

2010 Bellingham Bay Marine Sediment Monitoring



Sediment Quality Triad Data Summary

Table of Contents

Results 1

Sediment Triad Quality Index categories identified for stations in the 2010 Bellingham Bay survey.....	1
Spatial extent of Sediment Triad Quality Index categories for the 2010 Bellingham Bay survey.....	2
Spatial patterns of sediment condition in the 2010 Urban Waters Initiative sediment survey. <i>The numbers on the map are the station identifiers</i>	3
Incidence and spatial extent of sediment condition, as measured by the Sediment Quality Triad Index, in the 2010 Urban Waters Initiative sediment survey.....	4

Comparison with the Region 5

Incidence and spatial extent of sediment quality in Bellingham Bay, Strait of Georgia monitoring region, and all of Puget Sound, as measured with the Sediment Quality Triad Index.	5
--	---

Results

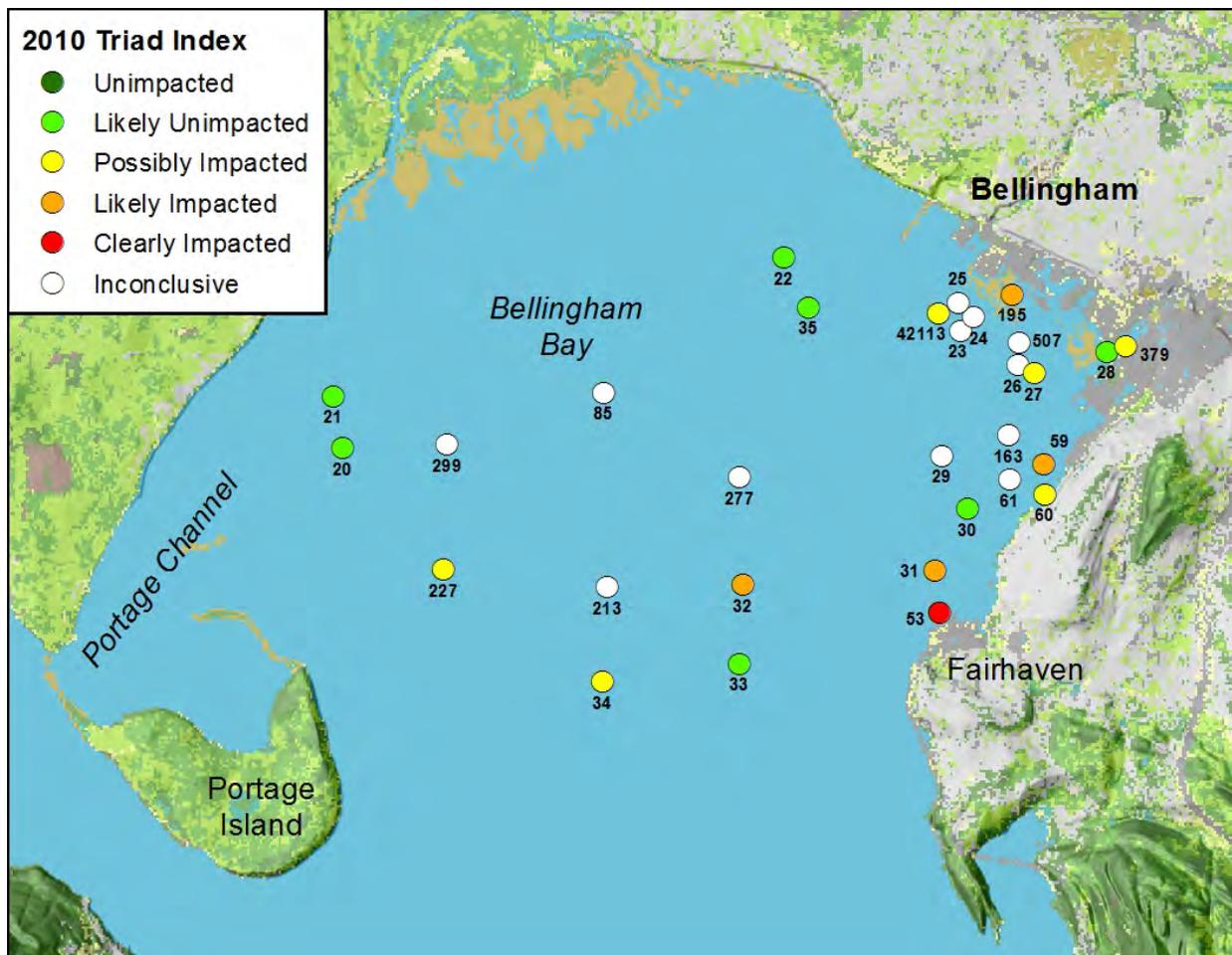
Sediment Triad Quality Index categories identified for stations in the 2010 Bellingham Bay survey.

