

APPENDIX J

SEDIMENT QUALITY OBJECTIVE (SQO) ASSESSMENT SCORES

**2013 RHMP
SQO ASSESSMENT
SCORES – TABLE & MAPS**

**2013 RHMP Sediment Quality Objectives (SQO) Assessment
Integrated SQO Scores**

Station	Harbor	Strata	Sediment Chemistry Exposure	Benthic Community Exposure	Sediment Toxicity	Integrated Station Assessment	
B13-8259	Dana Point Harbor	Marina	Moderate Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8263		Deep	Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8265		Shallow	Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8267		Marina	Moderate Exposure	High Disturbance	Nontoxic	Possibly impacted	
B13-8233	Oceanside Harbor	Marina	Moderate Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8236		Deep	Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8239		Deep	Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8145	Mission Bay	Deep	Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8146		Marina	Moderate Exposure	Reference	Nontoxic	Likely unimpacted	
B13-8151		Marina	Moderate Exposure	Reference	Nontoxic	Likely unimpacted	
B13-8152		Deep	Minimal Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8156		Shallow	Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8157		Shallow	Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8159		Shallow	Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8160		Freshwater-Influenced	Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8163		Freshwater-Influenced	Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8085		San Diego Bay - North	Deep	Low Exposure	Low Disturbance	Nontoxic	Unimpacted
B13-8102			Marina	Moderate Exposure	Reference	Low Toxicity	Likely unimpacted
B13-8105	Shallow		Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8106	Marina		Moderate Exposure	Low Disturbance	Low Toxicity	Possibly impacted	
B13-8108	Deep		Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8109	Deep		Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8111	Deep		Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted	
B13-8112	Deep		Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8113	Marina		Moderate Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8116	Marina		Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8117	Marina		Moderate Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8118	Deep		Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8121	Marina		High Exposure	Moderate Disturbance	Nontoxic	Likely impacted	
B13-8122	Deep		Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8123	Shallow		Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8124	Shallow		Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8127	Marina		Moderate Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8128	Shallow		Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted	
B13-8500	Freshwater-Influenced		High Exposure	Low Disturbance	Nontoxic	Likely unimpacted	
B13-8045	San Diego Bay - Central		Deep	Low Exposure	Low Disturbance	Low Toxicity	Likely unimpacted
B13-8049			Industrial/Port	Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted
B13-8050			Industrial/Port	Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted
B13-8052			Shallow	Low Exposure	Low Disturbance	Nontoxic	Unimpacted
B13-8053			Industrial/Port	Low Exposure	Reference	Nontoxic	Unimpacted
B13-8056			Industrial/Port	Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted
B13-8058			Shallow	Low Exposure	Low Disturbance	Nontoxic	Unimpacted
B13-8060			Shallow	Low Exposure	Low Disturbance	Nontoxic	Unimpacted
B13-8064		Industrial/Port	Moderate Exposure	High Disturbance	Low Toxicity	Likely impacted	
B13-8065		Industrial/Port	Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8066		Industrial/Port	Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted	
B13-8068		Shallow	Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8069		Industrial/Port	Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted	
B13-8073		Marina	Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8074		Freshwater-Influenced	High Exposure	Moderate Disturbance	Nontoxic	Likely impacted	
B13-8075		Freshwater-Influenced	High Exposure	Moderate Disturbance	Nontoxic	Likely impacted	
B13-8076		Freshwater-Influenced	High Exposure	Low Disturbance	Nontoxic	Likely unimpacted	
B13-8077		Freshwater-Influenced	Moderate Exposure	Moderate Disturbance	Nontoxic	Possibly impacted	
B13-8078		Deep	Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8087		Deep	Minimal Exposure	Reference	Nontoxic	Unimpacted	
B13-8090		Industrial/Port	High Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8093		Deep	Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8095		Industrial/Port	Moderate Exposure	Moderate Disturbance	Low Toxicity	Likely impacted	
B13-8096		Industrial/Port	Low Exposure	Reference	Nontoxic	Unimpacted	
B13-8098		Industrial/Port	Minimal Exposure	Reference	Nontoxic	Unimpacted	
B13-8099		Industrial/Port	Moderate Exposure	Reference	Nontoxic	Likely unimpacted	
B13-8100		Industrial/Port	Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8013		San Diego Bay - South	Marina	Moderate Exposure	High Disturbance	Nontoxic	Possibly impacted
B13-8014			Marina	Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted
B13-8017			Shallow	Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted
B13-8018	Shallow		Minimal Exposure	High Disturbance	Nontoxic	Likely unimpacted	
B13-8020	Shallow		Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8028	Freshwater-Influenced		Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8029	Freshwater-Influenced		Low Exposure	Low Disturbance	Nontoxic	Unimpacted	
B13-8030	Freshwater-Influenced		Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8031	Freshwater-Influenced		Minimal Exposure	Low Disturbance	Low Toxicity	Likely unimpacted	
B13-8033	Freshwater-Influenced		Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8036	Freshwater-Influenced		Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8038	Freshwater-Influenced		Low Exposure	Moderate Disturbance	Nontoxic	Likely unimpacted	
B13-8040	Freshwater-Influenced		Moderate Exposure	Low Disturbance	Nontoxic	Unimpacted	

