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

2018 RHMP
SQO Assessment Score Maps

Chemistry
SQO LOE

Dana Point Harbor

2018 RHMP SQO Chemistry LOE

Integrated

CSI

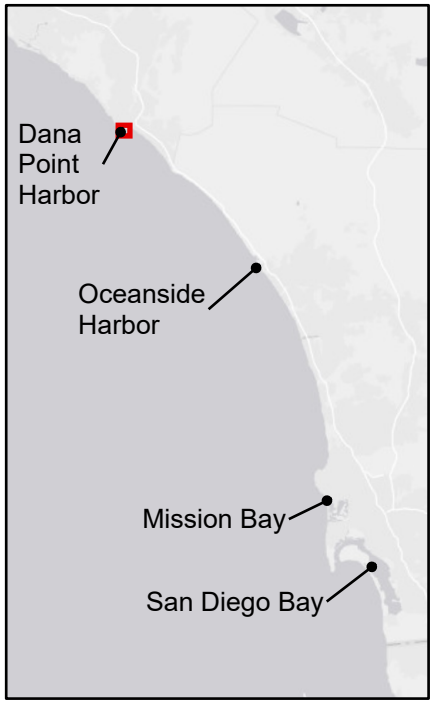
CA LRM

Exposure Category

- Minimal
- Moderate
- Low
- High

wood.

0 0.2 0.4 km



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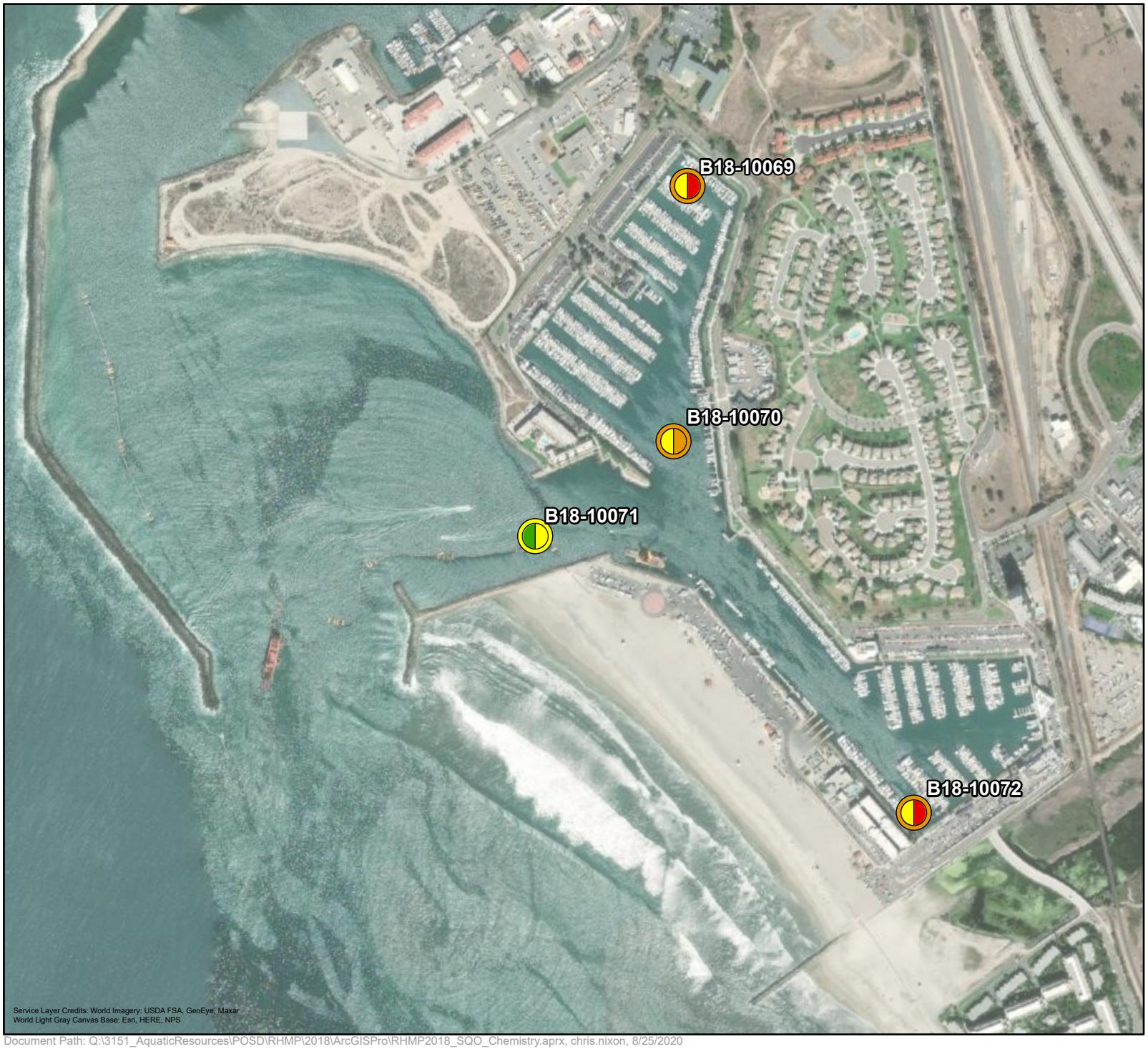
Oceanside Harbor



2018 RHMP SQO Chemistry LOE

Integrated

CSI

CA LRM

Exposure Category

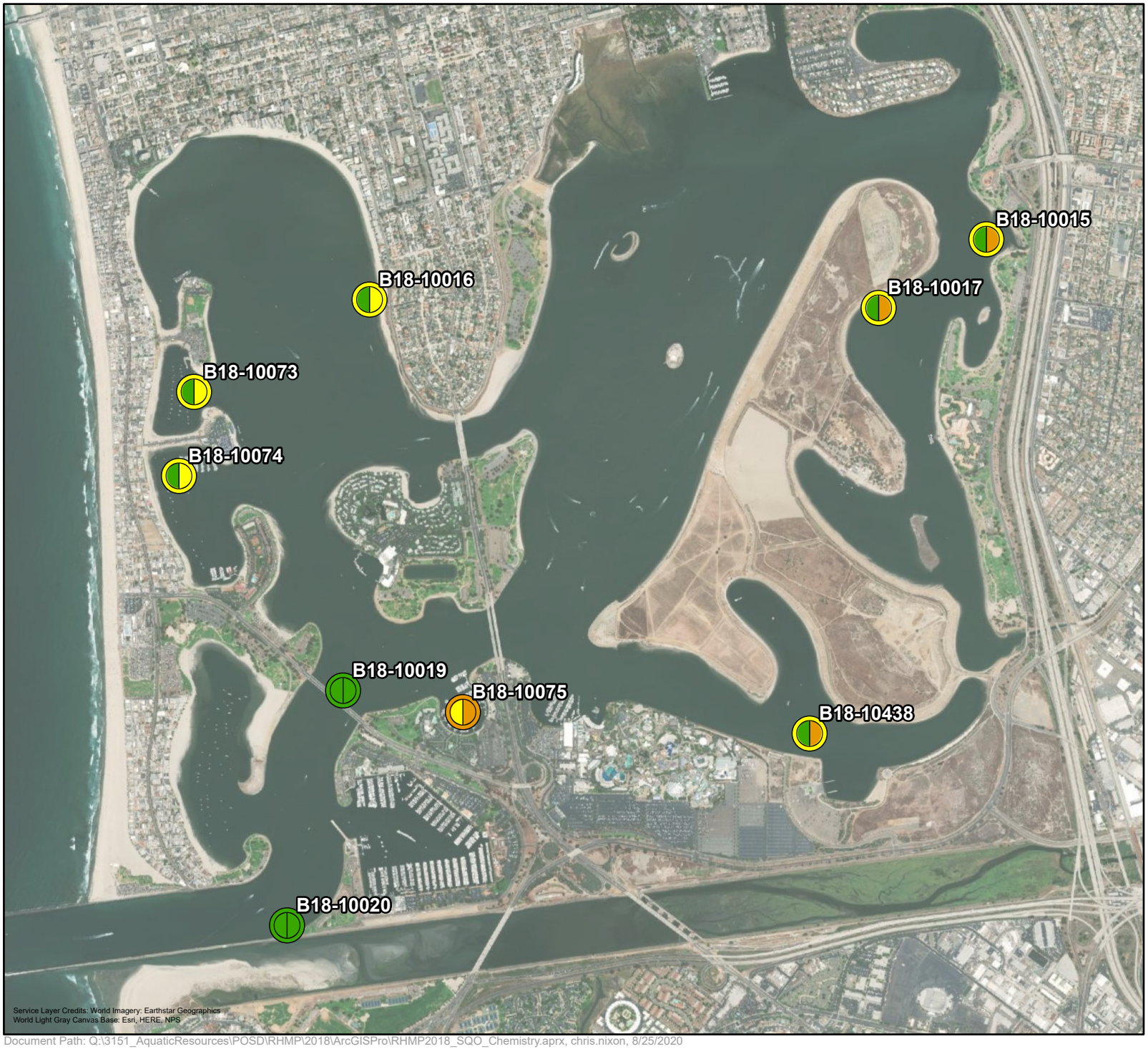
- Minimal
- Moderate
- Low
- High

wood.

0 0.15 0.3 km

Document Path: Q:\3151_AquaticResources\POSD\RHMP\2018\ArcGISPro\RHMP2018_SQO_Chemistry.aprx, chris.nixon, 8/25/2020

Mission Bay



2018 RHMP SQO Chemistry LOE

Integrated

CSI

CA LRM

Exposure Category

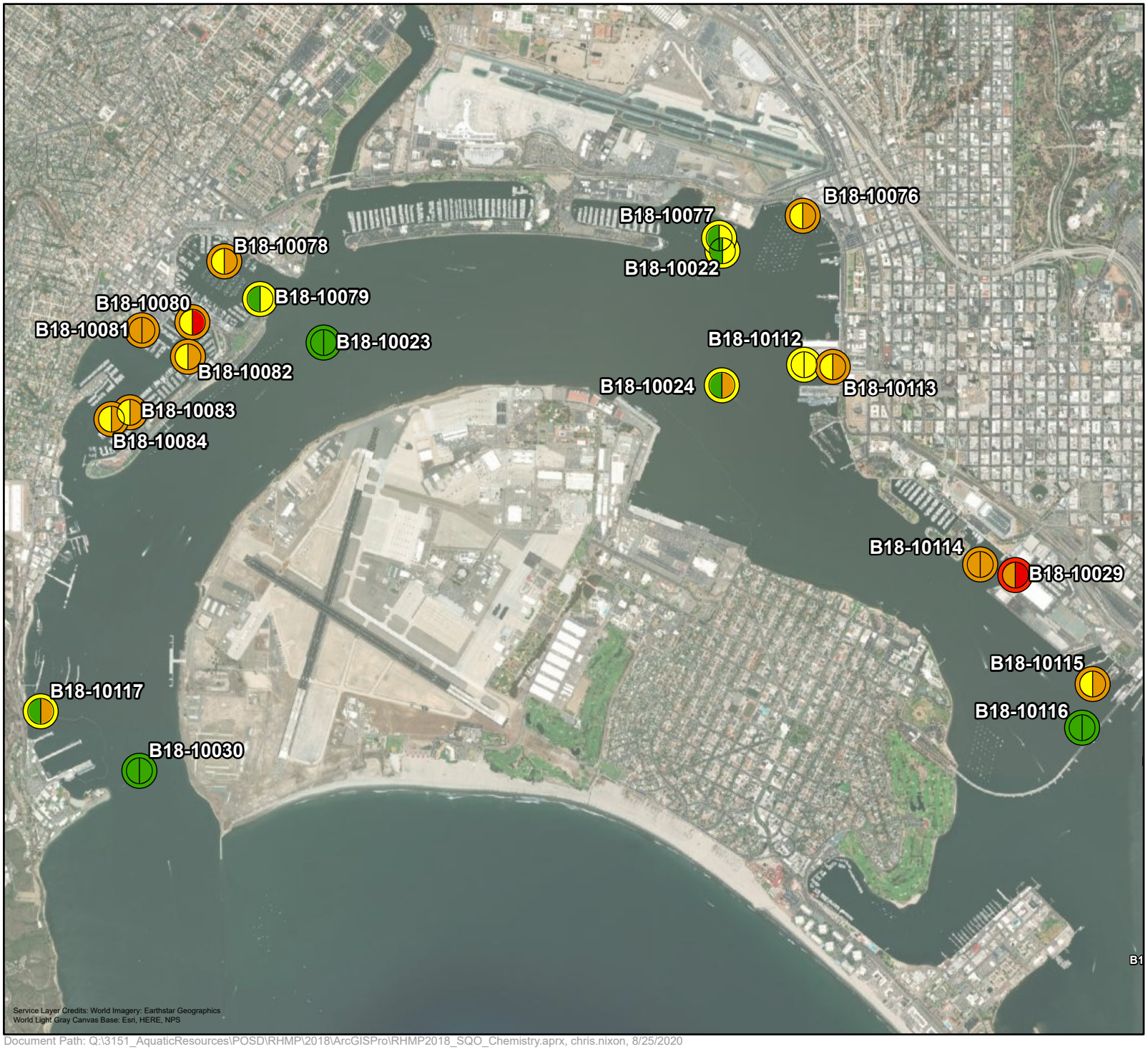
- Minimal
- Moderate
- Low
- High

wood.

