

# **APPENDIX D**

## **RDCO Electoral Area East Results**



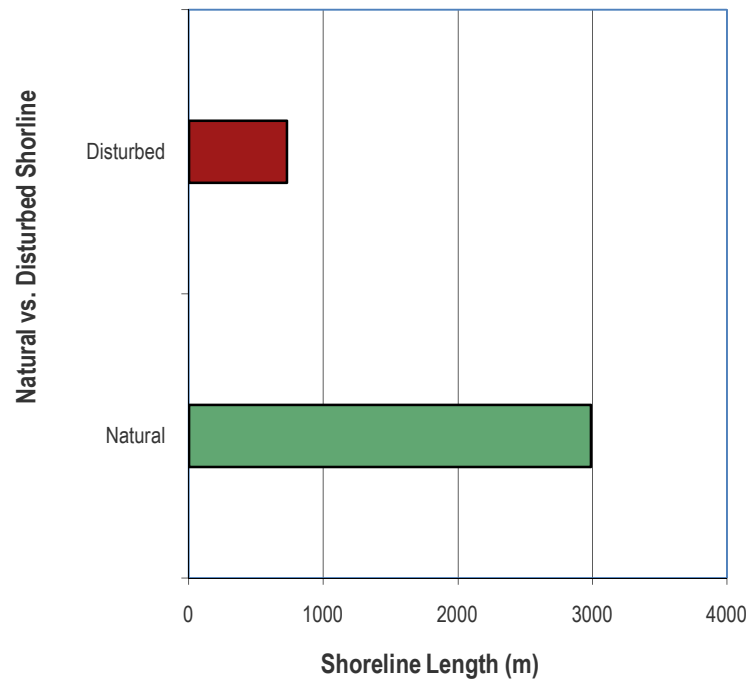


Figure 1: The percent of natural and disturbed shoreline.

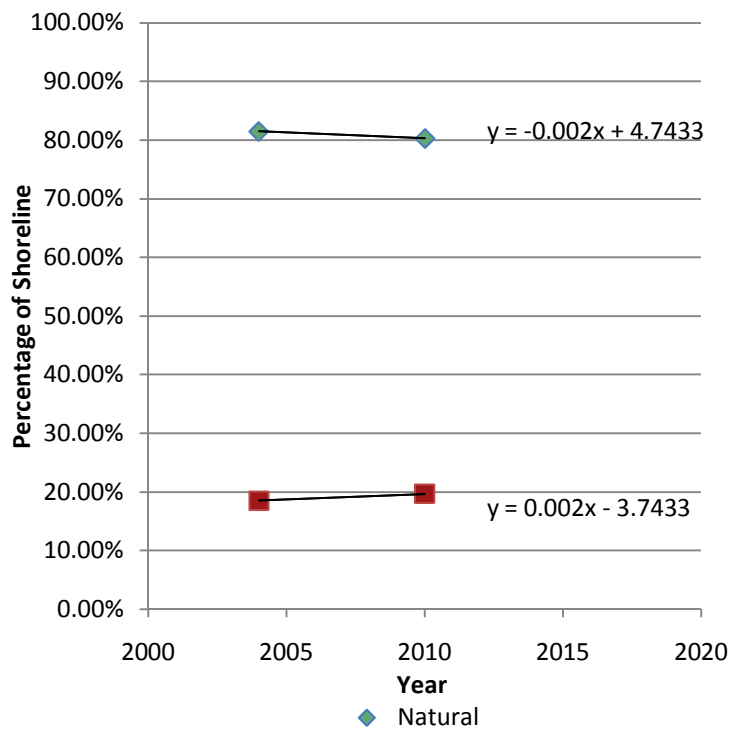


Figure 2: The percent of natural and disturbed shorelines in 2004 and 2010.



Table 1: The total shore length of percentage of shore length along Okanagan Lake in 2004 and 2010.