* No Final Station Scores are considered Clearly Impacted



SQO Integrated Assessment Scores
 Dana Point Harbor Harbor
 RHMP 2013



SQO Integrated Assessment Scores
Oceanside Harbor
RHMP 2013



SQO Integrated Results

Toxicity — Chemical exposure — Benthic disturbance

Individual Category:

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

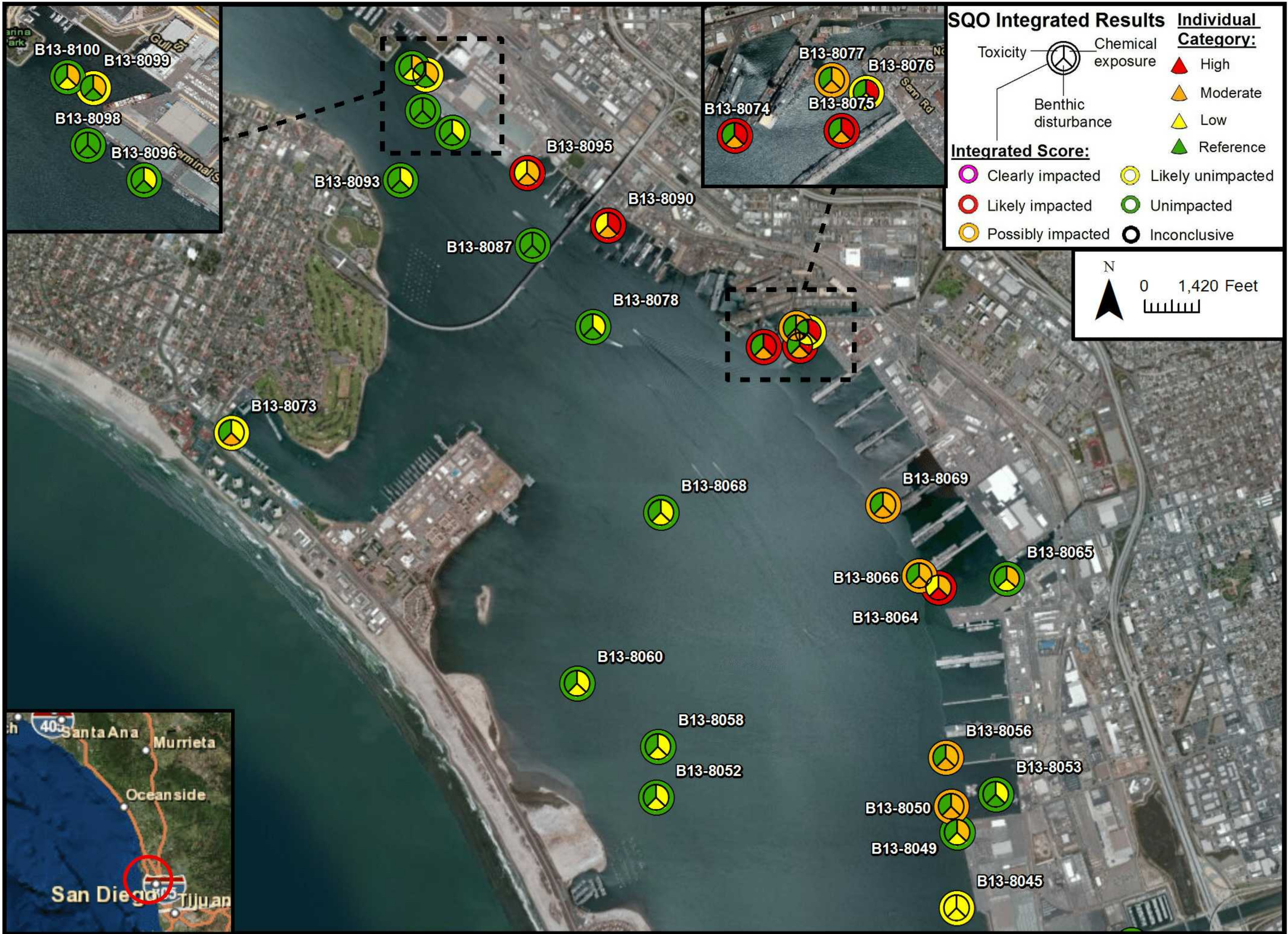
Integrated Score:

- Clearly impacted (Pink circle)
- Likely impacted (Red circle)
- Possibly impacted (Yellow circle)
- Likely unimpacted (Yellow circle with green border)
- Unimpacted (Green circle)
- Inconclusive (Black circle)

SQO Integrated Assessment Scores
Mission Bay
RHMP 2013



SQO Integrated Assessment Scores
 North San Diego Bay
 RHMP 2013

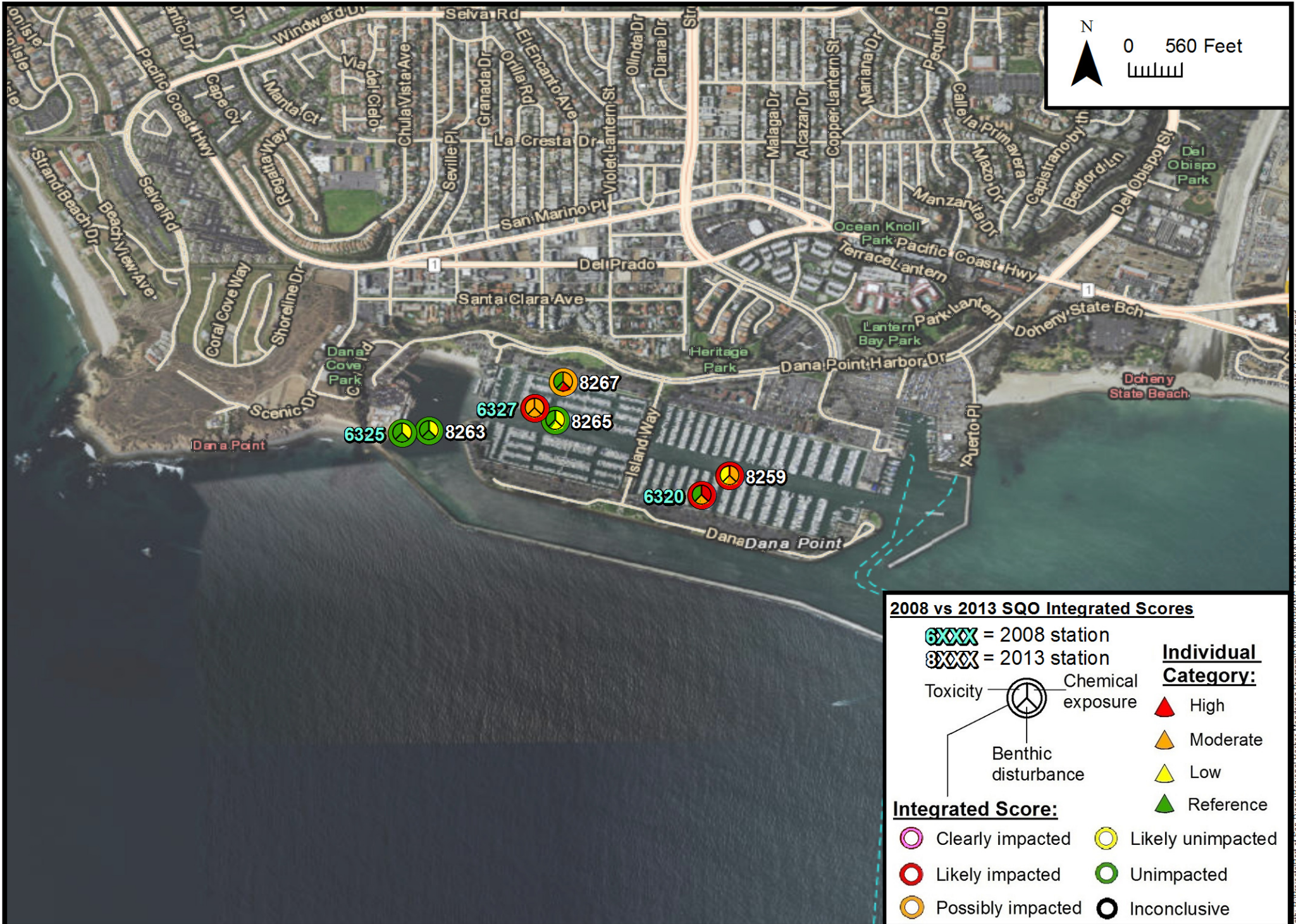


SQO Integrated Assessment Scores
 Central San Diego Bay
 RHMP 2013



SQO Integrated Assessment Scores
 South San Diego Bay
 RHMP 2013

2008 RHMP versus
2013 RHMP SQO MAPS



RHMP 2008 vs RHMP 2013 SQO Integrated Assessment Scores
 Historical Comparison
 Dana Point Harbor

*Note: Actual sampling locations are located on the right perimeter of the symbol for 2008 stations, and on the left perimeter of the symbol for 2013 stations.

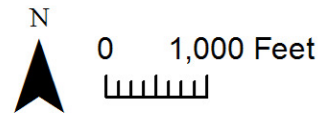


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RHMP 2008 vs RHMP 2013 SQO Integrated Assessment Scores
Historical Comparison
Oceanside Harbor

*Note: Actual sampling locations are located on the right perimeter of the symbol for 2008 stations, and on the left perimeter of the symbol for 2013 stations.



2008 vs 2013 SGO Integrated Scores

6XXX = 2008 station
8XXX = 2013 station

Individual Category:
 Toxicity: Chemical exposure
 Benthic disturbance:

▲ High
▲ Moderate
▲ Low
▲ Reference

Integrated Score:

	Clearly impacted		Likely unimpacted
	Likely impacted		Unimpacted
	Possibly impacted		Inconclusive

RHMP 2008 vs RHMP 2013 SGO Integrated Assessment Scores
 Historical Comparison
 Mission Bay