0 0.5 1 km

Document Path: Q:\3151_AquaticResources\POSD\RHMP\2018\ArcGISPro\RHMP2018_SQO_Chemistry.aprx, chris.nixon, 8/25/2020

North San Diego Bay



2018 RHMP SQO Chemistry LOE

Integrated

CSI

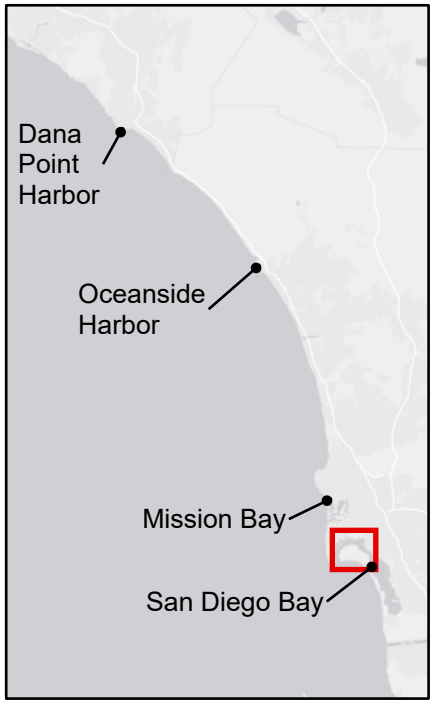
CA LRM

Exposure Category

- Minimal
- Moderate
- Low
- High

wood.

0 0.85 1.7 km



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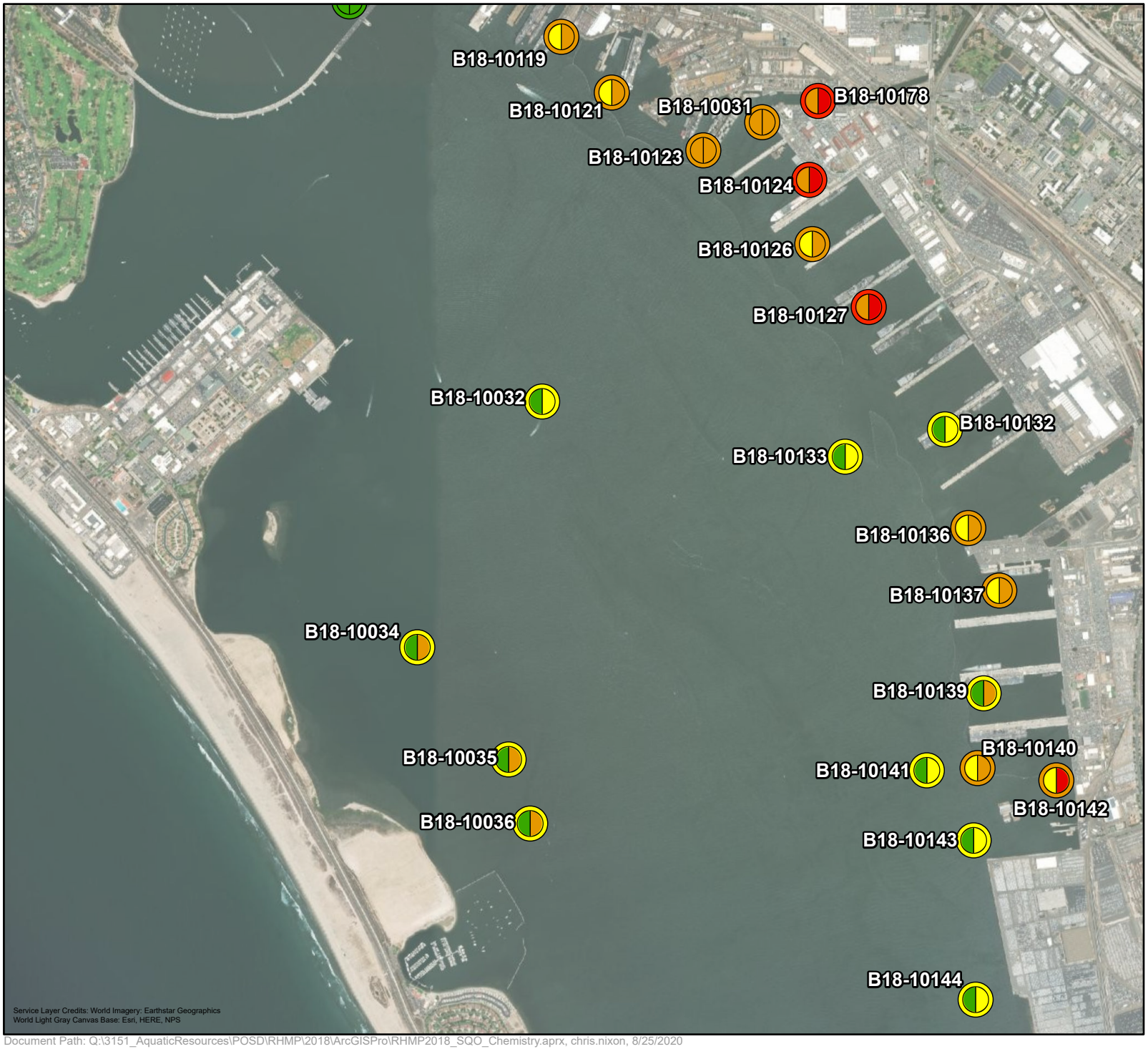
Central San Diego Bay



2018 RHMP SQO Chemistry LOE

Integrated

CSI

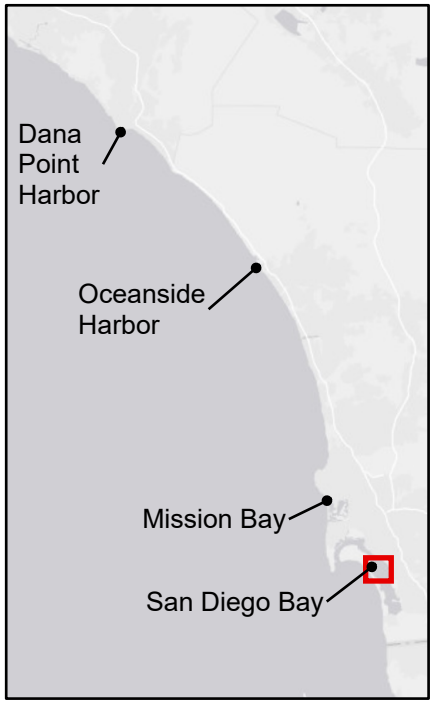
CA LRM

Exposure Category

- Minimal
- Moderate
- Low
- High

wood.

0 0.5 1 km



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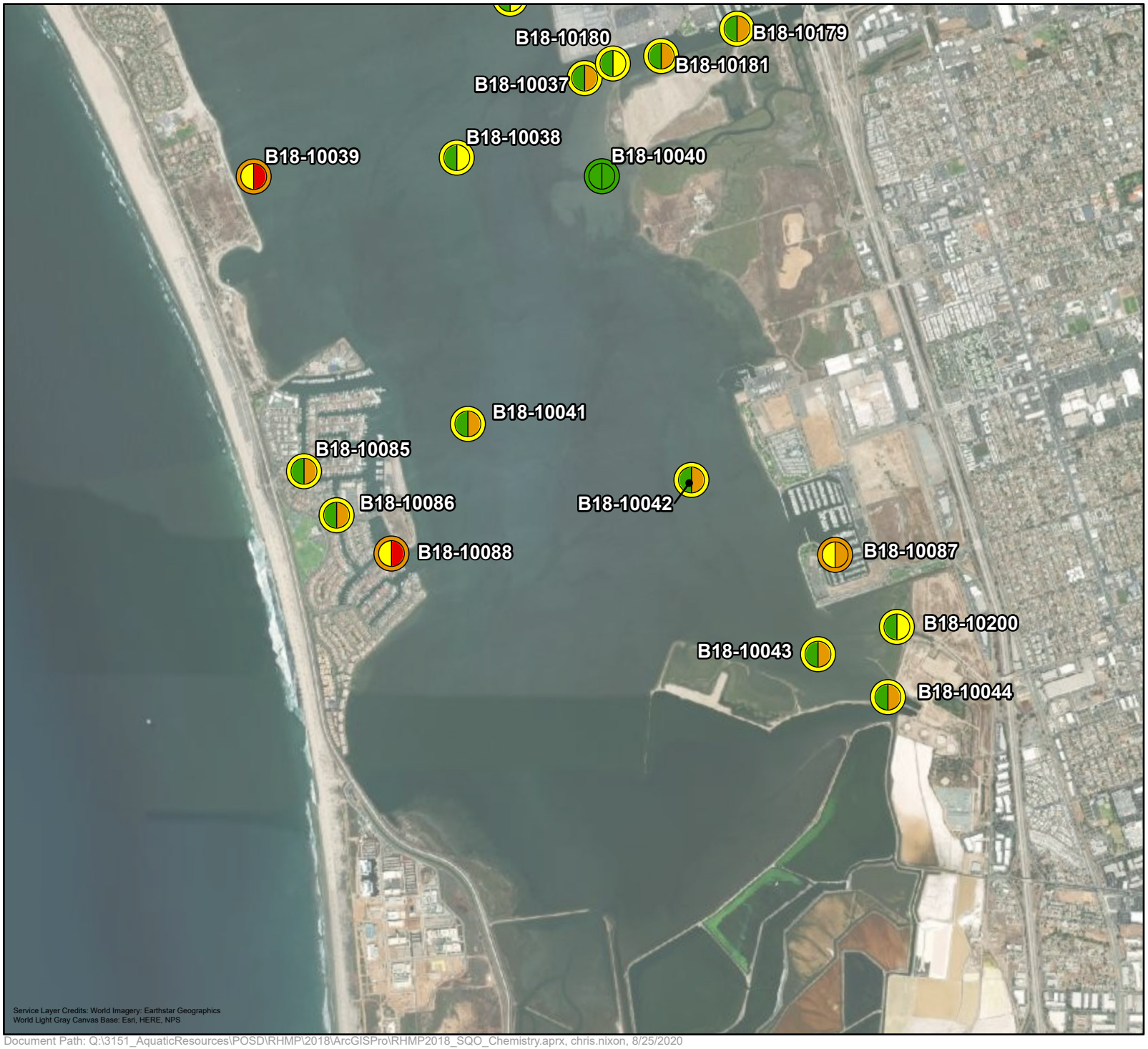
South San Diego Bay



2018 RHMP SQO Chemistry LOE

Integrated

CSI

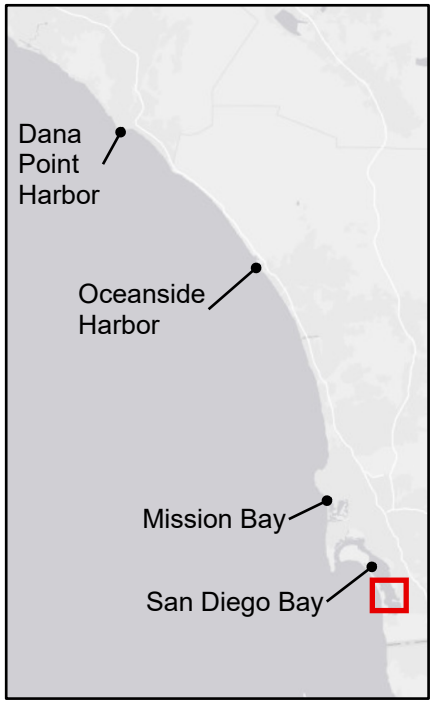
CA LRM

Exposure Category

- Minimal
- Moderate
- Low
- High

wood.