	2010		2004	
	% of Shoreline	Shore Length (m)	% of Shoreline	Shore Length (m)
Natural	80.32%	2987	81.50%	3030.71
Disturbed	19.68%	732	18.50%	688.14
<b>Total</b>		<b>3718.8</b>		<b>3718.8</b>

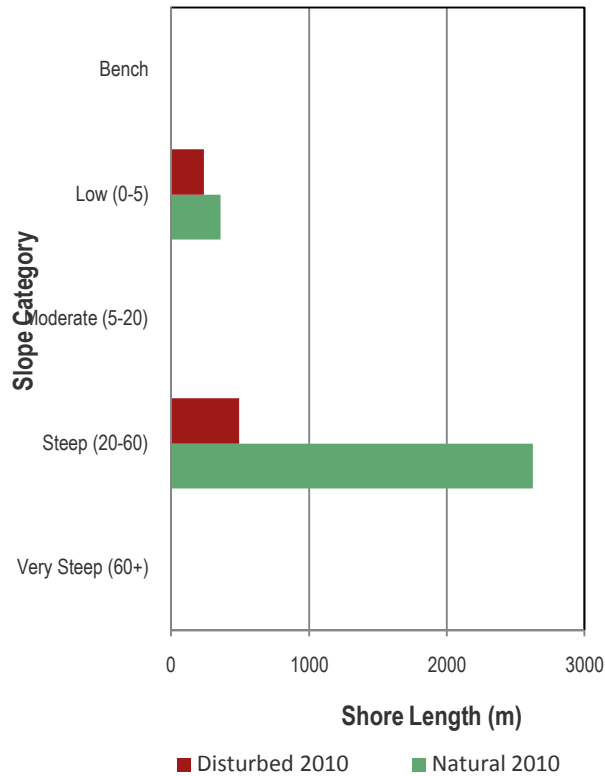
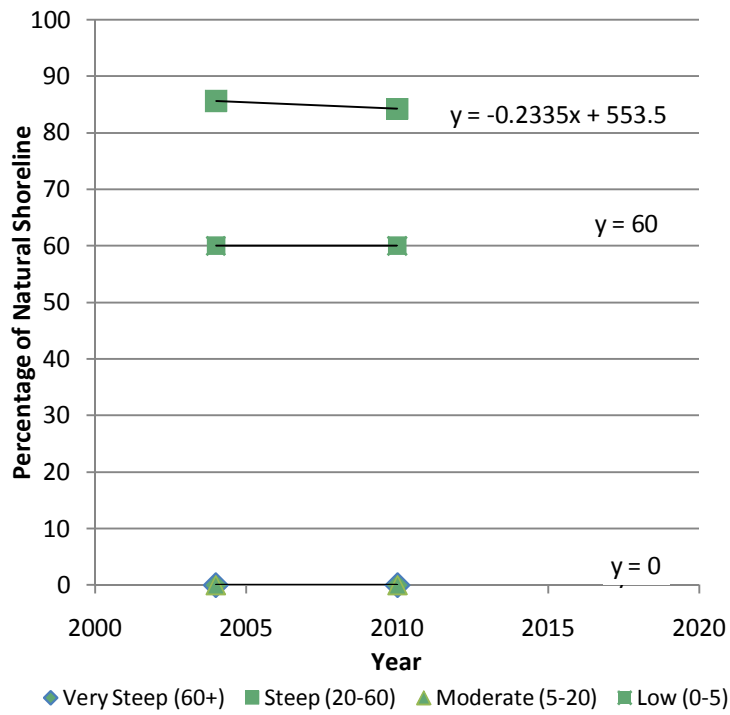


Figure 4: The length of natural and disturbed shorelines in each slope category.





