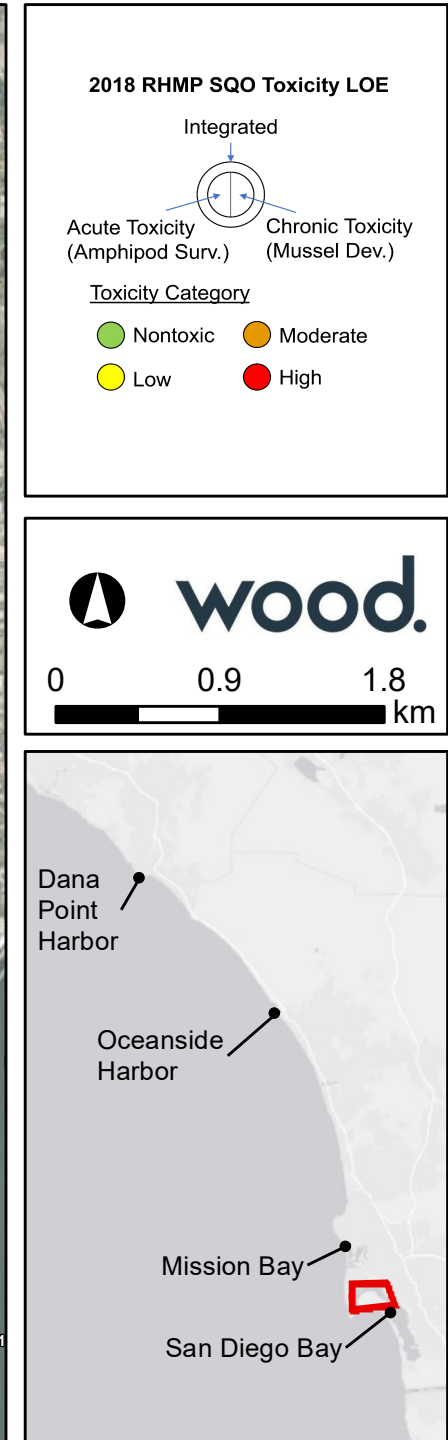
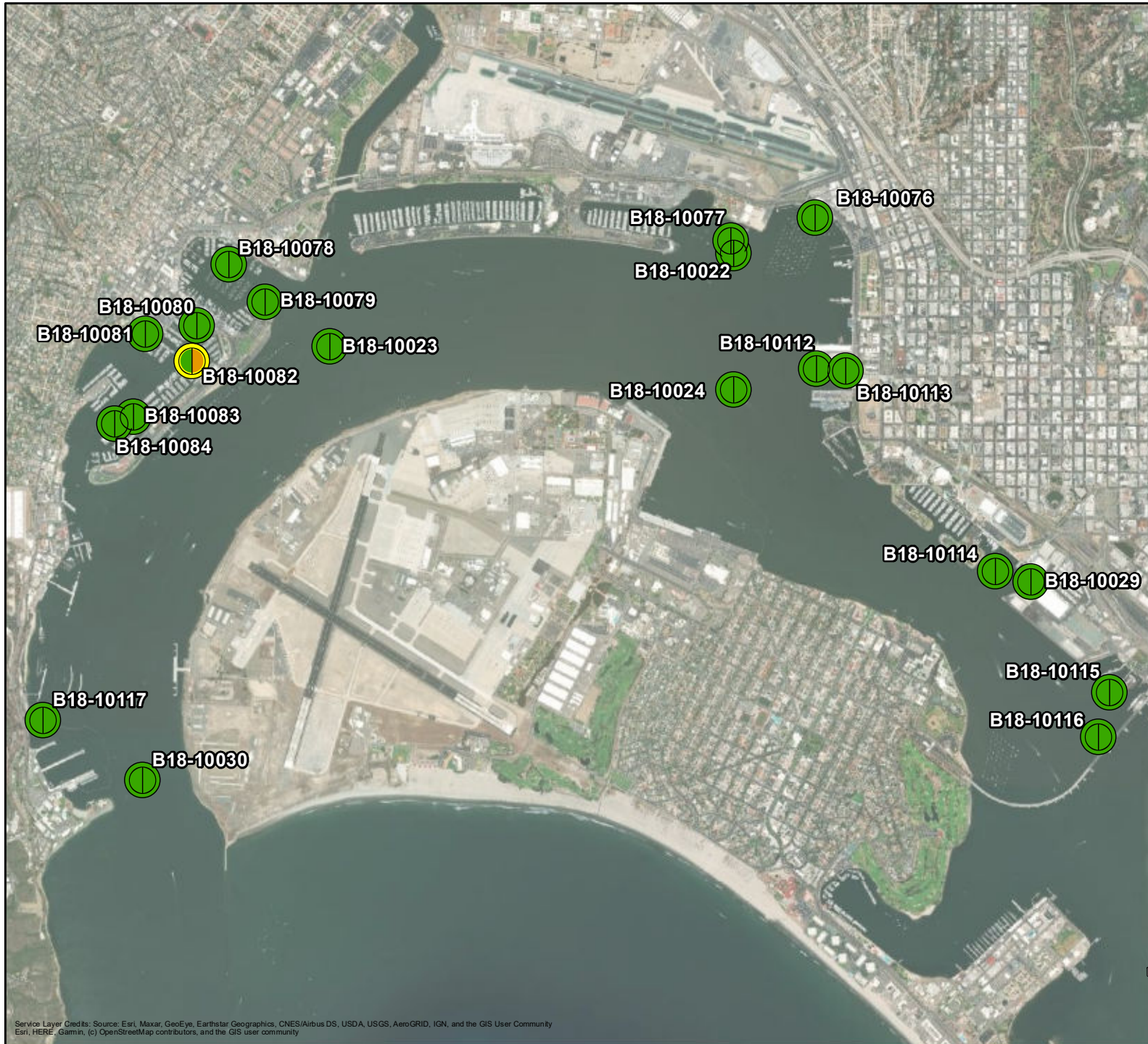