0 0.65 1.3 km



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Toxicity
SQO LOE

Dana Point Harbor

2018 RHMP SQO Toxicity LOE

Integrated

Acute Toxicity (Amphipod Surv.)

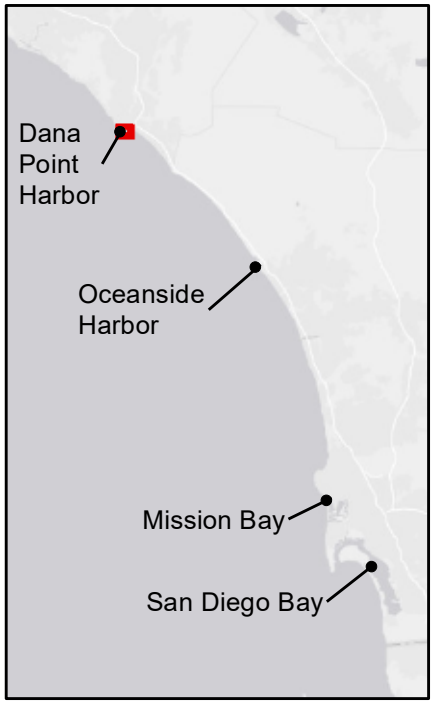
Chronic Toxicity (Mussel Dev.)

Toxicity Category

- Nontoxic
- Moderate
- Low
- High

wood.

0 0.2 0.4 km



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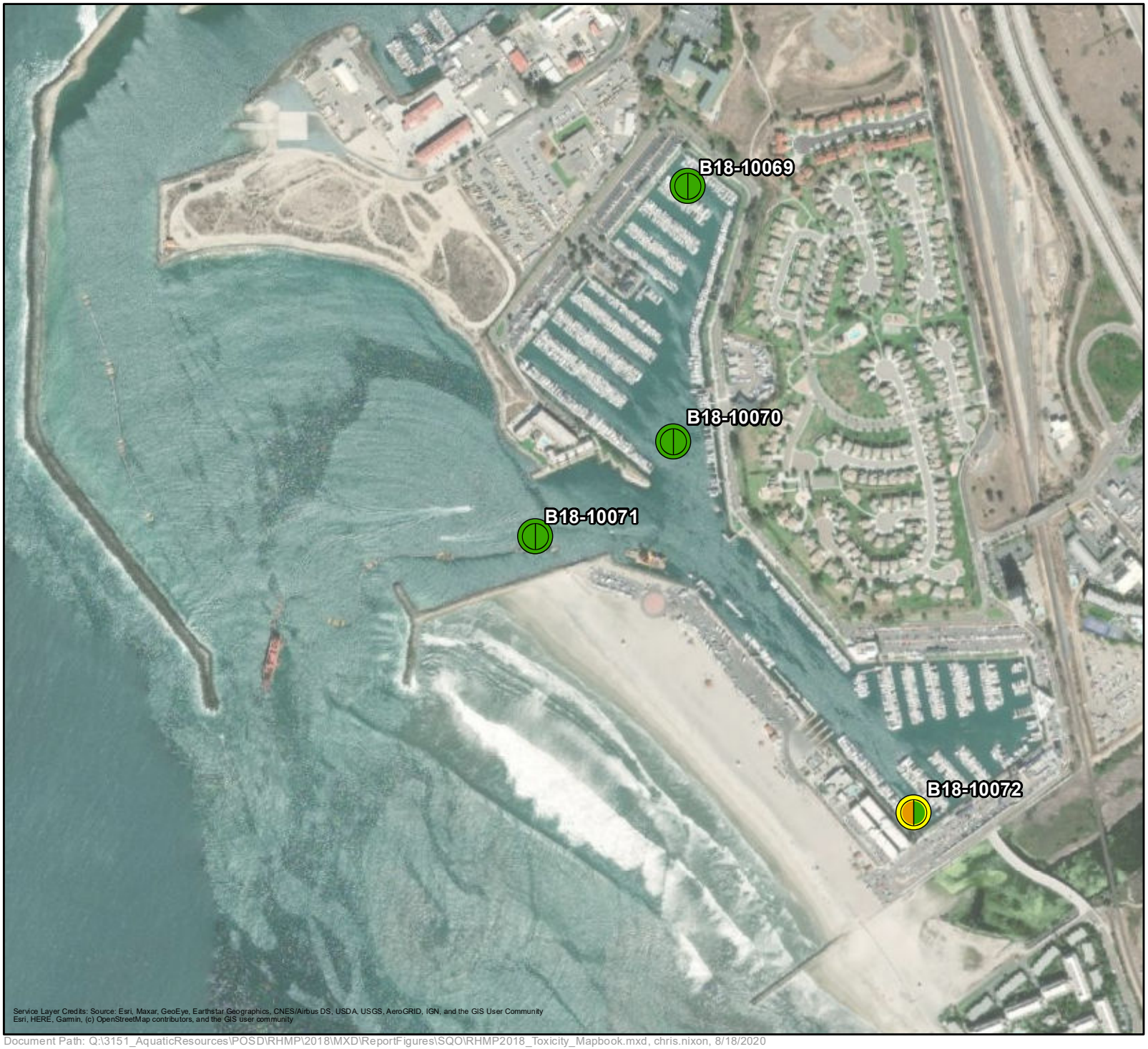
Oceanside Harbor



2018 RHMP SQO Toxicity LOE

Integrated

Acute Toxicity (Amphipod Surv.)

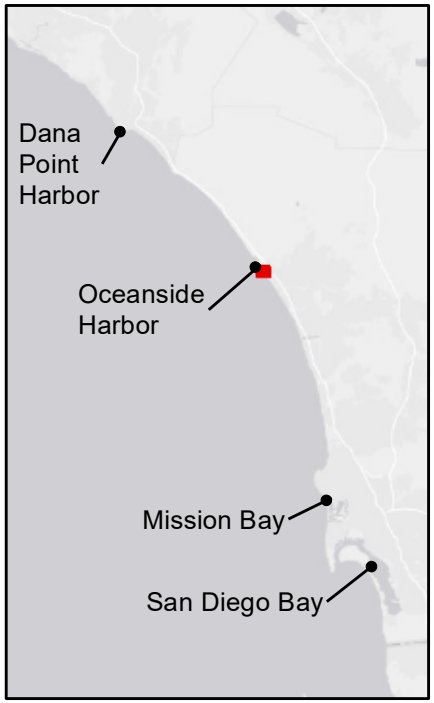
Chronic Toxicity (Mussel Dev.)

Toxicity Category

- Nontoxic
- Moderate
- Low
- High

wood.

0 0.15 0.3 km



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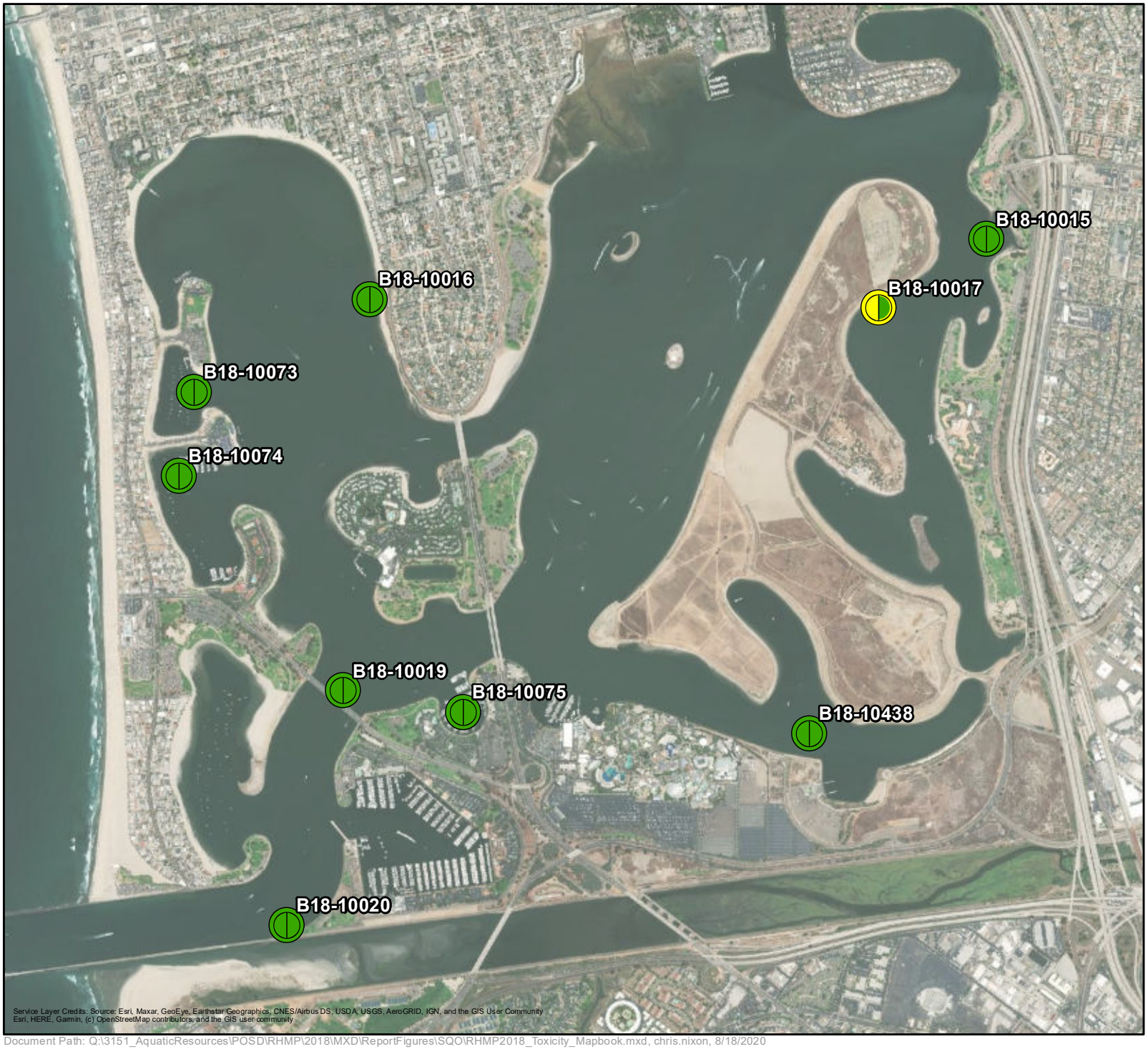
Mission Bay



2018 RHMP SQO Toxicity LOE

Integrated

Acute Toxicity (Amphipod Surv.)

Chronic Toxicity (Mussel Dev.)