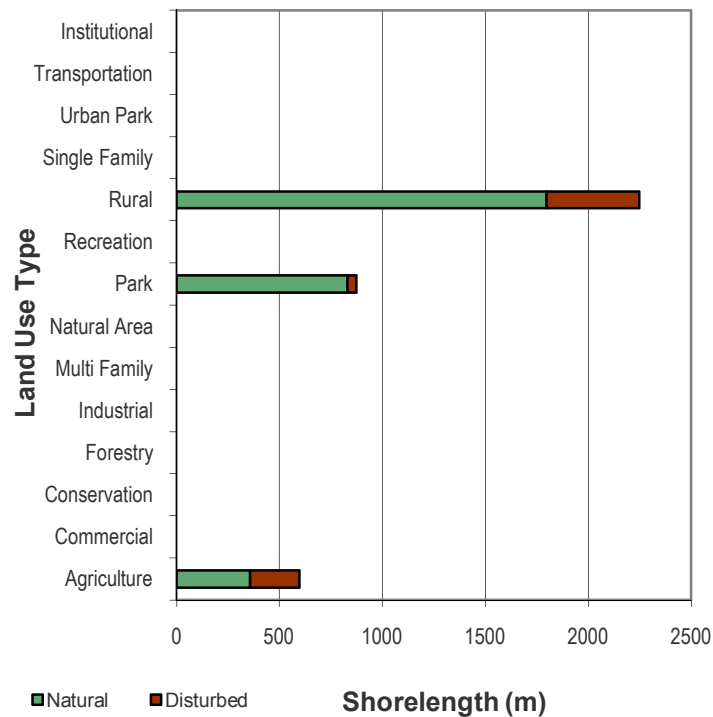
**Figure 5:** The percent of natural shoreline in each slope category in 2004 and 2010.



Table 2: The percentage of natural and disturbed shore lengths within each of the different slope categories on Okanagan Lake in 2004 and 2010.

2004							2010						
Slope	% of Total Shore Length	Total Shore Length (m)	Shore Length Natural (m)	Shore Length Disturbed (m)	% Natural	% Disturbed	Slope	% of Total Shore Length	Total Shore Length (m)	Shore Length Natural (m)	Shore Length Disturbed (m)	% Natural	% Disturbed
Very Steep (60+)	0	0	0	0	0	0	Very Steep (60+)	0.0	0	0	0	0	0
Steep (20-60)	84	3122	2673	449	86	14	Steep (20-60)	84.0	3122	2629	493	84.2	15.8
Moderate (5-20)	0	0	0	0	0	0	Moderate (5-20)	0.0	0	0	0	0	0
Low (0-5)	16	597	358	239	60	40	Low (0-5)	16.0	597	358	239	60.0	40.0
Bench	0	0	0	0	0	0	Bench	0.0	0	0	0	0	0
Total	100.0	3719	3031	688	81.5	18.5	Total	100.0	3719	2987	732	80.3	19.7



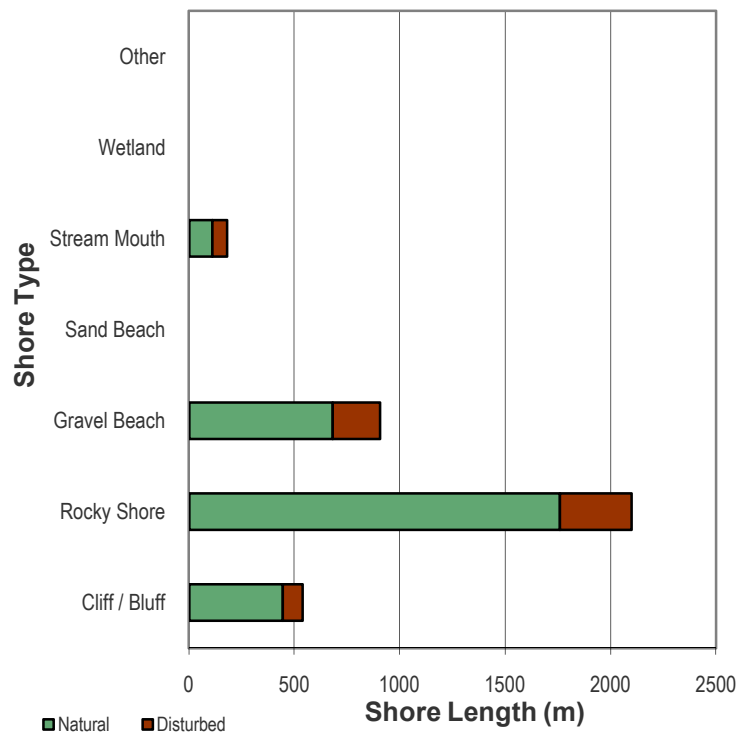


**Figure 6:** The length of natural and disturbed shoreline in each land use category

**Table 3:** The total length of natural and disturbed shorelines and their associated land uses around Okanagan Lake in 2004 and 2010.