0 0.55 1.1 km





# North San Diego Bay

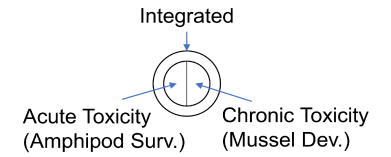




# Central San Diego Bay



## 2018 RHMP SQO Toxicity LOE



### Toxicity Category

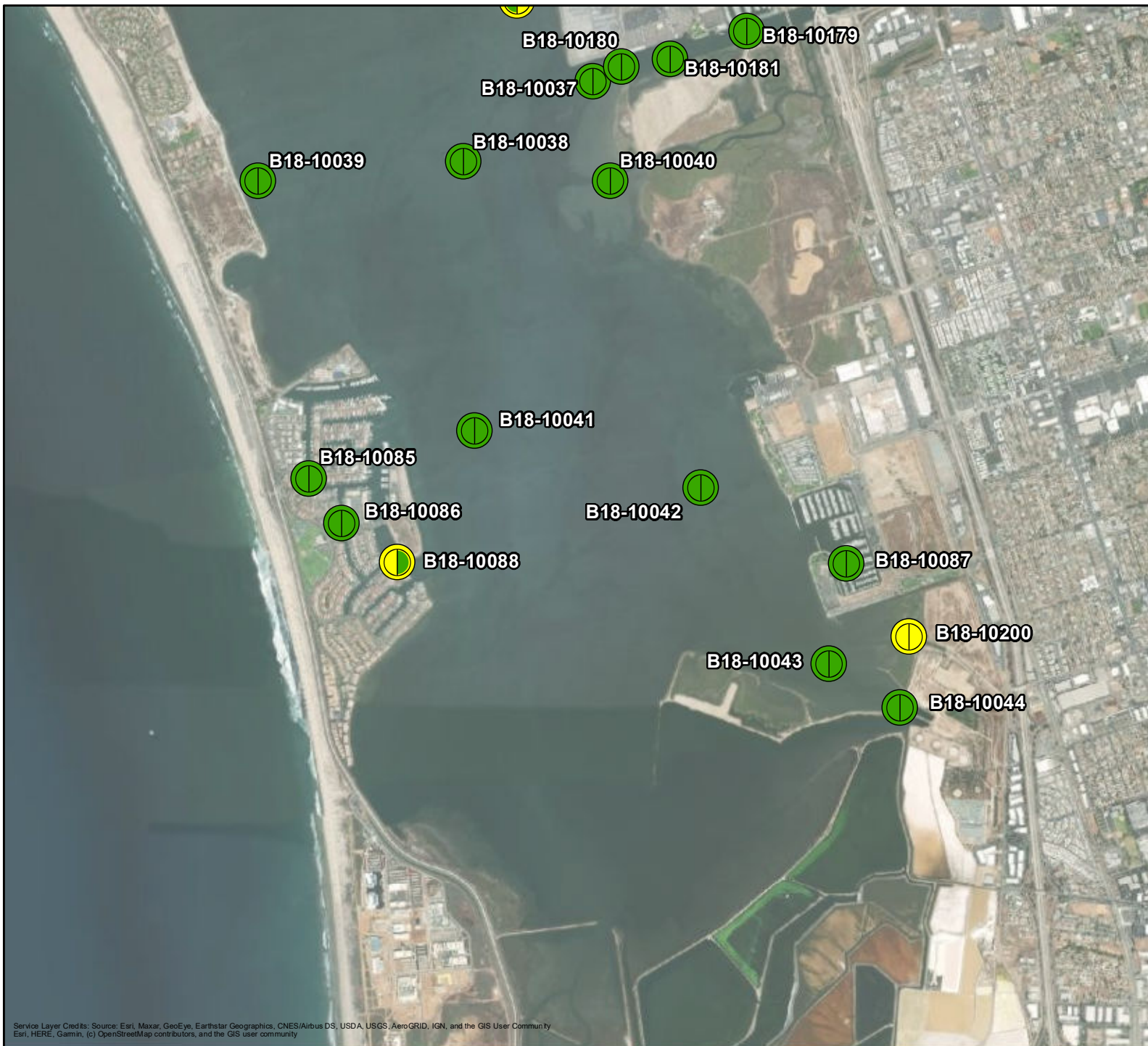
- Nontoxic
- Low
- Moderate
- High



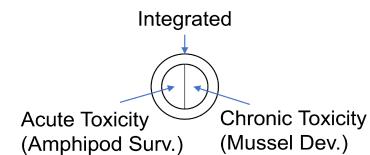
0 0.5 1 km



# South San Diego Bay



## 2018 RHMP SQO Toxicity LOE



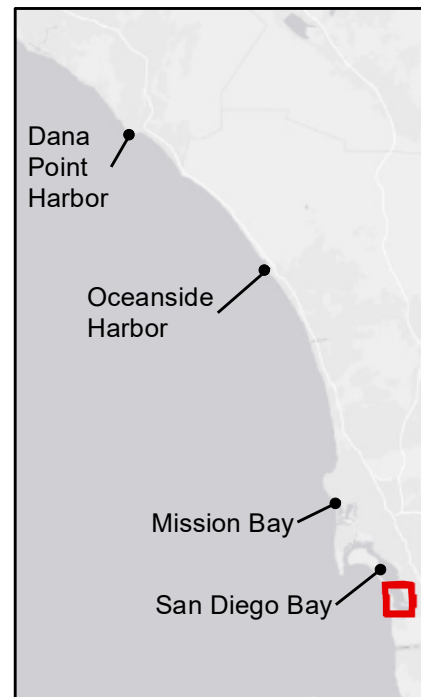
### Toxicity Category

- Nontoxic
- Low
- Moderate
- High



**wood.**

0      0.7      1.4  
km



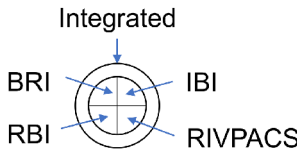
# Benthic Community SQO LOE



# Dana Point Harbor

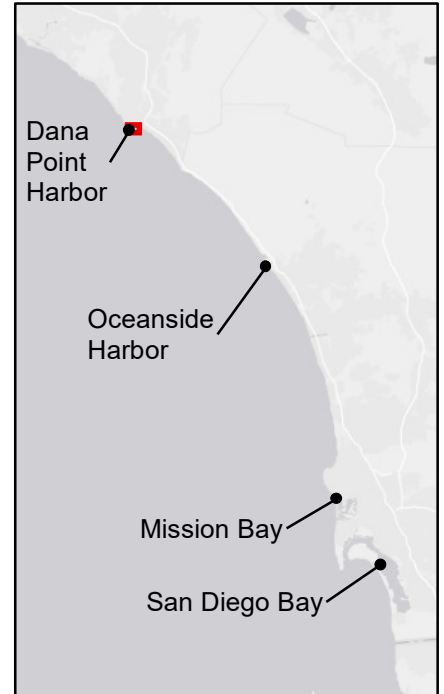
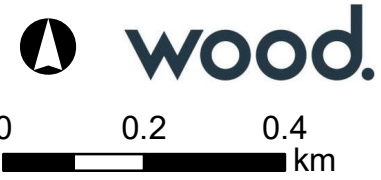


## 2018 RHMP SQO Benthic Community LOE



### Disturbance Category

- |           |          |
|-----------|----------|
| Reference | Moderate |
| Low       | High     |



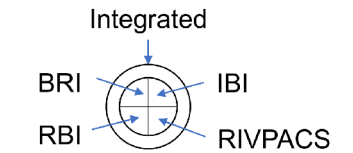
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



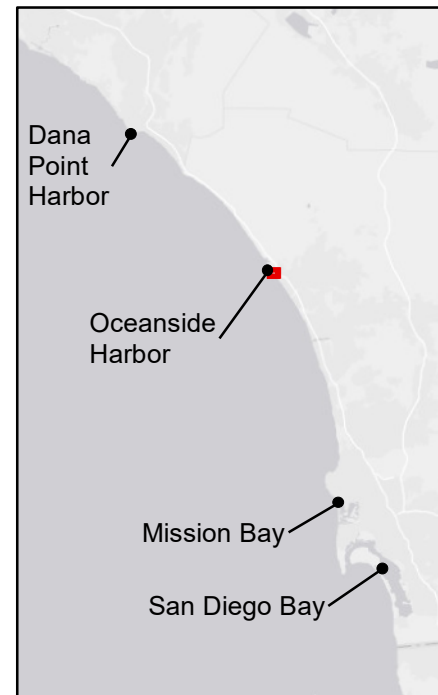
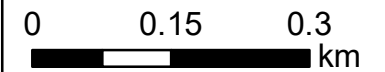
# Oceanside Harbor