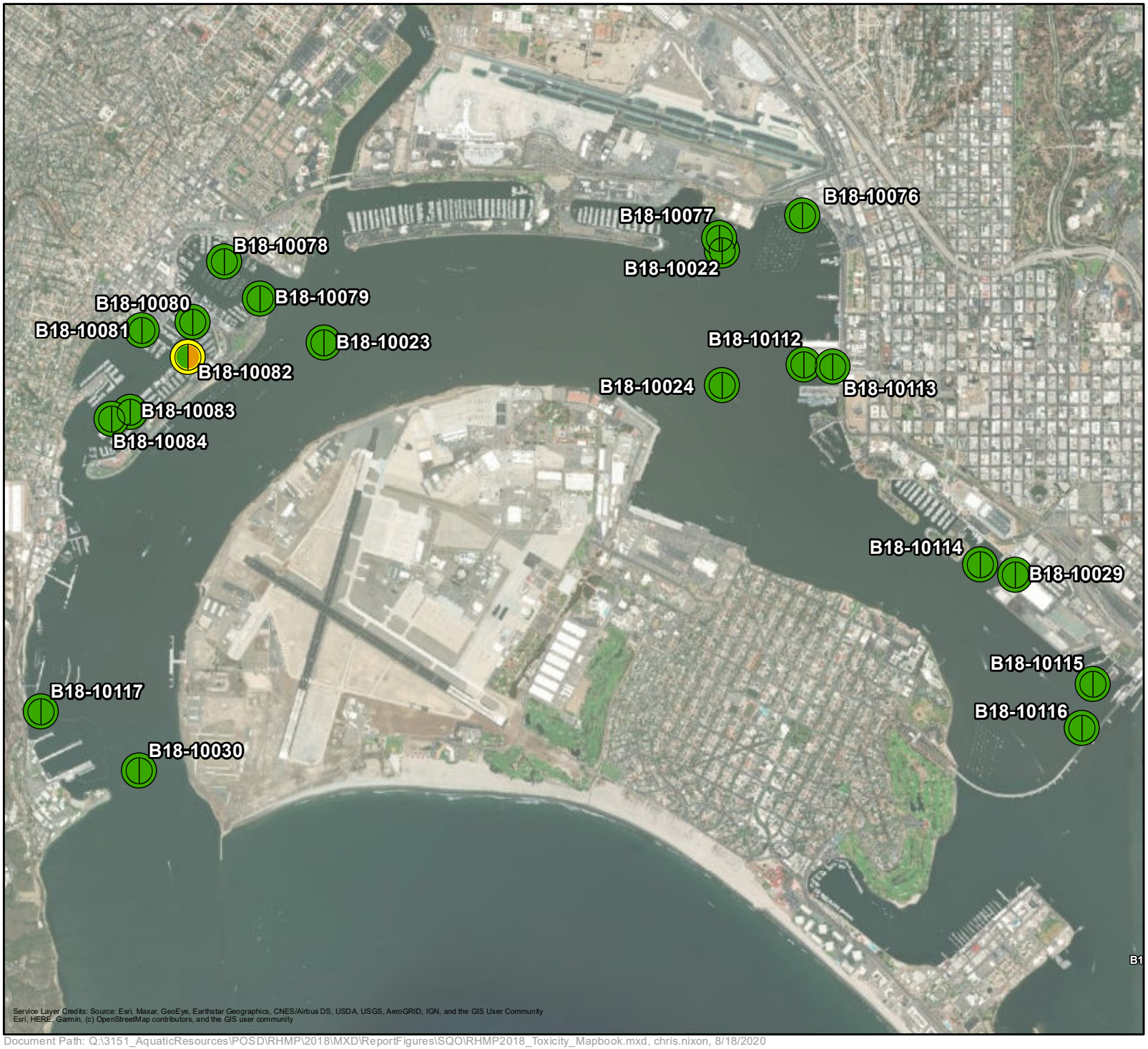
Toxicity Category

- Nontoxic
- Moderate
- Low
- High

wood.

0 0.55 1.1 km

North San Diego Bay



2018 RHMP SQO Toxicity LOE

Integrated

Acute Toxicity (Amphipod Surv.)

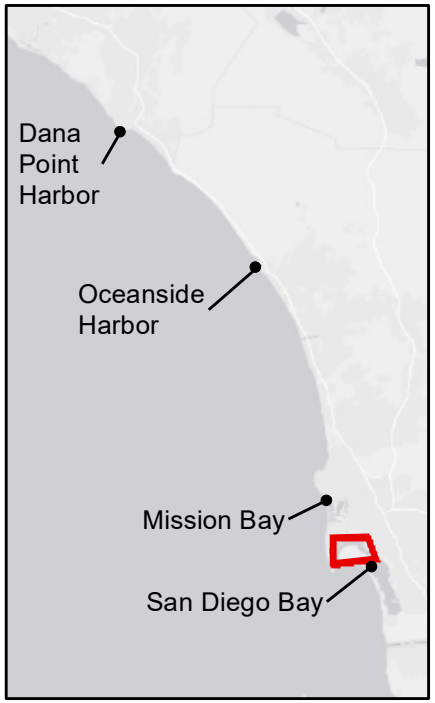
Chronic Toxicity (Mussel Dev.)

Toxicity Category

- Nontoxic
- Moderate
- Low
- High

wood.

0 0.9 1.8 km



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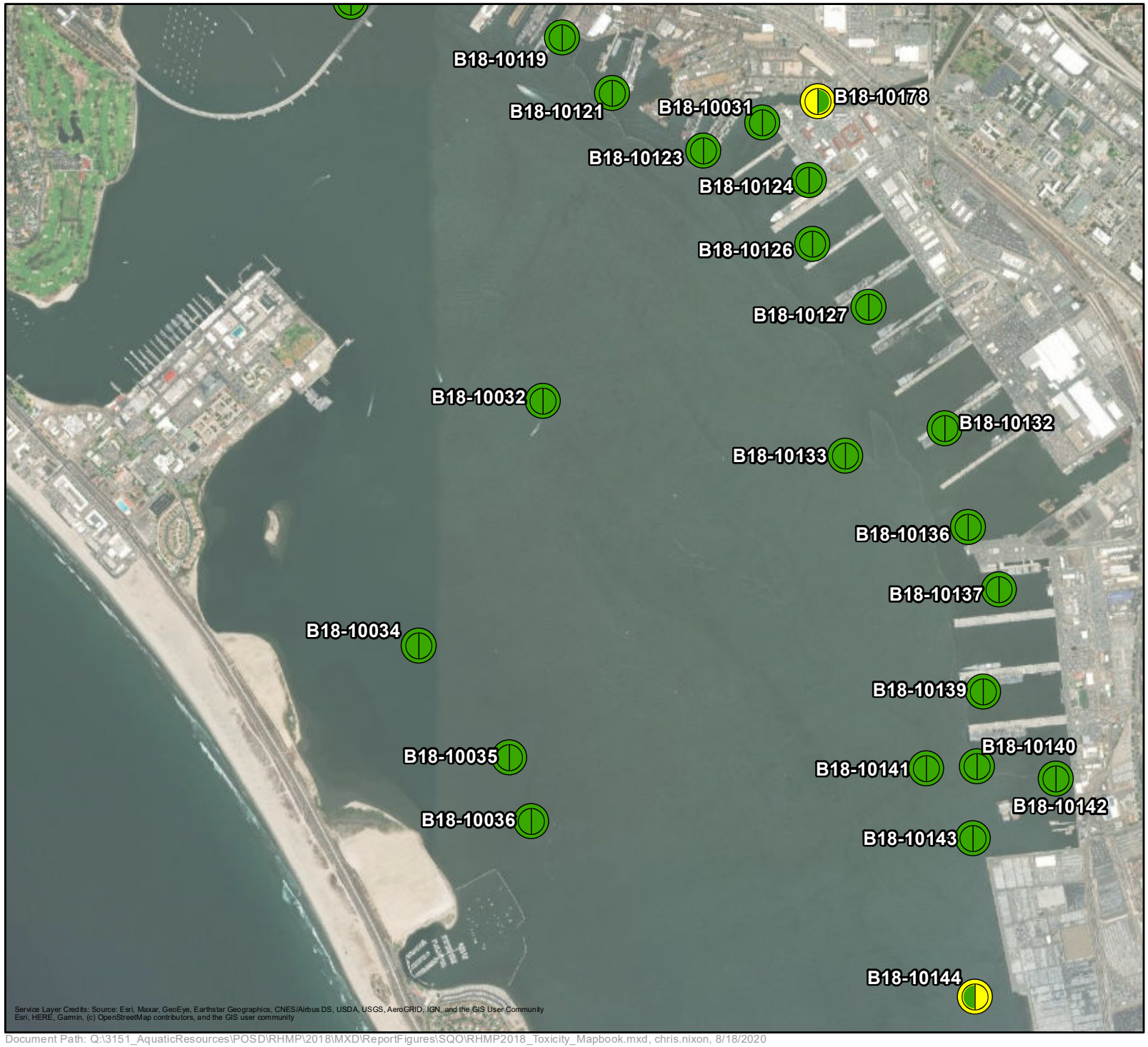
Central San Diego Bay



2018 RHMP SQO Toxicity LOE

Integrated

Acute Toxicity (Amphipod Surv.)

Chronic Toxicity (Mussel Dev.)

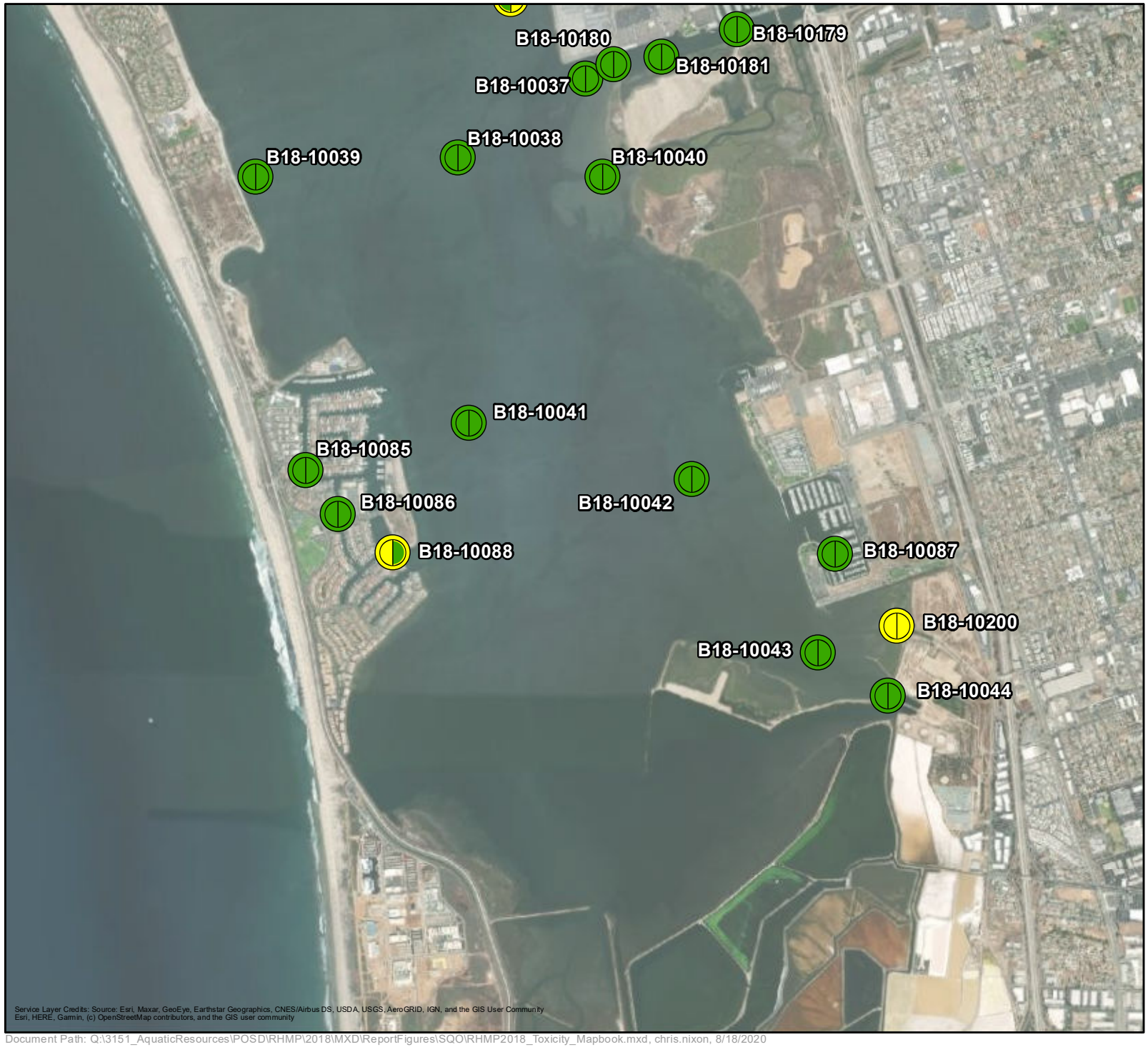
Toxicity Category

- Nontoxic
- Moderate
- Low
- High

wood.

0 0.5 1 km

South San Diego Bay



2018 RHMP SQO Toxicity LOE

Integrated

Acute Toxicity (Amphipod Surv.)

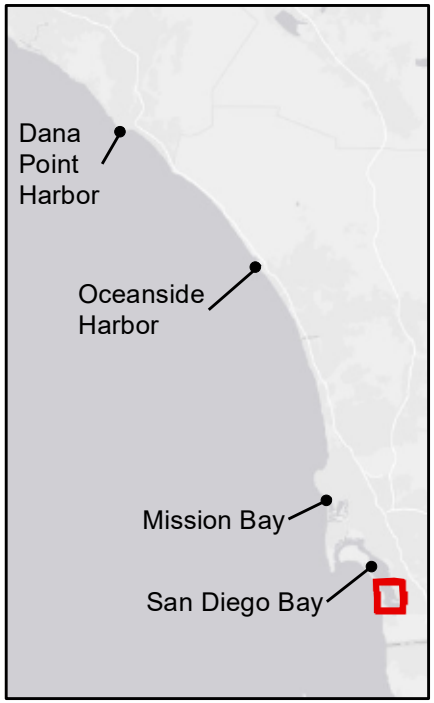
Chronic Toxicity (Mussel Dev.)