	% of Shoreline Length	Shoreline Length (m)	Natural Shore Length (m)	Disturbed Shore Length (m)	% Natural	% Disturbed
Agriculture	16.0%	597	358	239	60.0%	40.0%
Commercial	0.0%	0	0	0	0	0
Conservation	0.0%	0	0	0	0	0
Forestry	0.0%	0	0	0	0	0
Industrial	0.0%	0	0	0	0	0
Multi Family	0.0%	0	0	0	0	0
Natural Area	0.0%	0	0	0	0	0
Park	23.5%	875	831	44	95.0%	5.0%
Recreation	0.0%	0	0	0	0	0
Rural	60.4%	2247	1798	449	80.0%	20.0%
Single Family	0.0%	0	0	0	0	0
Urban Park	0.0%	0	0	0	0	0
Transportation	0.0%	0	0	0	0	0
Institutional	0.0%	0	0	0	0	0



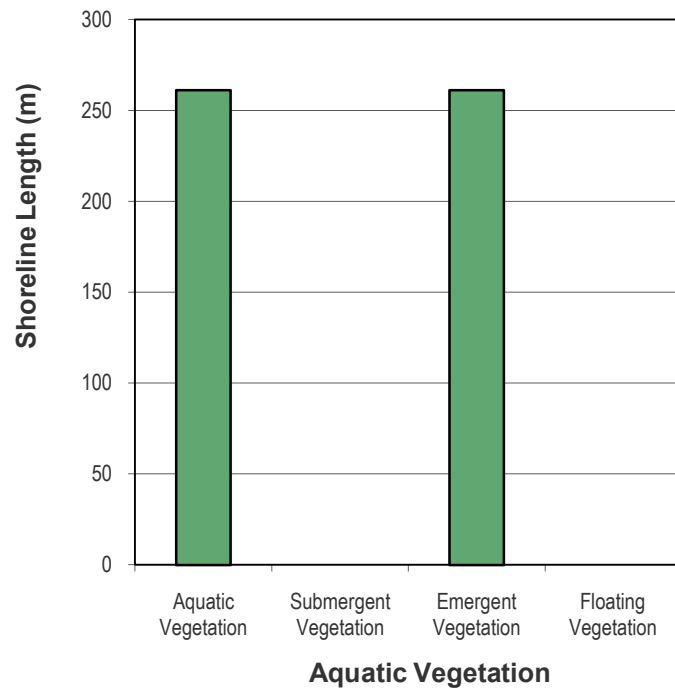


**Figure 7:** The length of natural and disturbed shoreline in each shore type category

**Table 4:** The total length of natural and disturbed shoreline and associated percentages within the different shore types that occur around Okanagan Lake in 2004 and 2010.

Shore Type	% of Total	Total Shoreline Length (m)	Natural Shore Length (m)	Disturbed Shore Length (m)	% Natural	% Disturbed
Cliff / Bluff	14.4%	537	443	94.3	82.4%	17.6%
Rocky Shore	56.4%	2098	1757	340.9	83.8%	16.2%
Gravel Beach	24.3%	905	680	225.1	75.1%	24.9%
Sand Beach	0.0%	0	0	0.0	0	0
Stream Mouth	4.8%	179	107	71.6	60.0%	40.0%
Wetland	0.0%	0	0	0.0	0	0
Other	0.0%	0	0	0.0	0	0
<b>Total</b>	<b>100.00%</b>	<b>3719</b>				