## 2018 RHMP SQO Benthic Community LOE



### Disturbance Category

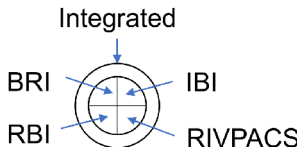




# Mission Bay



## 2018 RHMP SQO Benthic Community LOE



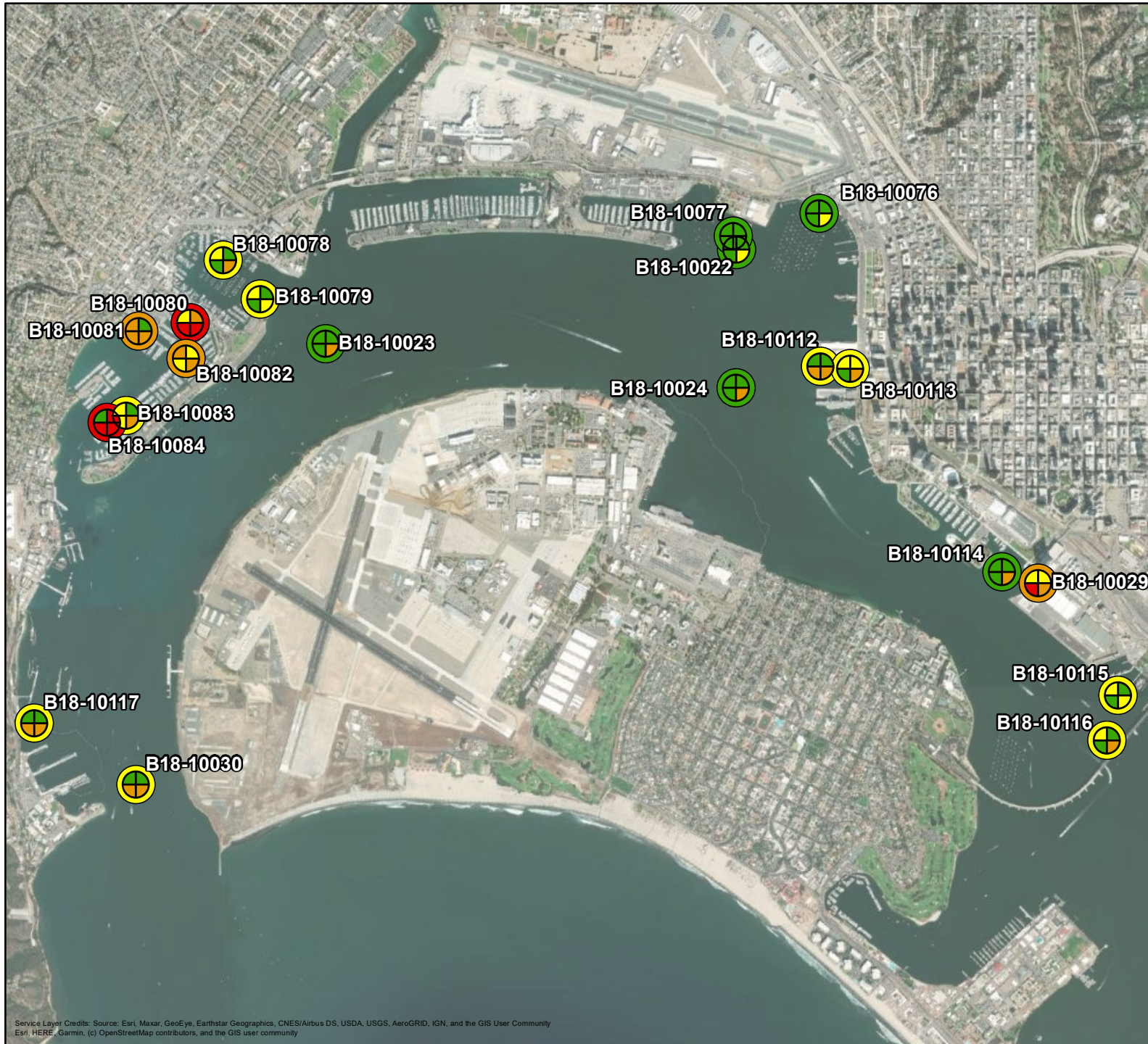
### Disturbance Category

- Reference (Green)
- Low (Yellow)
- Moderate (Orange)
- High (Red)

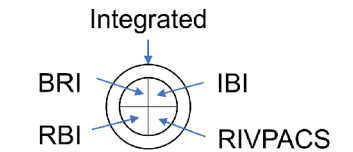




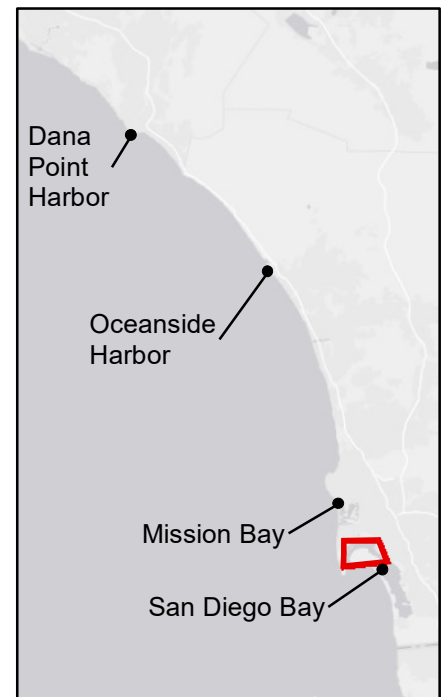
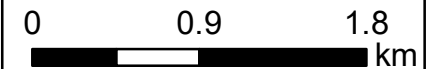
# North San Diego Bay