Toxicity Category

- Nontoxic
- Moderate
- Low
- High

wood.

0 0.7 1.4 km



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Benthic Community
SQO LOE

Dana Point Harbor

2018 RHMP SQO Benthic Community LOE

Integrated

BRI IBI

RBI RIVPACS

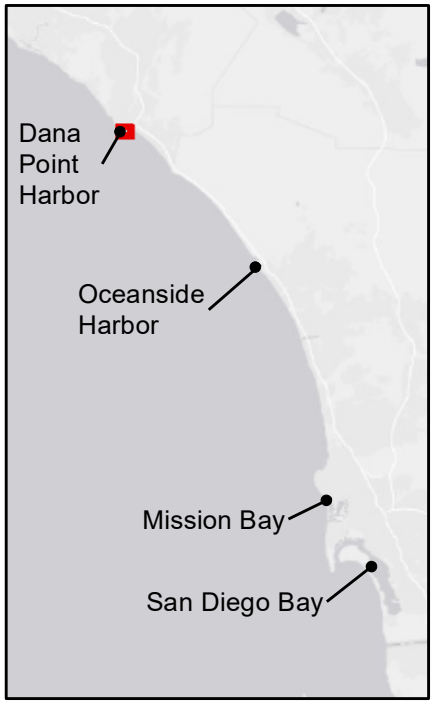
Disturbance Category

Reference Moderate

Low High

wood.

0 0.2 0.4 km



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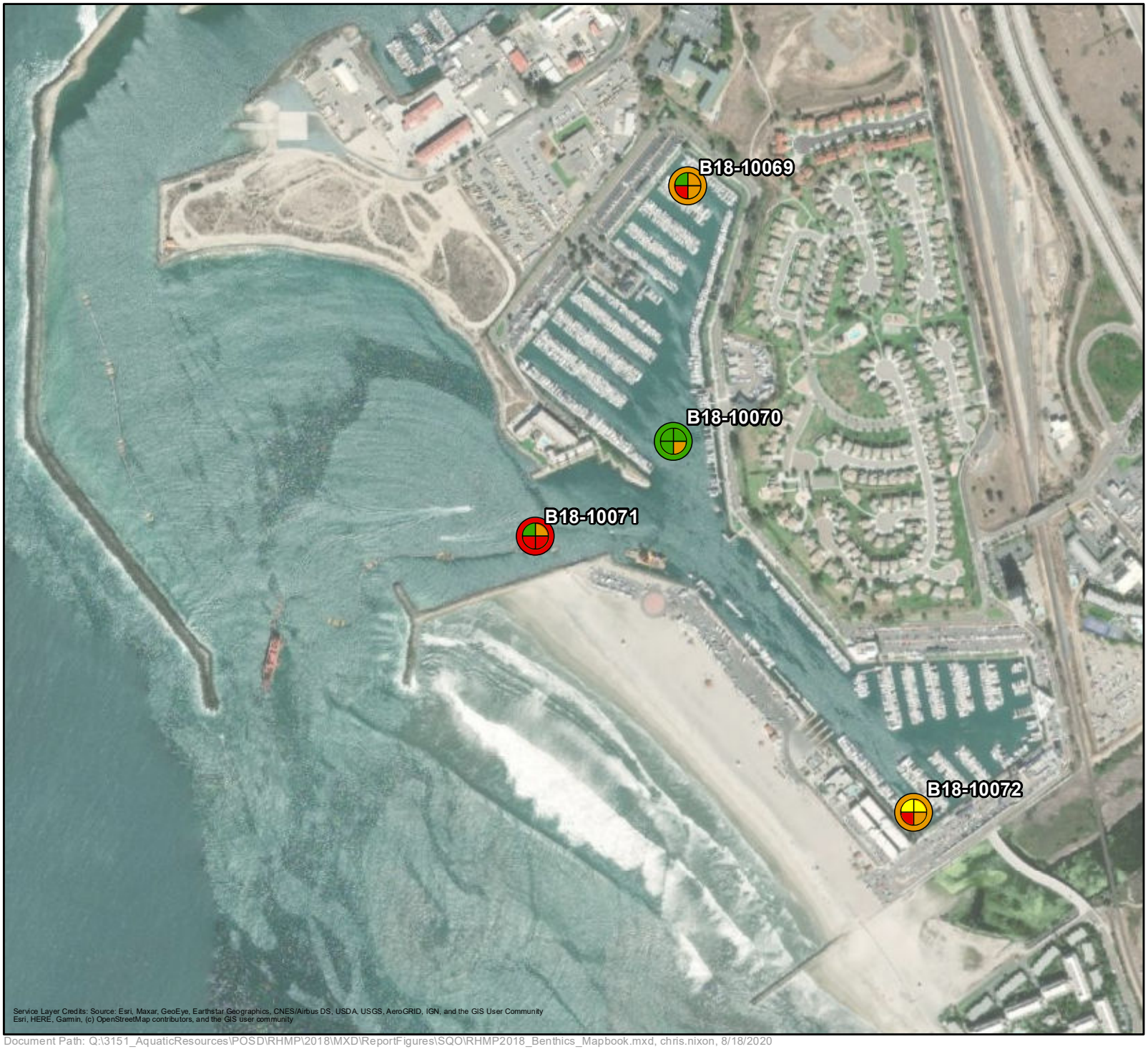
Oceanside Harbor



2018 RHMP SQO Benthic Community LOE

Integrated

BRI IBI

RBI RIVPACS

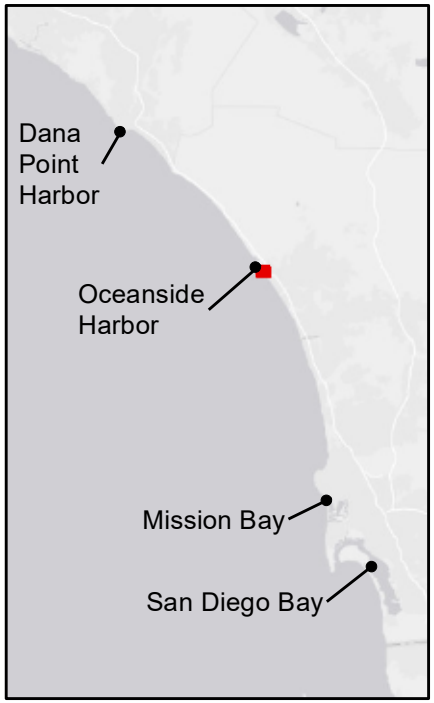
Disturbance Category

Reference Moderate

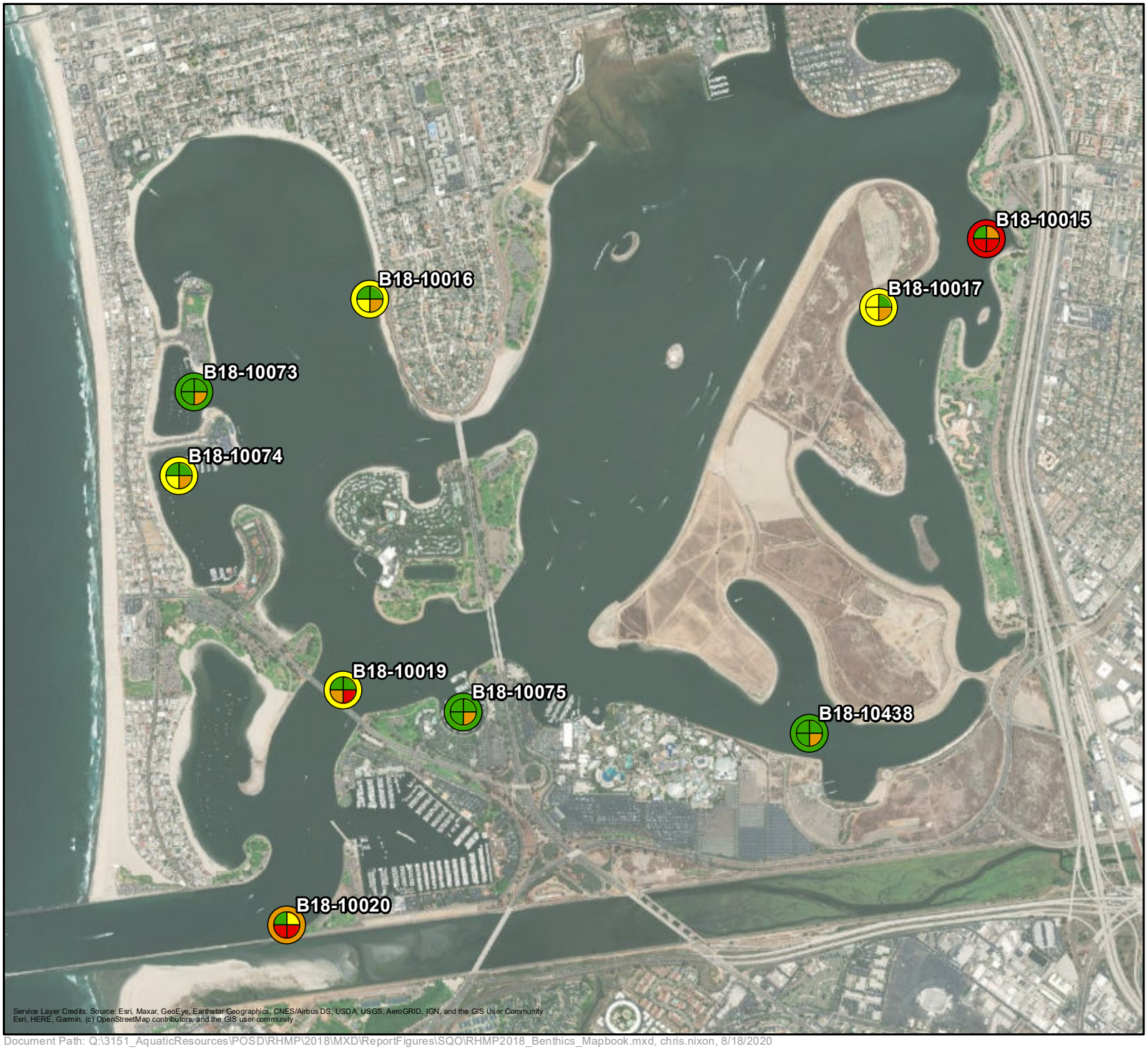
Low High

wood.