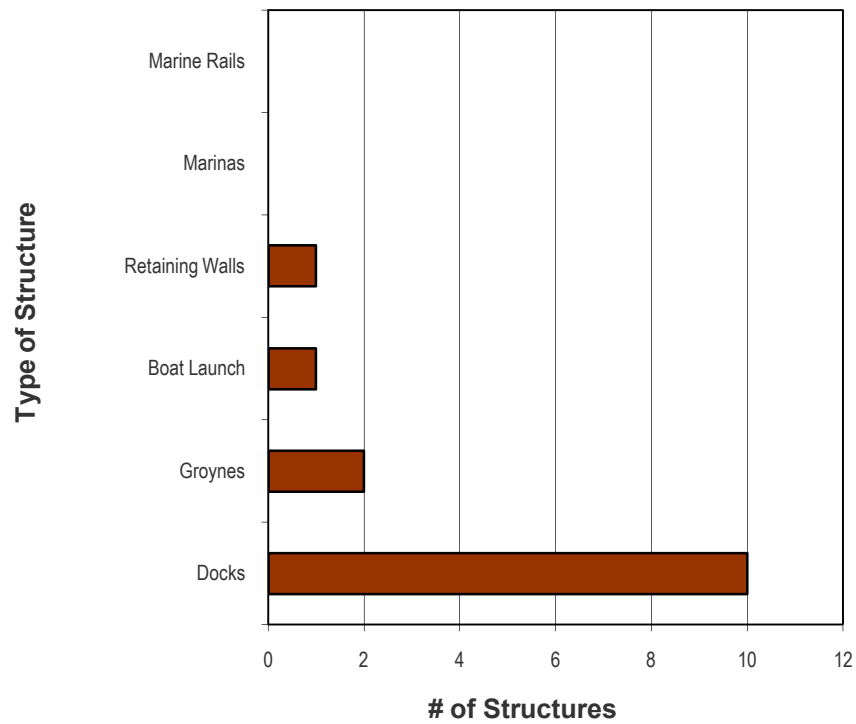
**Figure 8:** The shore length of each different type of aquatic vegetation.

Table 5: The total shoreline length and percentage that has aquatic, submergent, emergent, and floating vegetation along Okanagan Lake in 2004 and 2010.

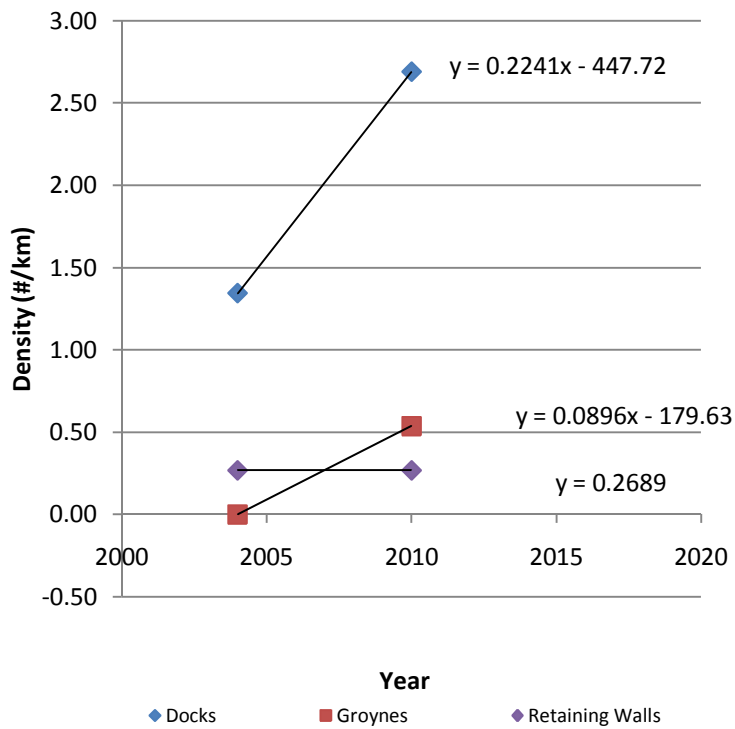
Type	% of Total Shoreline Length	Shoreline Length (m)
Aquatic Vegetation	7.0%	261
Submergent Vegetation	0.0%	0
Emergent Vegetation	7.0%	261
Floating Vegetation	0.0%	0