## 2018 RHMP SQO Benthic Community LOE

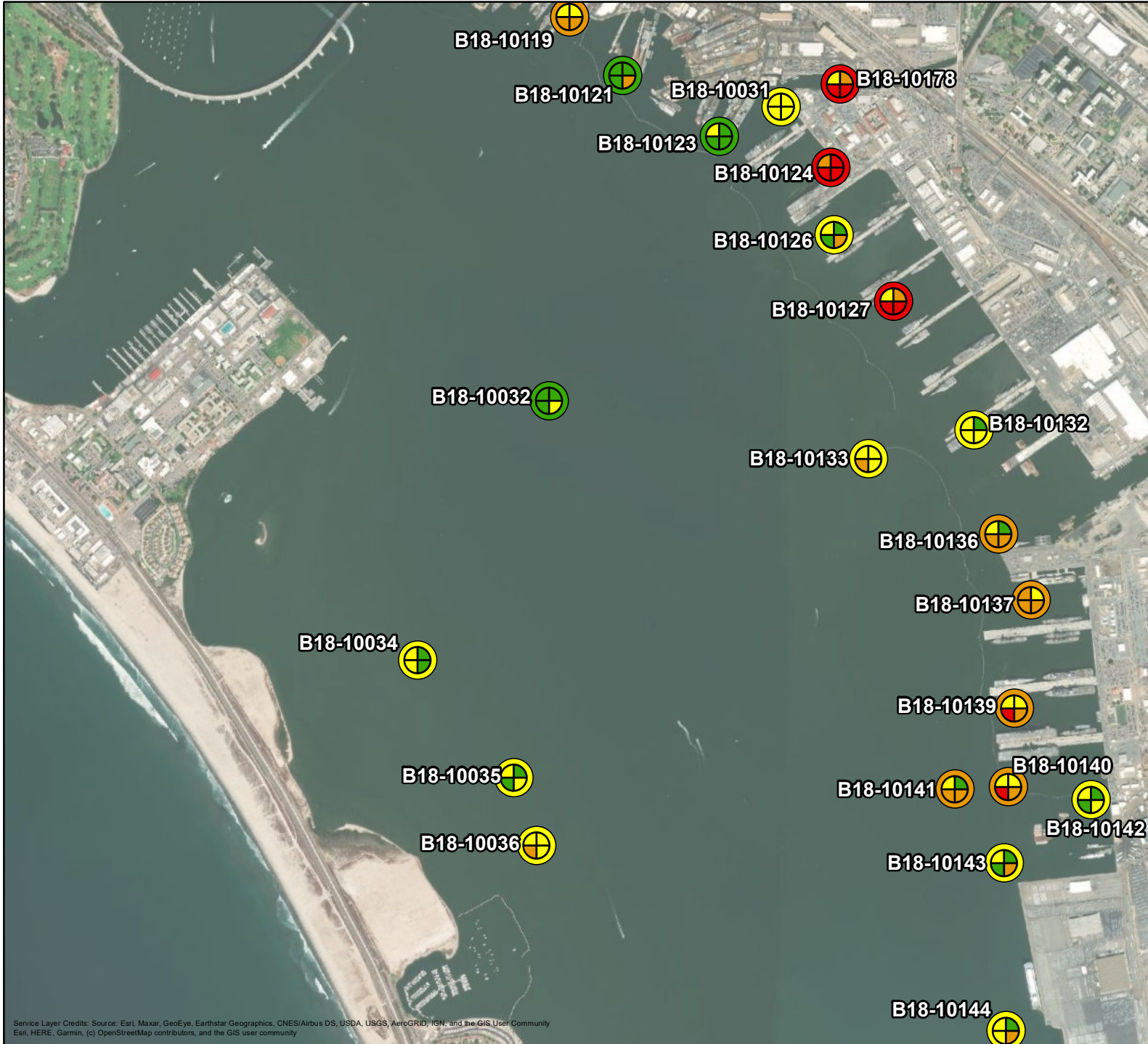


### Disturbance Category





# Central San Diego Bay



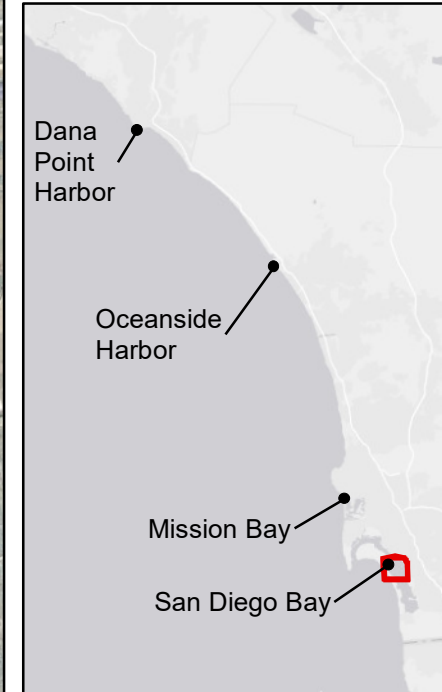
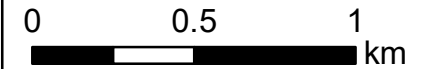
## 2018 RHMP SQO Benthic Community LOE

Integrated

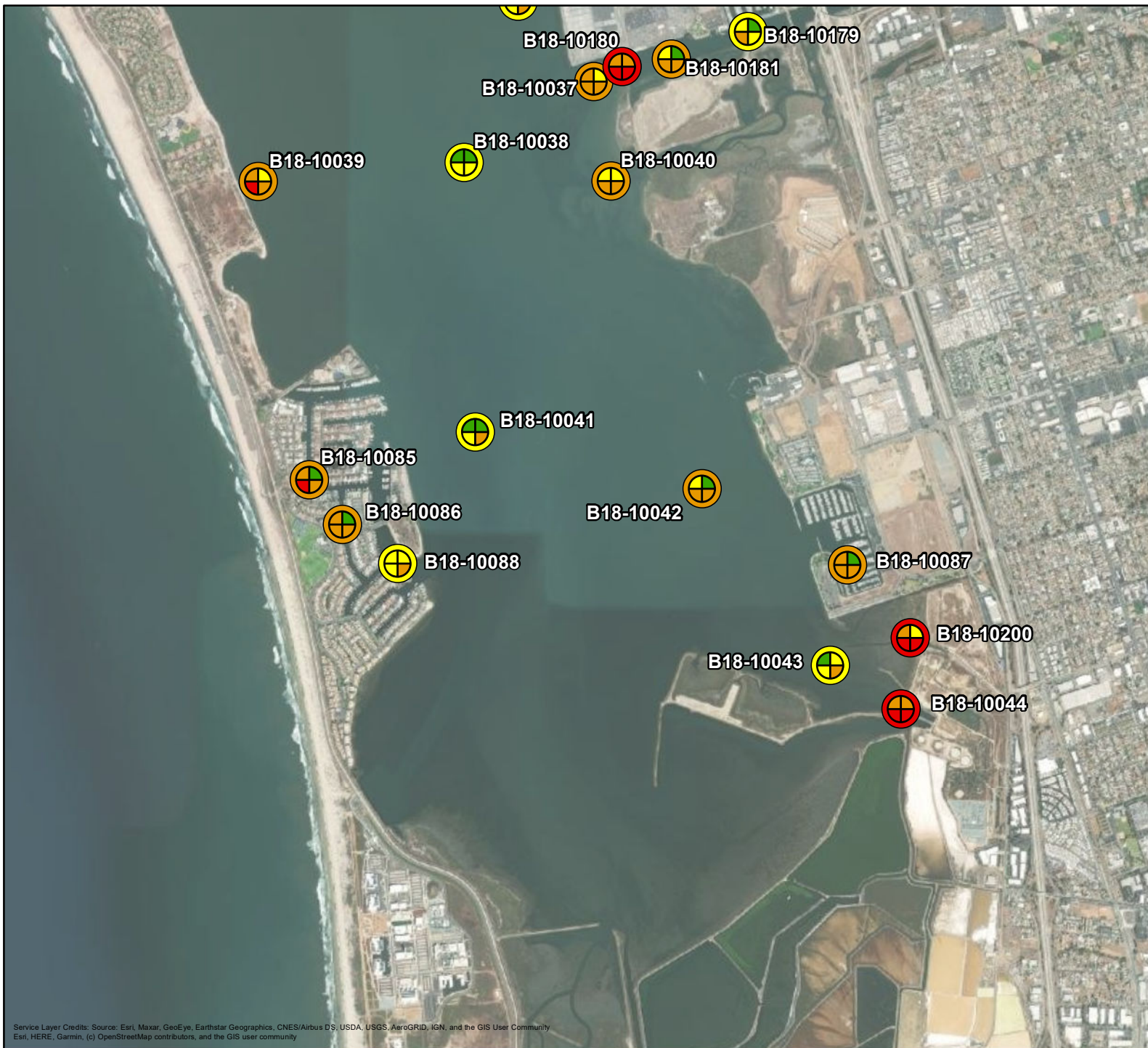


## Disturbance Category

- Reference (Green)
- Low (Yellow)
- Moderate (Orange)
- High (Red)