0 0.15 0.3 km



Mission Bay



2018 RHMP SQO Benthic Community LOE

Integrated

BRI IBI

RBI RIVPACS

Disturbance Category

Reference Moderate

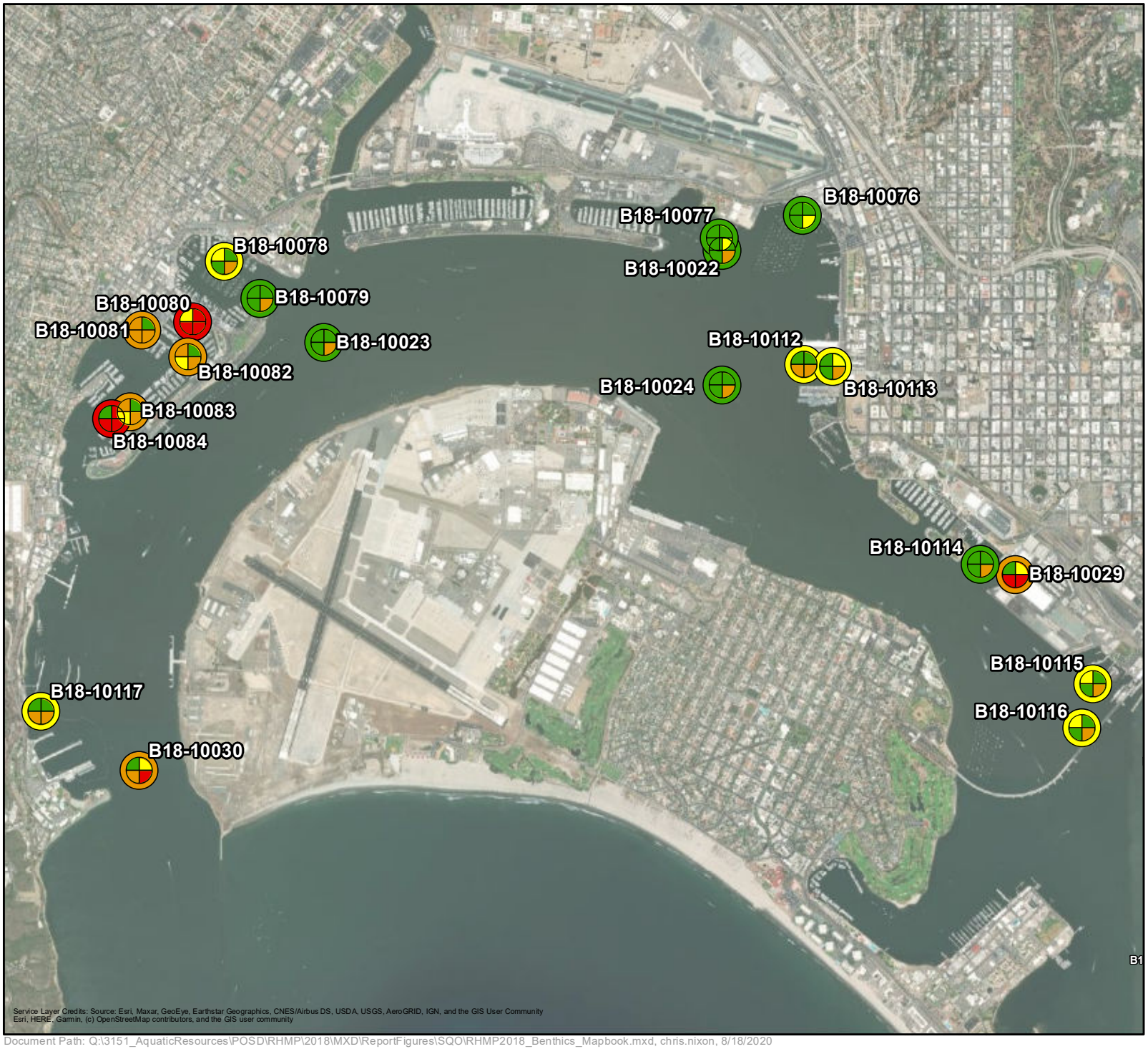
Low High

wood.

0 0.55 1.1 km

Document Path: Q:\3151_AquaticResources\POSD\RHMP\2018\MXD\ReportFigures\SQO\RHMP2018_Benthics_Mapbook.mxd, chris.nixon, 8/18/2020

North San Diego Bay



2018 RHMP SQO Benthic Community LOE

Integrated

BRI IBI

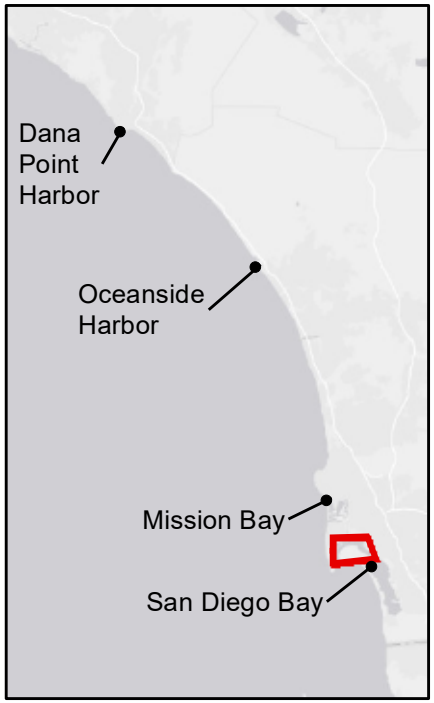
RBI RIVPACS

Disturbance Category

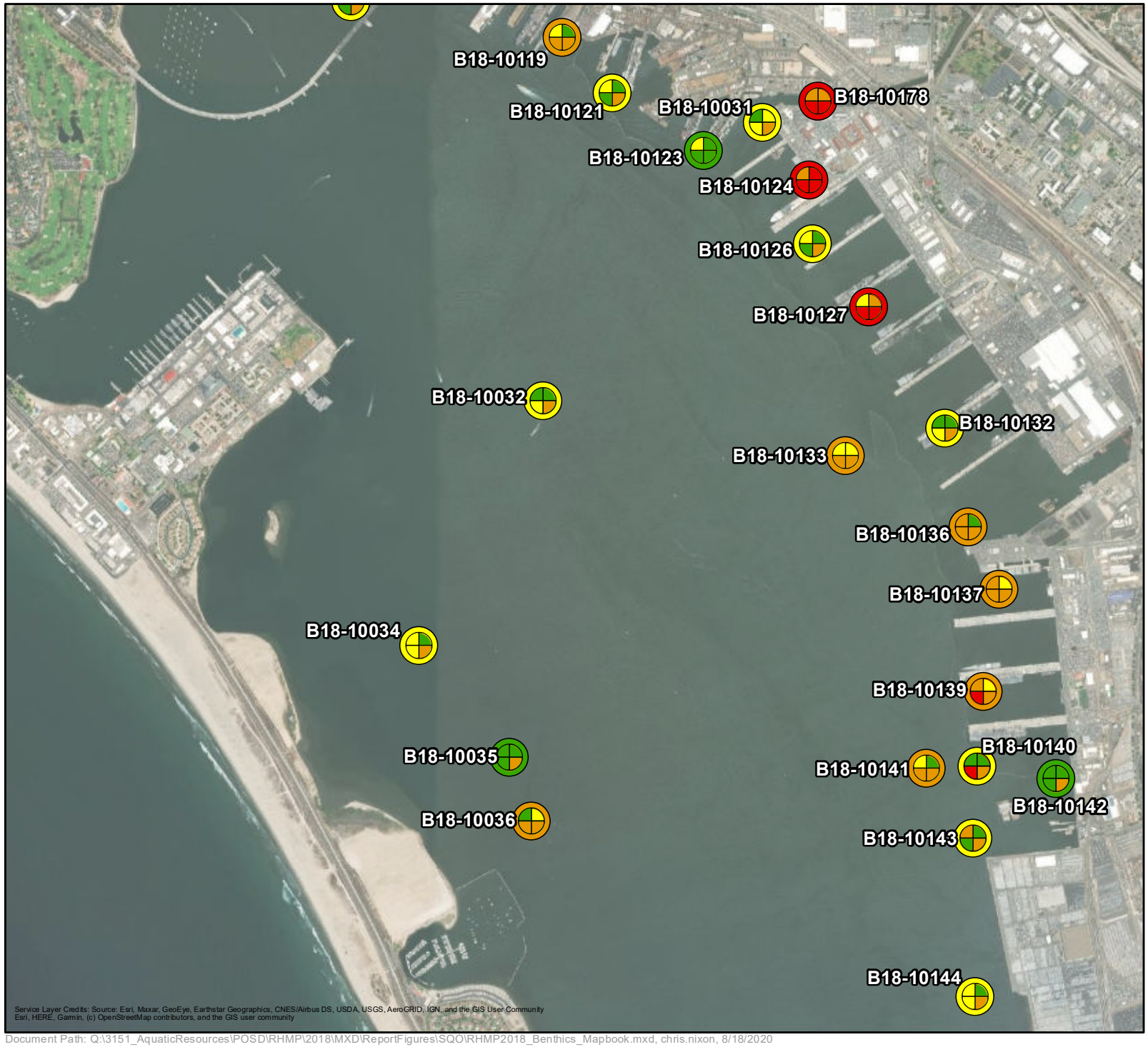
- Reference
- Moderate
- Low
- High

wood.

0 0.9 1.8 km



Central San Diego Bay



2018 RHMP SQO Benthic Community LOE

Integrated

BRI IBI

RBI RIVPACS

Disturbance Category

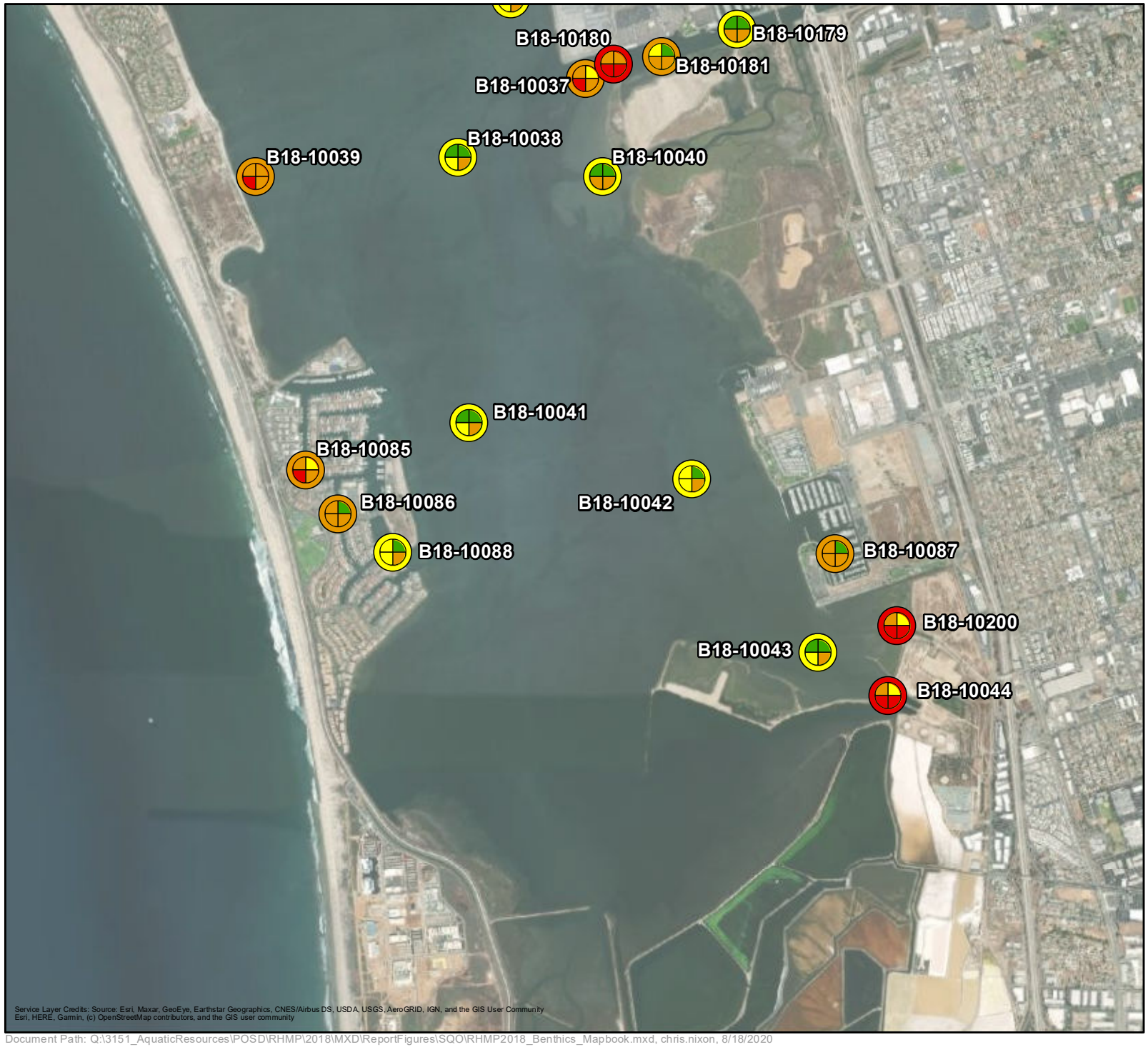
Reference Moderate

Low High

wood.

0 0.5 1 km

South San Diego Bay



2018 RHMP SQO Benthic Community LOE

Integrated

BRI IBI

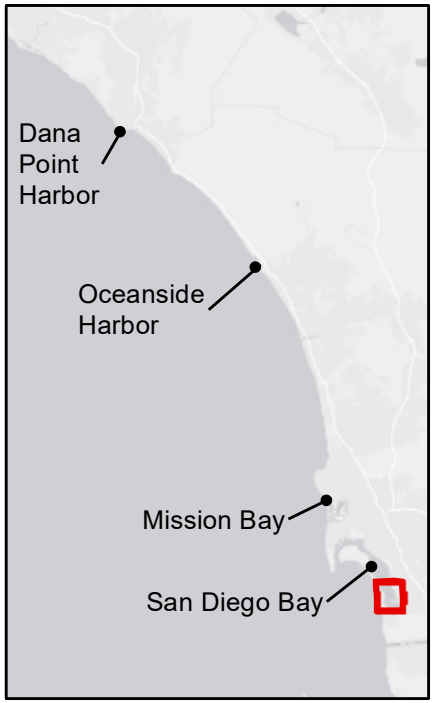
RBI RIVPACS

Disturbance Category

- Reference
- Moderate
- Low
- High

wood.