Sample	Location	Chemistry Index Category	Toxicity Index Category	Interim Benthic Index Category	Triad Index Category
20	Northern Bellingham Bay	Minimum exposure	Non-Toxic	Adversely affected	Likely unimpacted
21	Northern Bellingham Bay	Minimum exposure	Non-Toxic	Adversely affected	Likely unimpacted
22	Bellingham Bay	Minimum exposure	Non-Toxic	Adversely affected	Likely unimpacted
23	Bellingham Bay, off Squalicum Hbr.	Minimum exposure	Low	Adversely affected	Inconclusive
24	Bellingham Bay, off Squalicum Hbr.	Minimum exposure	Low	Adversely affected	Inconclusive
25	Bellingham Bay, off Squalicum Hbr.	Minimum exposure	Low	Adversely affected	Inconclusive
26	Bellingham Bay, off Squalicum Hbr.	Minimum exposure	Low	Adversely affected	Inconclusive
27	Bellingham Bay, off Squalicum Hbr.	Minimum exposure	Moderate	Adversely affected	Possibly impacted
28	Bellingham Bay, Whatcom Wty.	Low exposure	Non-Toxic	Adversely affected	Likely unimpacted
29	Bellingham Bay, South Bellingham	Minimum exposure	Low	Adversely affected	Inconclusive
30	Bellingham Bay, South Bellingham	Low exposure	Non-Toxic	Adversely affected	Likely unimpacted
31	Bellingham Bay, South Bellingham	Low exposure	Moderate	Adversely affected	Likely impacted
32	Bellingham Bay	Minimum exposure	High	Adversely affected	Likely impacted
33	Bellingham Bay	Minimum exposure	Non-Toxic	Adversely affected	Likely unimpacted
34	Bellingham Bay	Minimum exposure	Moderate	Adversely affected	Possibly impacted
35	Bellingham Bay (central)	Minimum exposure	Non-Toxic	Adversely affected	Likely unimpacted
53	Bellingham Bay	Maximum exposure	Moderate	Adversely affected	Clearly impacted
59	Bellingham Bay, South Bellingham	Low exposure	Moderate	Adversely affected	Likely impacted
60	Bellingham Bay, South Bellingham	Low exposure	Low	Adversely affected	Possibly impacted
61	Bellingham Bay, South Bellingham	Minimum exposure	Low	Adversely affected	Inconclusive
85	Bellingham Bay (central)	Minimum exposure	Low	Adversely affected	Inconclusive
163	Bellingham Bay	Minimum exposure	Low	Adversely affected	Inconclusive
195	Bellingham Bay	Low exposure	Moderate	Adversely affected	Likely impacted

Sample	Location	Chemistry Index Category	Toxicity Index Category	Interim Benthic Index Category	Triad Index Category
213	Bellingham Bay (central)	Minimum exposure	Low	Adversely affected	Inconclusive
227	Bellingham Bay (central)	Minimum exposure	Moderate	Adversely affected	Possibly impacted
277	Bellingham Bay (central)	Minimum exposure	Low	Adversely affected	Inconclusive
299	Bellingham Bay (central)	Minimum exposure	Low	Adversely affected	Inconclusive
379	Bellingham Bay	Low exposure	Low	Adversely affected	Possibly impacted
507	Bellingham Bay	Minimum exposure	Low	Adversely affected	Inconclusive
42113	Bellingham Bay	Minimum exposure	Moderate	Adversely affected	Possibly impacted

Spatial extent of Sediment Triad Quality Index categories for the 2010 Bellingham Bay survey.