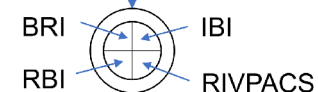


# South San Diego Bay

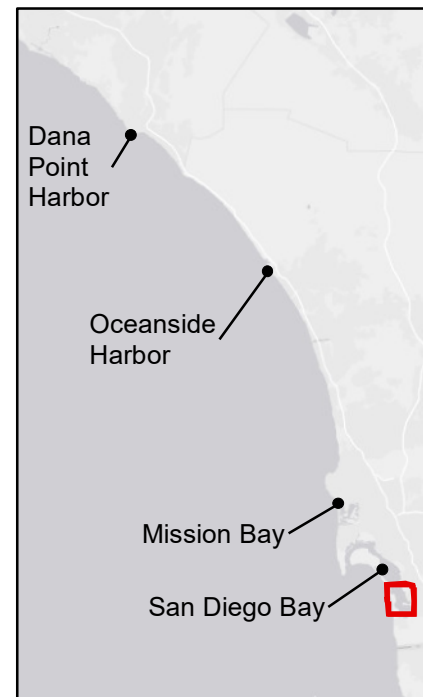
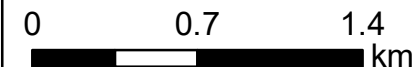


## 2018 RHMP SQO Benthic Community LOE

Integrated



## Disturbance Category



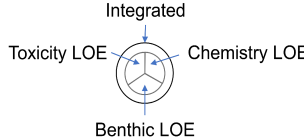
# Integrated SQO Scores



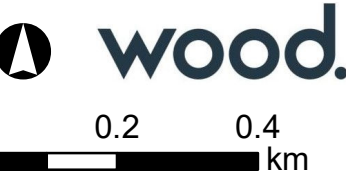
# Dana Point Harbor



## 2018 RHMP Integrated SQO Scores



LOE Category	Integrated Score
Reference	Unimpacted
Low	Likely unimpacted
Moderate	Possibly impacted
High	Likely impacted
	Clearly impacted



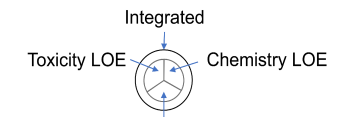
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  
Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community



# Oceanside Harbor



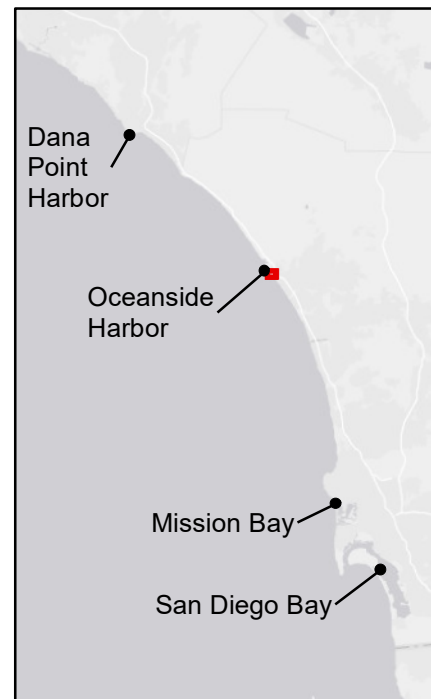
## 2018 RHMP Integrated SQO Scores



LOE Category	Integrated Score
Reference	Unimpacted
Low	Likely unimpacted
Moderate	Possibly impacted
High	Likely impacted
	Clearly impacted