0 0.7 1.4 km



Integrated SQO Scores

Dana Point Harbor

2018 RHMP Integrated SQO Scores

Integrated

Toxicity LOE

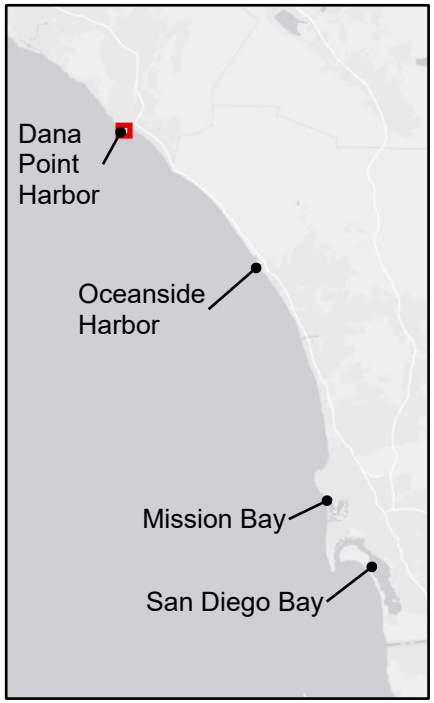
Chemistry LOE

Benthic LOE

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

wood.

0 0.2 0.4 km



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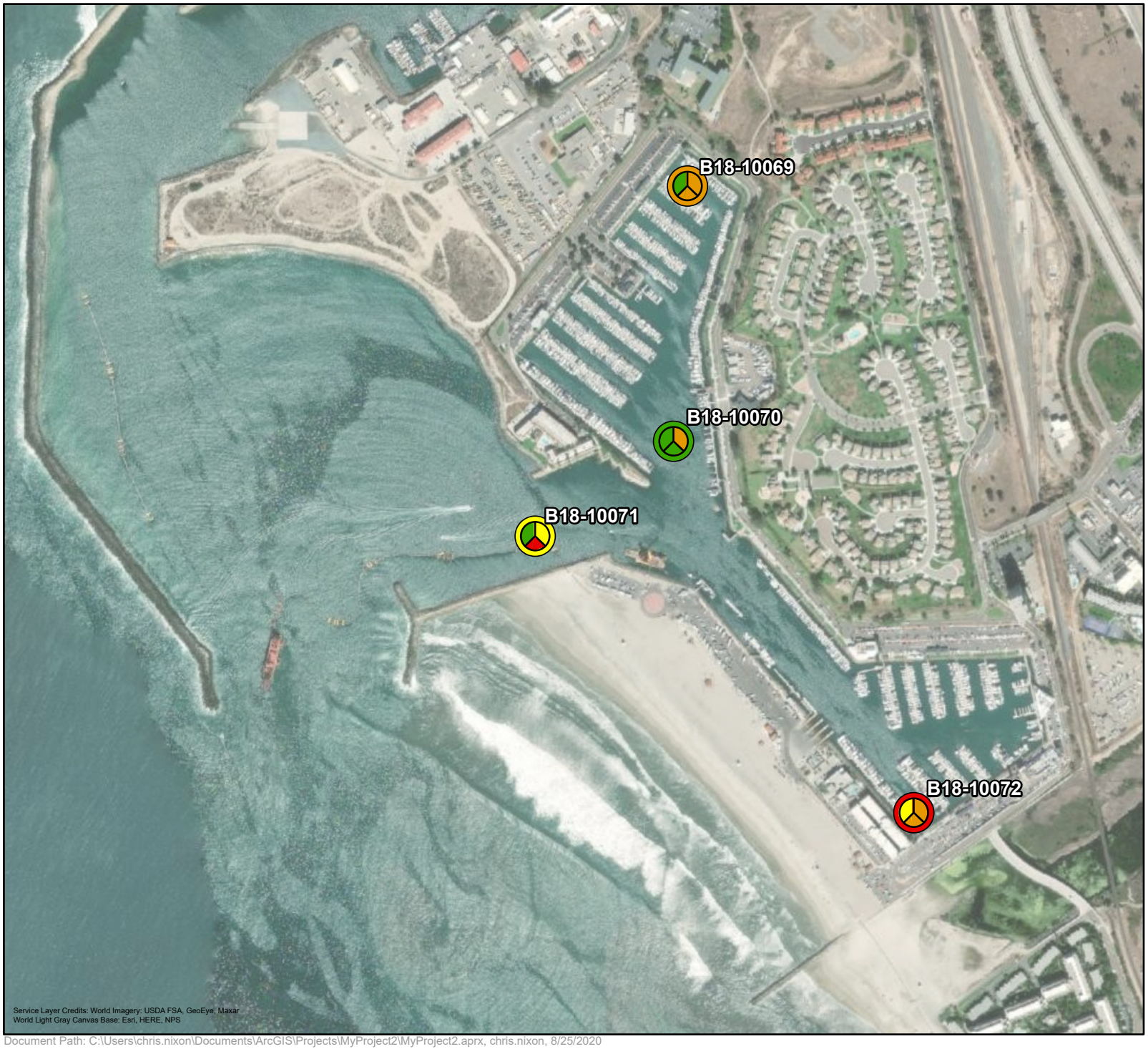
Oceanside Harbor



2018 RHMP Integrated SQO Scores

Integrated

Toxicity LOE — Chemistry LOE — Benthic LOE

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

wood.

0 0.15 0.3 km

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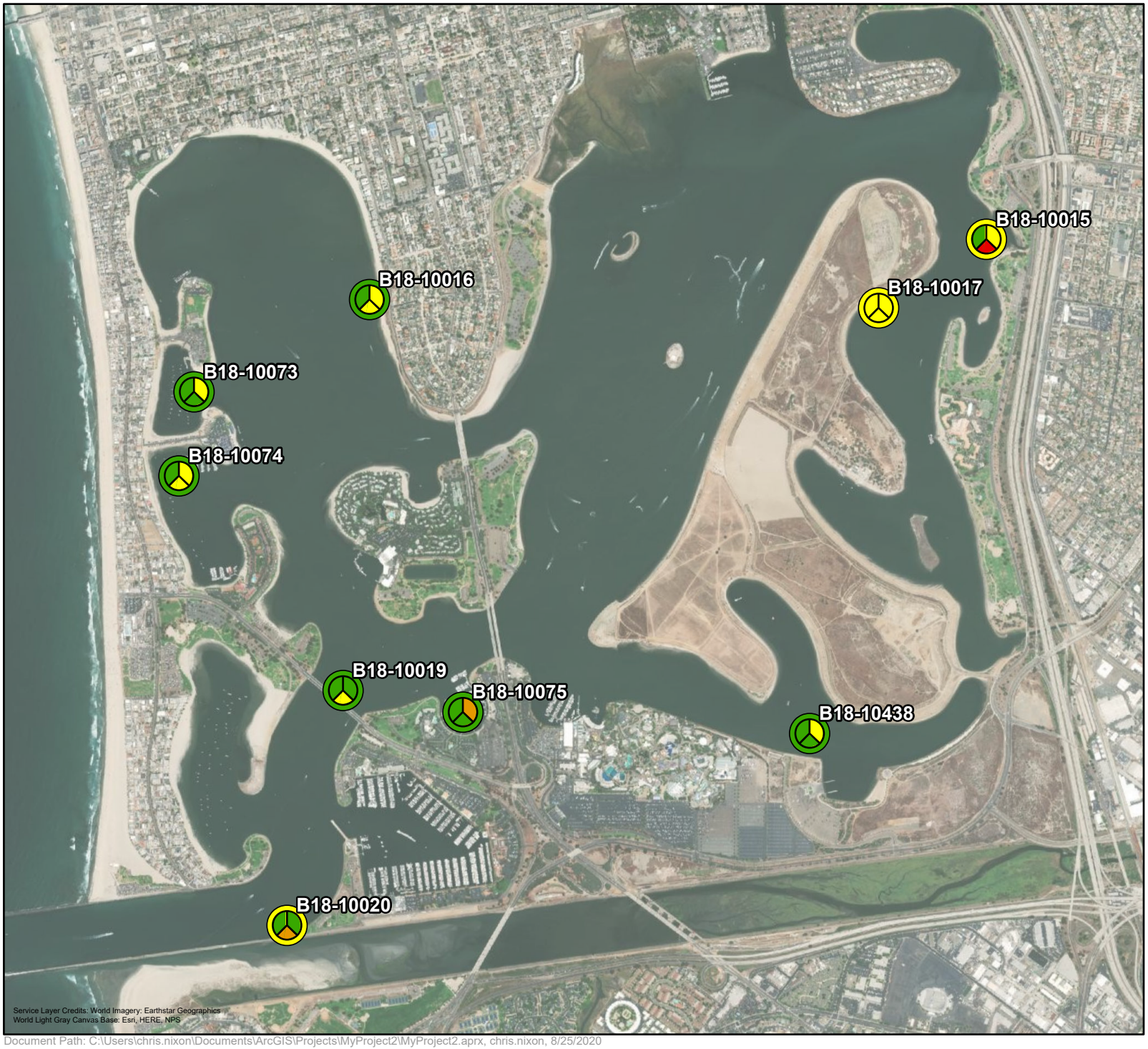
Mission Bay



2018 RHMP Integrated SQO Scores

Integrated

Toxicity LOE

Chemistry LOE

Benthic LOE

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

wood.

0 0.5 1 km

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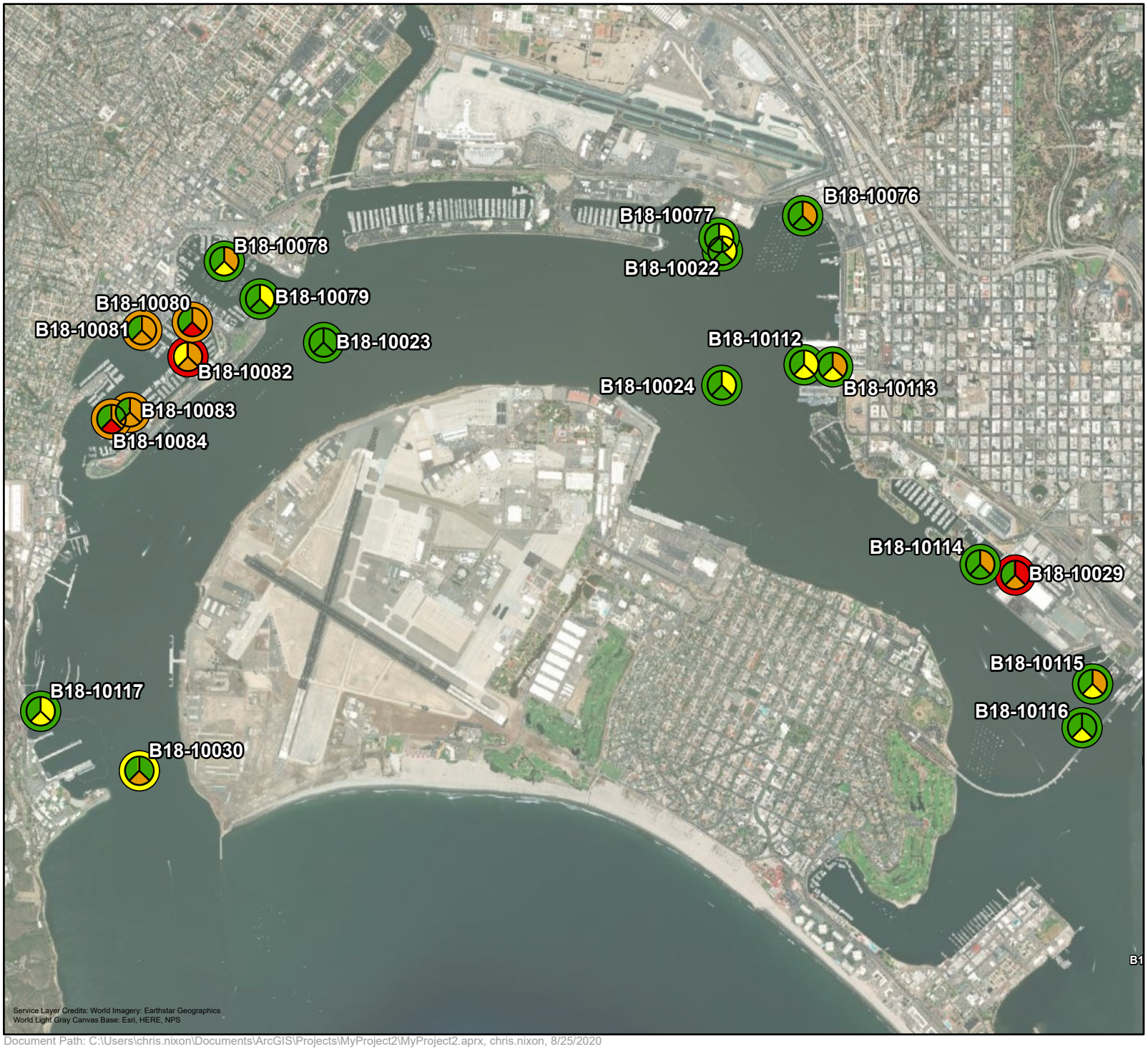
North San Diego Bay