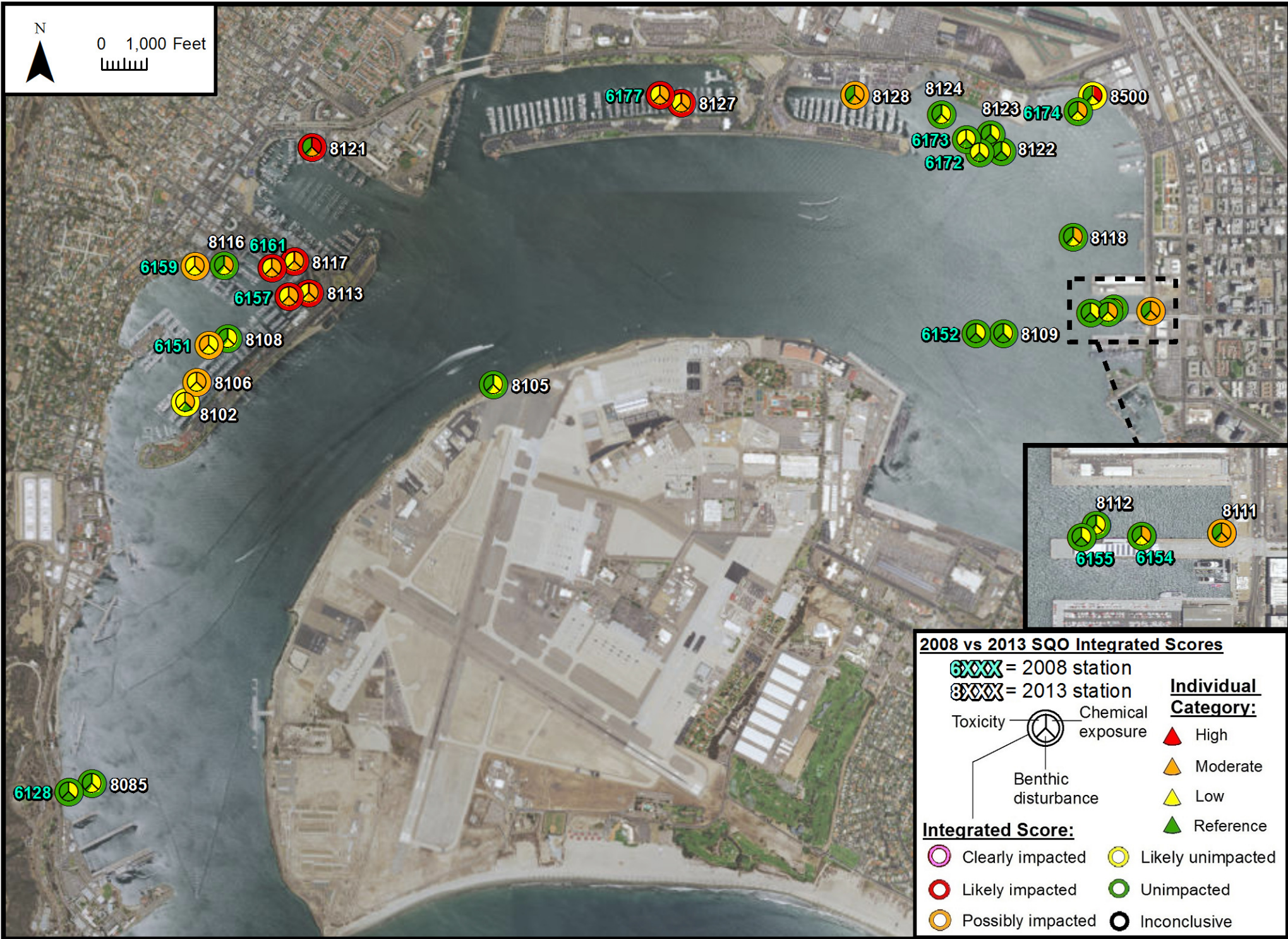
*Note: Actual sampling locations are located on the right perimeter of the symbol for 2008 stations, and on the left perimeter of the symbol for 2013 stations.



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2008 vs 2013 SGO Integrated Scores

~~6~~XXX = 2008 station

~~8~~XXX = 2013 station

Toxicity — — Chemical exposure

Benthic disturbance — —

Individual Category:

High

Moderate

Low

Reference

Integrated Score:

Clearly impacted

Likely unimpacted

Likely impacted

Unimpacted

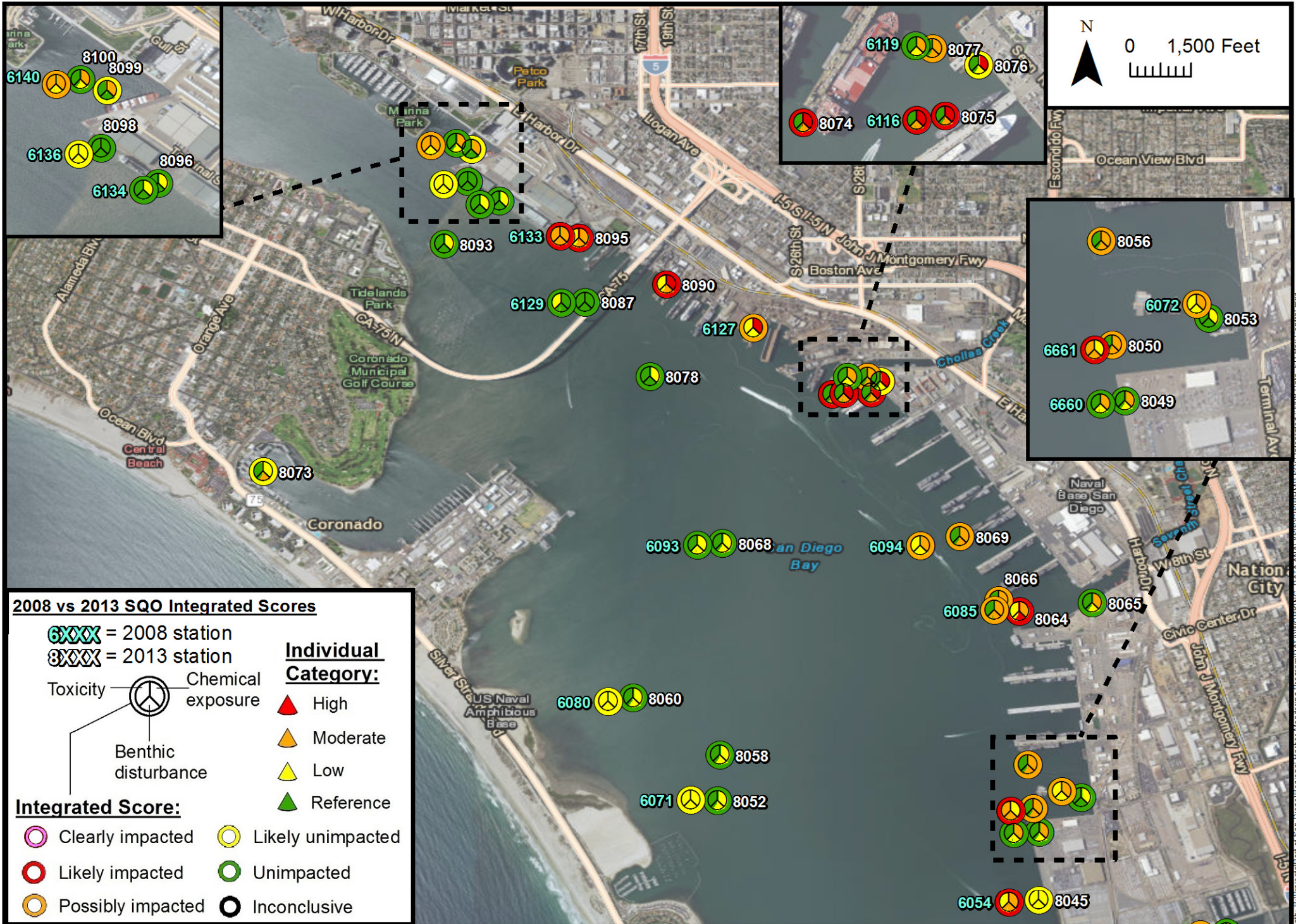
Possibly impacted

Inconclusive



RHMP 2008 vs RHMP 2013 SGO Integrated Assessment Scores Historical Comparison North San Diego Bay

*Note: Actual sampling locations are located on the right perimeter of the symbol for 2008 stations, and on the left perimeter of the symbol for 2013 stations.