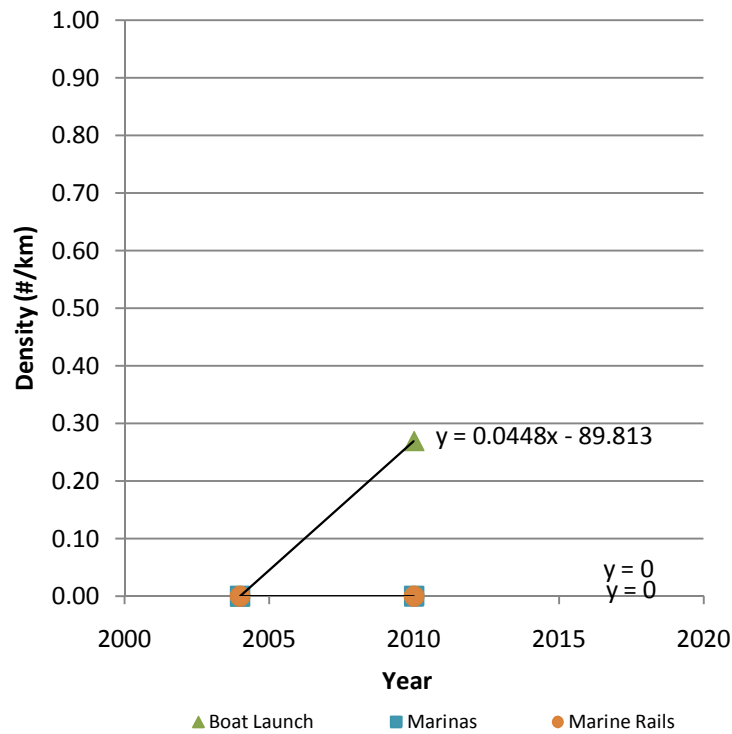


**Figure 9:** The total number of different types of modifications on Okanagan Lake



**Figure 10:** The density of docks, groynes, and retaining walls on Okanagan Lake in 2004 and 2010.



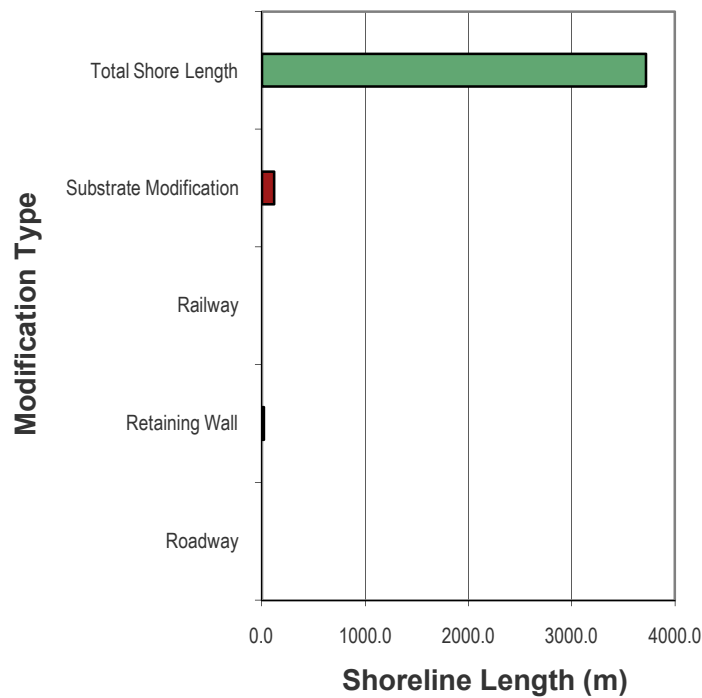


. **Figure 11:** The density of both launches, marinas, and marine rails on Okanagan Lake in 2004 and 2010.

Table 6: The total number and density (# per km) of different shoreline modifications occurring around Okanagan Lake in 2004 and 2010.