2018 RHMP Integrated SQO Scores

Integrated

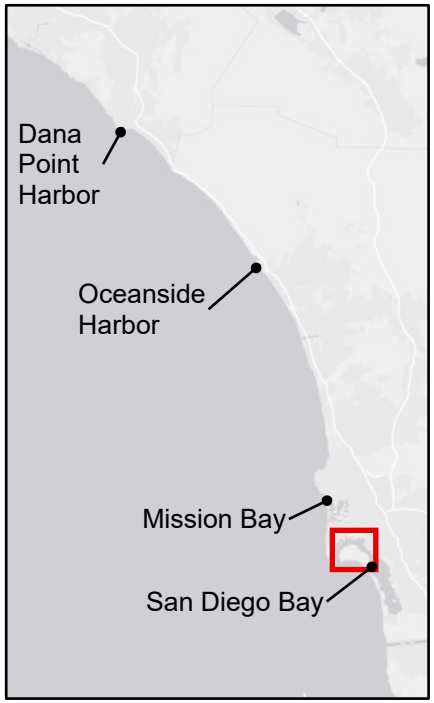
Toxicity LOE — Chemistry LOE

Benthic LOE

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

wood.

0 0.85 1.7 km



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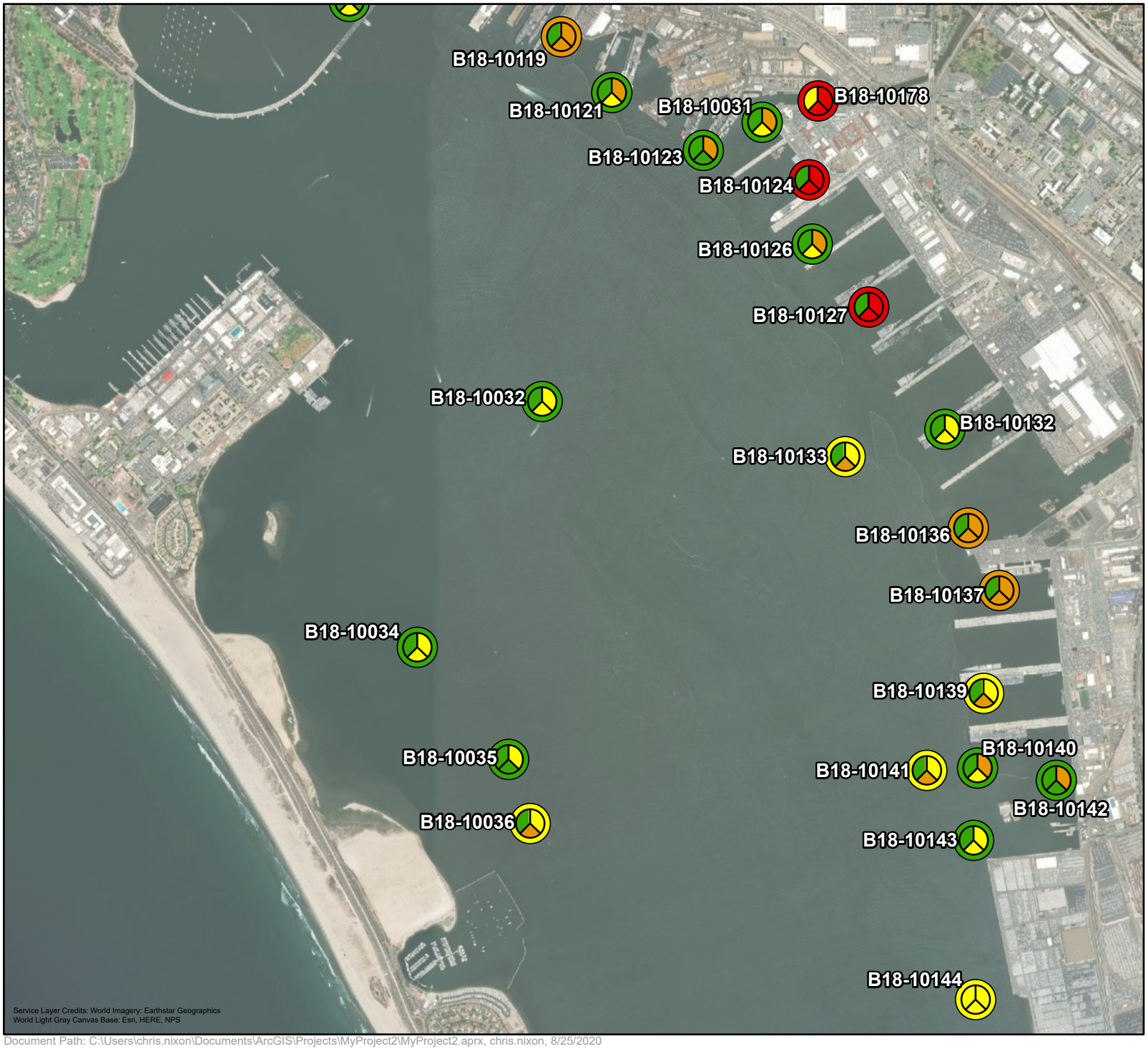
Central San Diego Bay



2018 RHMP Integrated SQO Scores

Integrated

Toxicity LOE

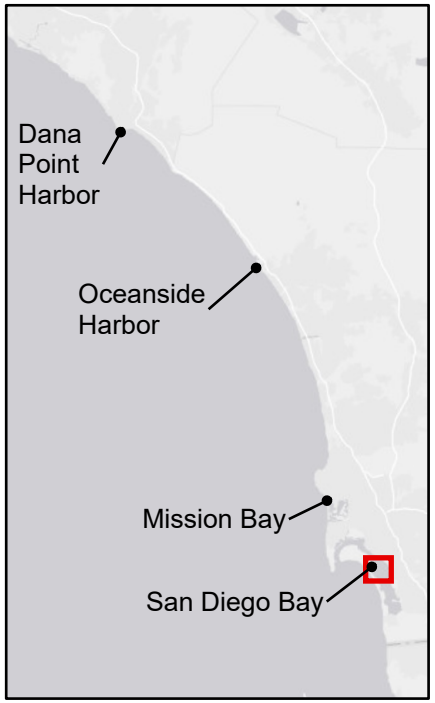
Chemistry LOE

Benthic LOE

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

wood.

0 0.5 1 km



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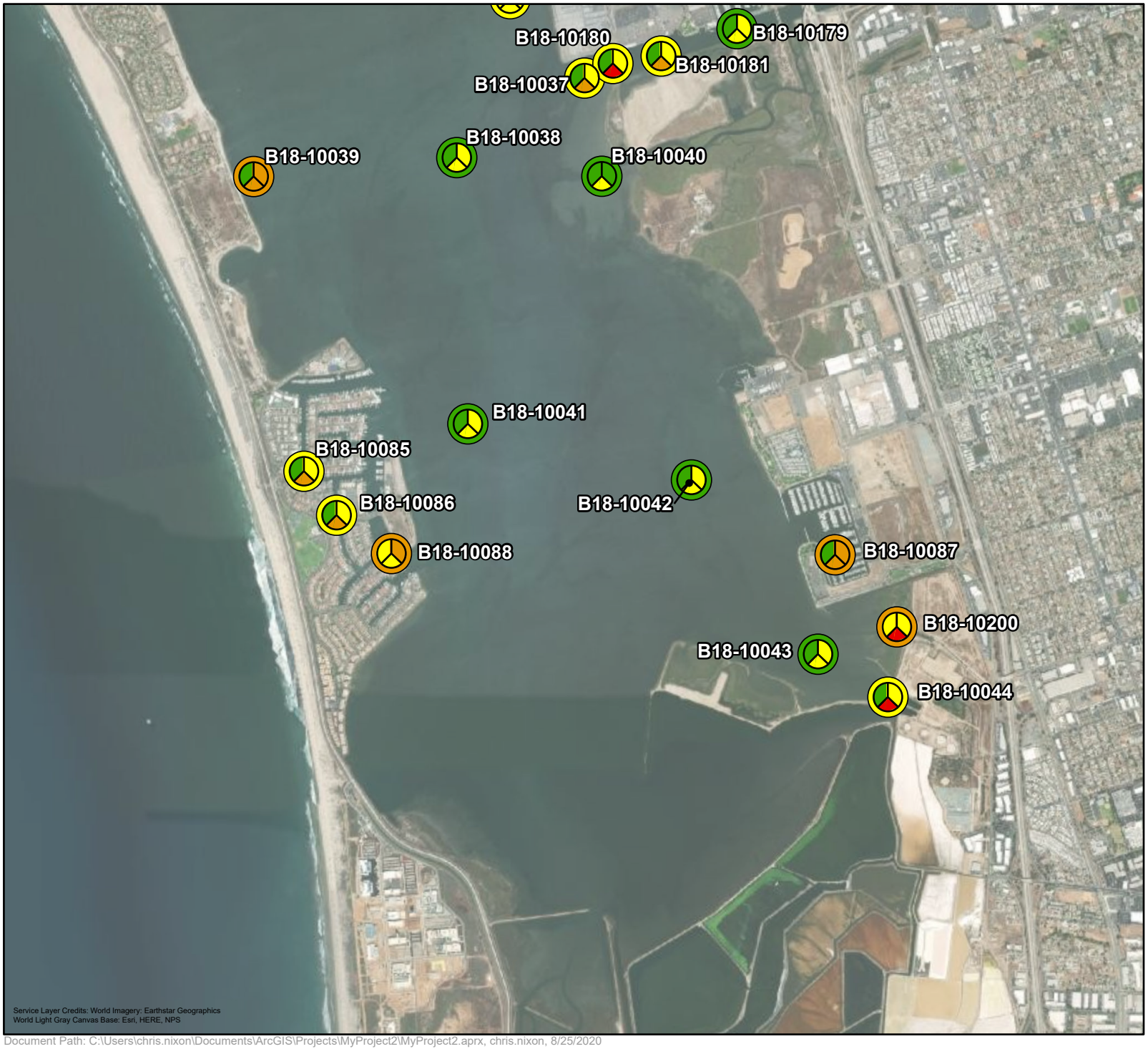
South San Diego Bay



2018 RHMP Integrated SQO Scores

Integrated

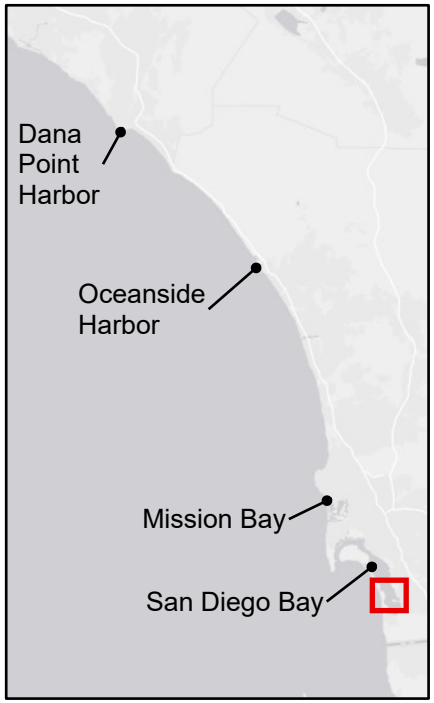
Toxicity LOE — Chemistry LOE

Benthic LOE

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

wood.

0 0.65 1.3 km



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