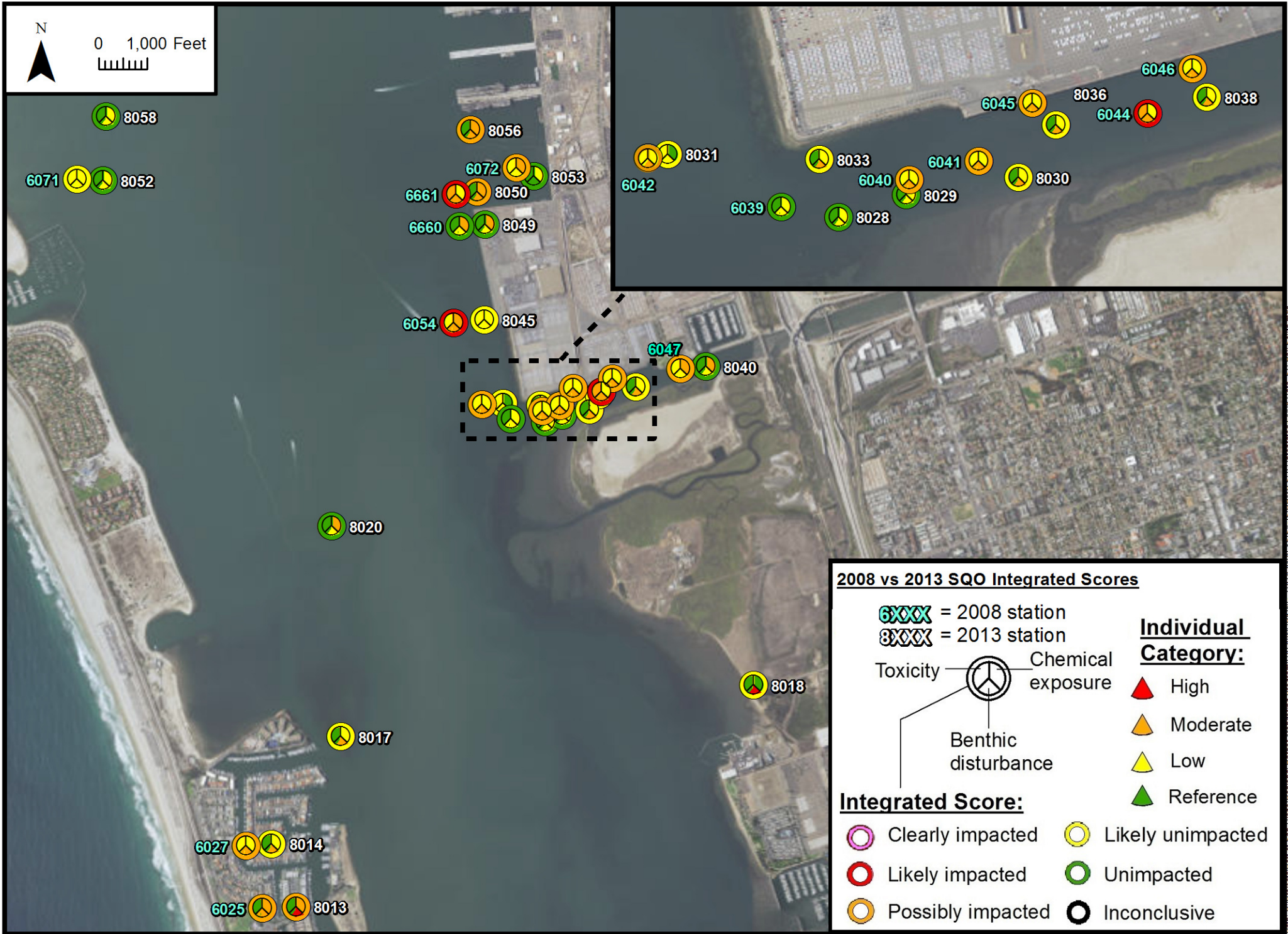


RHMP 2008 vs RHMP 2013 SGO Integrated Assessment Scores
 Historical Comparison
 Central San Diego Bay

*Note: Actual sampling locations are located on the right perimeter of the symbol for 2008 stations, and on the left perimeter of the symbol for 2013 stations.

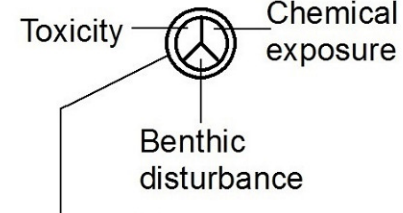


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2008 vs 2013 SQO Integrated Scores

6XXX = 2008 station
 8XXX = 2013 station



Individual Category:

- ▲ High
- ▲ Moderate
- ▲ Low
- ▲ Reference

Integrated Score:

- Clearly impacted
- Likely impacted
- Possibly impacted
- Likely unimpacted
- Unimpacted
- Inconclusive



RHMP 2008 vs RHMP 2013 SQO Integrated Assessment Scores
 Historical Comparison
 South San Diego Bay

*Note: Actual sampling locations are located on the right perimeter of the symbol for 2008 stations, and on the left perimeter of the symbol for 2013 stations.

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