2004			2010		
Type	Total #	# Per km	Type	Total #	# Per km
Docks	5	1.34	Docks	10	2.69
Groynes	0	0.00	Groynes	2	0.54
Boat Launch	0	0.00	Boat Launch	1	0.27
Retaining Walls	1	0.27	Retaining Walls	1	0.27
Marinas	0	0.00	Marinas	0	0.00
Marine Rails	0	0.00	Marine Rails	0	0.00



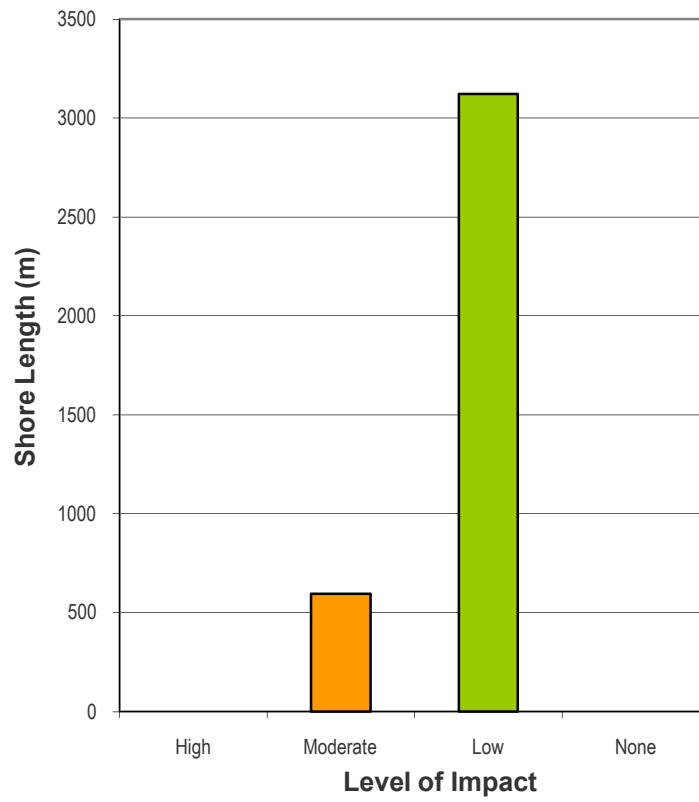


. **Figure 12:** The shore length of different shore modifiers were observed.

Table 7: The approximate shoreline length that has been impacted by substrate modification, road and railways, and retaining walls along Okanagan Lake in 2004 and 2010.

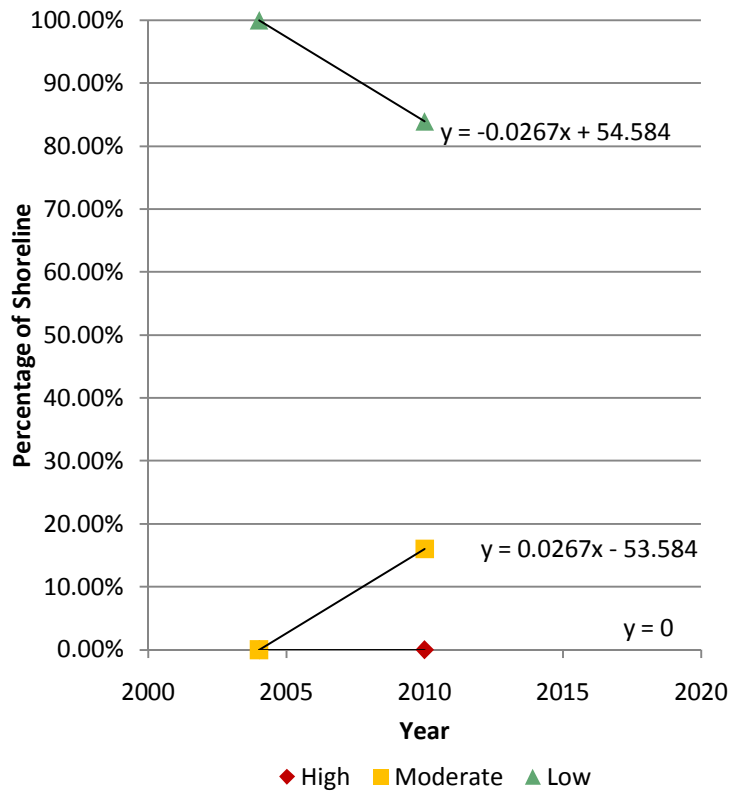
Category	% of Shoreline	Shorelength (m)
Roadway	0%	0.0
Retaining Wall	1%	22.5
Railway	0%	0.0
Substrate Modification	3%	120.7
Total Shore Length		3718.8





. **Figure 13:** The shore length of different levels of impact on Okanagan Lake..