Chemistry Index Category	Toxicity Index Category	Interim Benthic Index Category	Triad Index Category	% of Area
Low exposure	Non-Toxic	Adversely affected	Likely unimpacted	4.7
Minimum exposure			Likely unimpacted	31.9
Low exposure	Low		Possibly impacted	4.7
Minimum exposure	Moderate		Possibly impacted	9.4
Low exposure			Likely impacted	8.9
Minimum exposure	High		Likely impacted	4.2
Maximum exposure	Moderate		Clearly impacted	4.2
Minimum exposure	Low		Inconclusive	31.9



Spatial patterns of sediment condition in the 2010 Urban Waters Initiative sediment survey. *The numbers on the map are the station identifiers.*

Incidence and spatial extent of sediment condition, as measured by the Sediment Quality Triad Index, in the 2010 Urban Waters Initiative sediment survey.

Sediment Triad Index Category	Stations		Area	
	No.	(%)	km ²	(%)
Bellingham Bay	30	(100.0)	41.3	(100.0)
Unimpacted	0	(0.0)	0.0	(0.0)
Likely unimpacted	7	(23.3)	15.1	(36.6)
Possibly impacted	6	(20.0)	5.8	(14.1)
Likely impacted	4	(13.3)	5.4	(13.2)
Clearly impacted	1	(3.3)	1.8	(4.2)
Inconclusive	12	(40.0)	13.2	(31.9)

Comparison with the Region

Incidence and spatial extent of sediment quality in Bellingham Bay, Strait of Georgia monitoring region, and all of Puget Sound, as measured with the Sediment Quality Triad Index.

Sediment Quality Triad Index Category	Regional Baseline		Second Baseline	
	Stations		Stations	
	No.	Area	No.	Area
	No.	km ² (%)	No.	km ² (%)
Bellingham Bay	Not Available		30 (100.0)	41.3 (100.0)
Unimpacted			0 (0.0)	0.0 (0.0)
Likely unimpacted			7 (23.3)	15.1 (36.6)
Possibly impacted			6 (20.0)	5.8 (14.1)
Likely impacted			4 (13.3)	5.4 (13.2)
Clearly impacted			1 (3.3)	1.8 (4.2)
Inconclusive			12 (40.0)	13.2 (31.9)
Strait of Georgia	61 (100.0)	386.9 (100.0)	40 (100.0)	360.6 (100.0)
Unimpacted	51 (83.6)	327.5 (84.6)	21 (52.5)	201.6 (55.9)
Likely unimpacted	7 (11.5)	54.6 (14.1)	9 (22.5)	82.5 (22.9)
Possibly impacted	3 (4.9)	4.81 (1.2)	2 (5.0)	1.0 (0.3)
Likely impacted	0 (0.0)	0.0 (0.0)	0 (0.0)	0.0 (0.0)
Clearly impacted	0 (0.0)	0.0 (0.0)	0 (0.0)	0.0 (0.0)
Inconclusive	0 (0.0)	0.0 (0.0)	8 (20.0)	75.6 (21.0)
Total Study Area	381 (100.0)	2294.1 (100.0)	Available after 2014	
Unimpacted	221 (58.0)	1498.3 (65.3)		
Likely unimpacted	115 (30.2)	695.3 (30.3)		
Possibly impacted	24 (6.3)	66.7 (2.9)		
Likely impacted	14 (3.7)	3.0 (0.1)		
Clearly impacted	2 (0.5)	0.2 (0.0)		
Inconclusive	5 (1.3)	30.5 (1.3)		