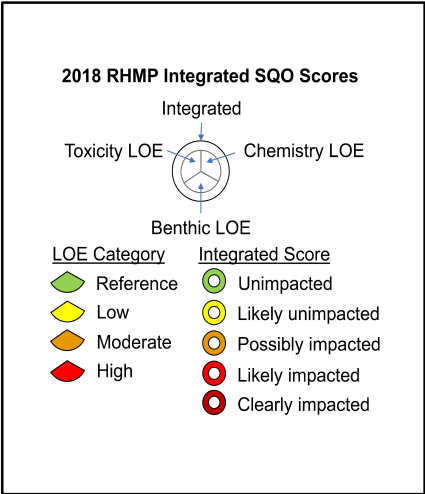


0 0.15 0.3 km



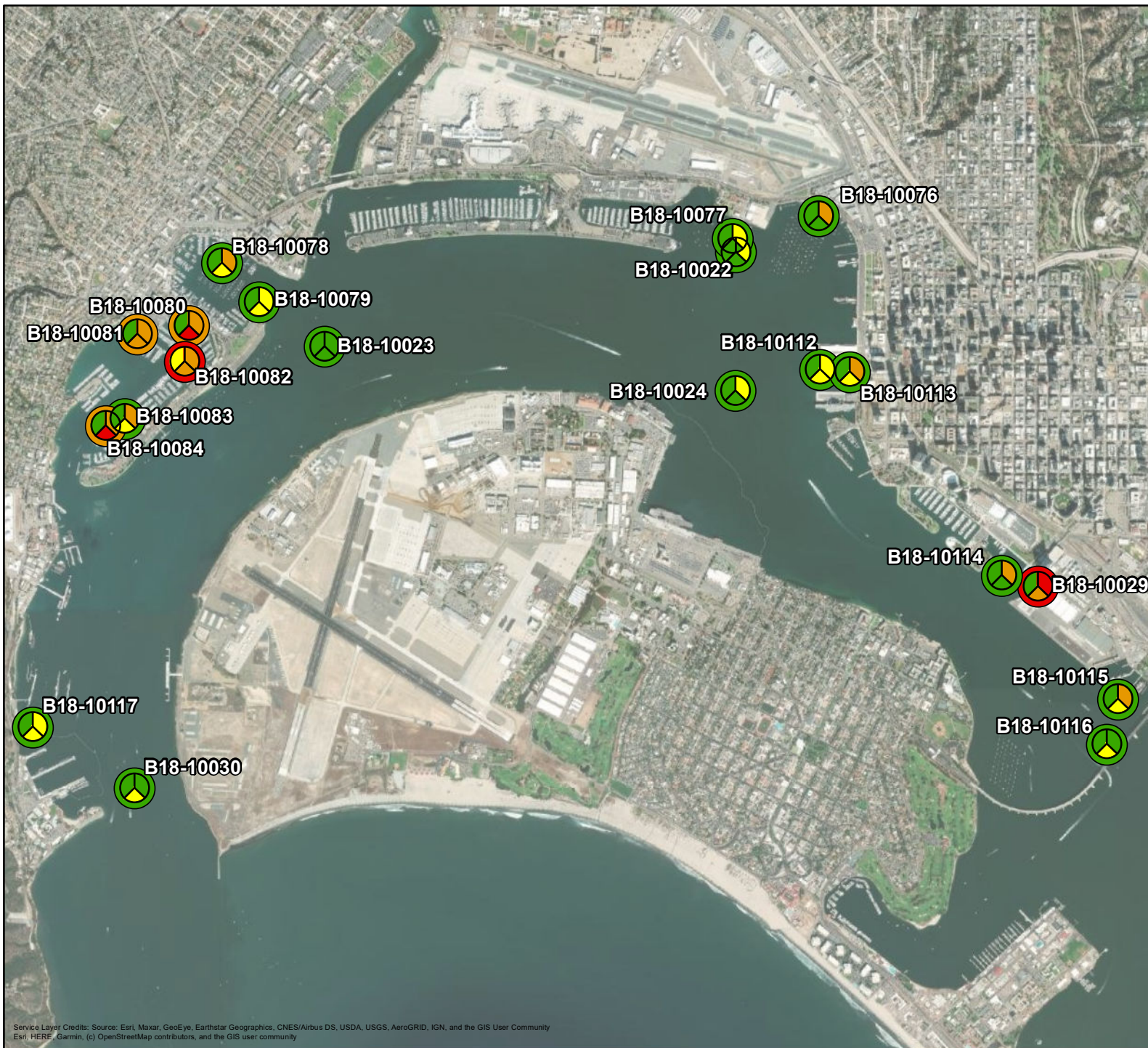


# Mission Bay

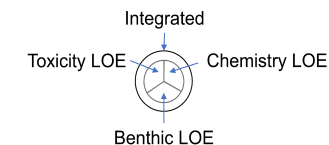




# North San Diego Bay



## 2018 RHMP Integrated SQO Scores



LOE Category	Integrated Score
Reference	Unimpacted
Low	Likely unimpacted
Moderate	Possibly impacted
High	Likely impacted
	Clearly impacted

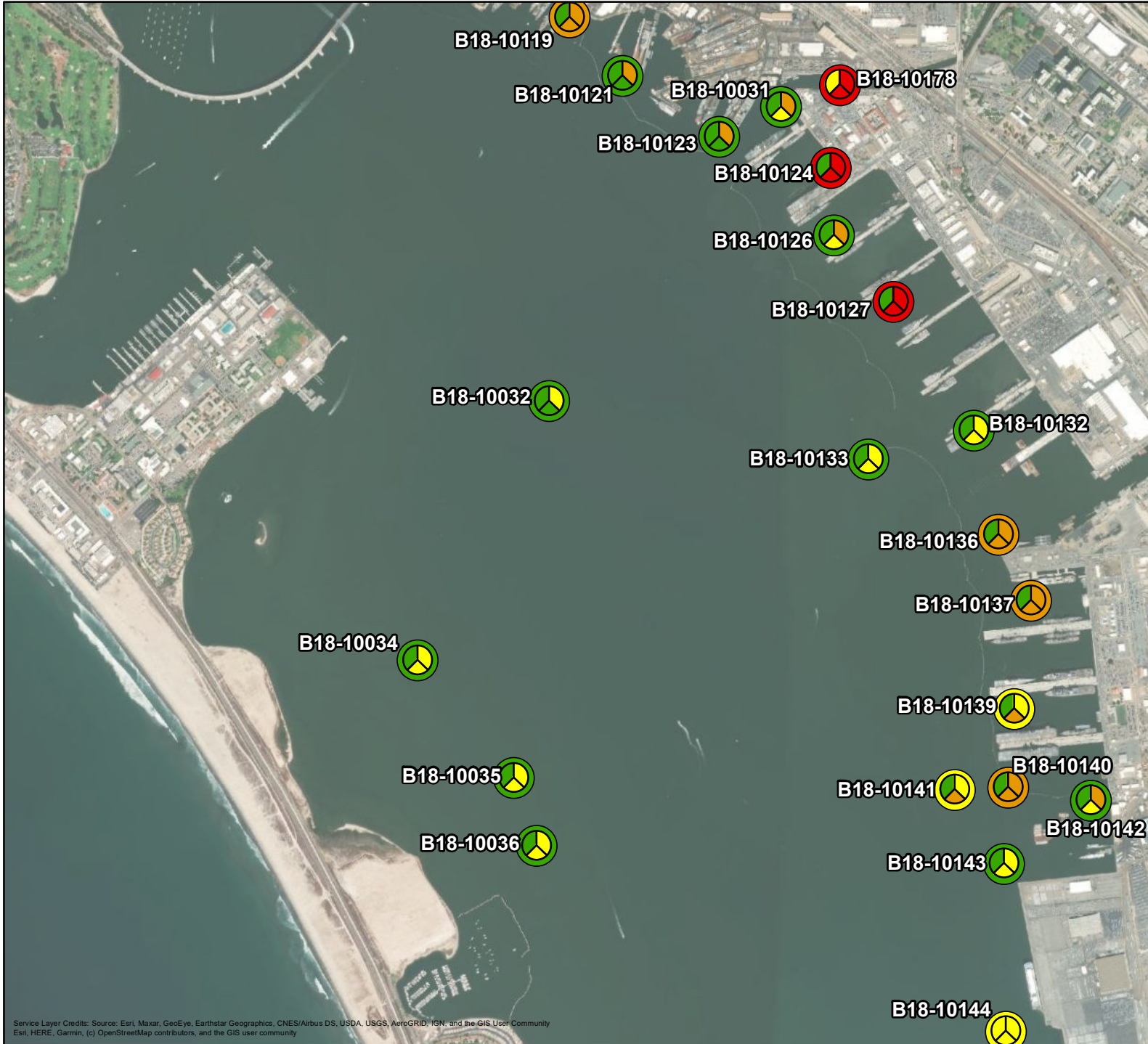


0 0.9 1.8 km

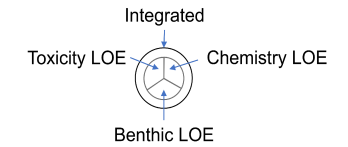




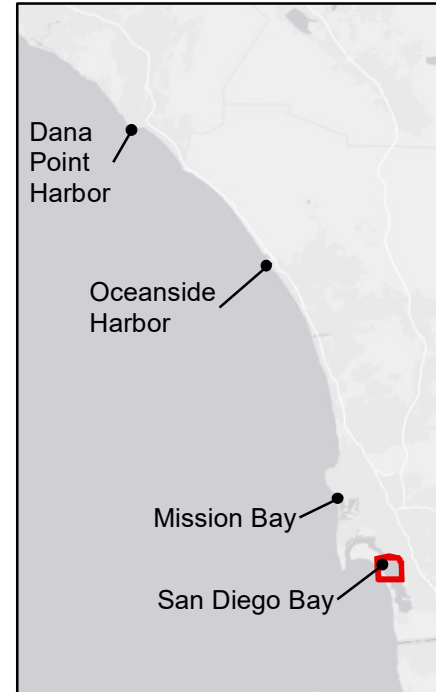
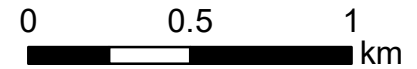
# Central San Diego Bay



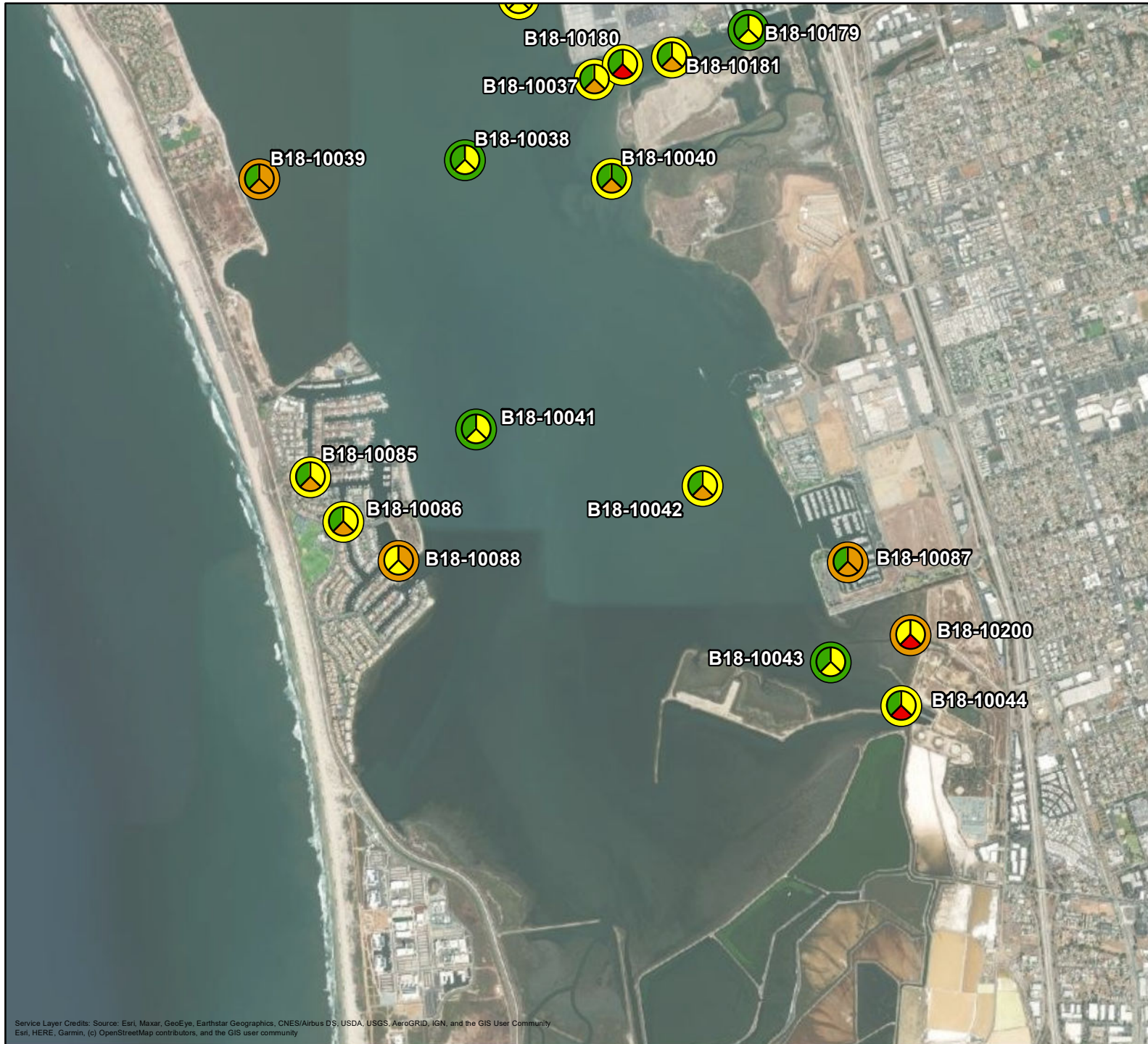
## 2018 RHMP Integrated SQO Scores



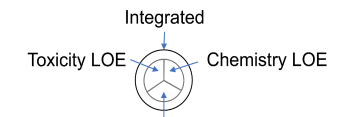
LOE Category	Integrated Score
Reference	Unimpacted
Low	Likely unimpacted
Moderate	Possibly impacted
High	Likely impacted
	Clearly impacted



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## 2018 RHMP Integrated SQO Scores



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