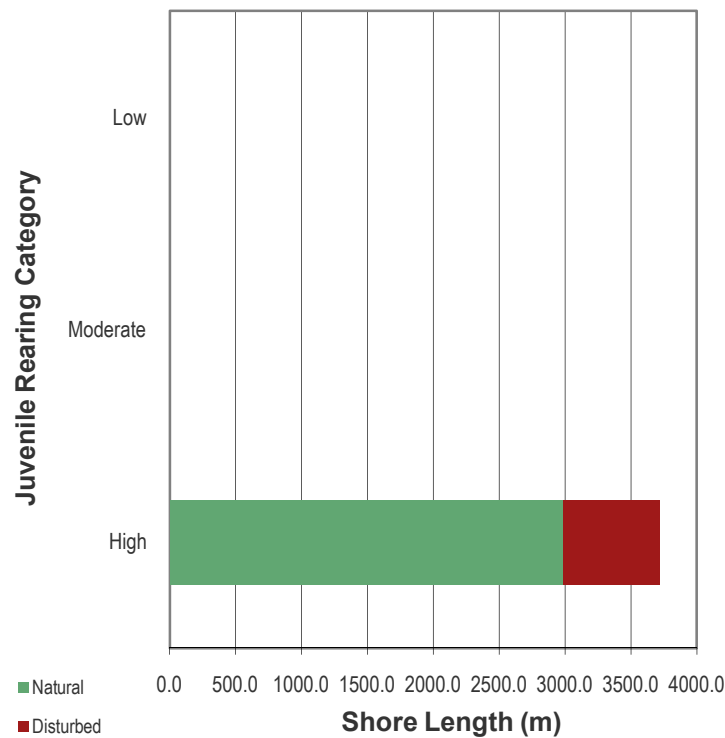


. **Figure 14:** The percentage of the shoreline classified as High, Moderate or Low Level of Impact in 2004 and 2010 on Okanagan Lake..

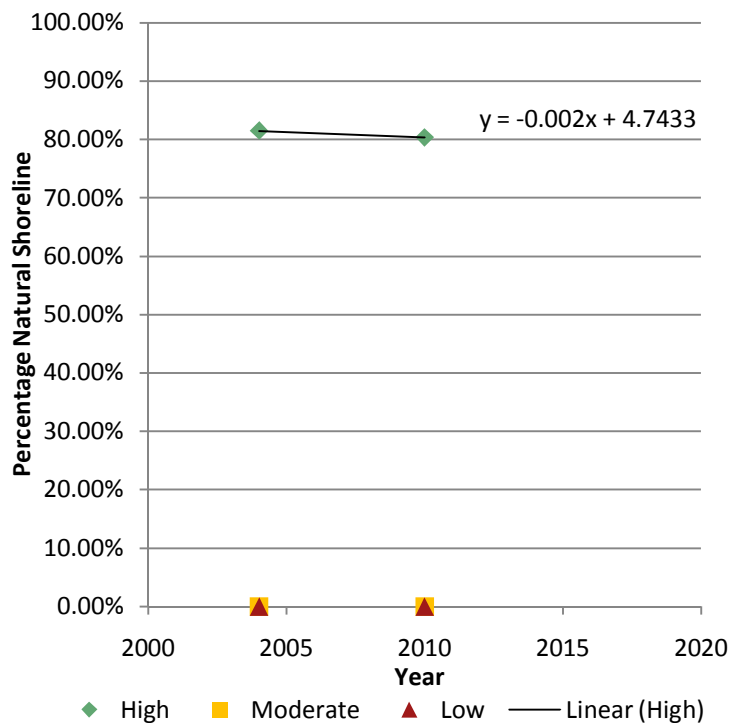
Table 8: The Level of Impact around Okanagan Lake (High > 40%, Moderate (10-40%), Low (<10%), None (0%)) in 2004 and 2010.

Level of Impact	2004		2010		Shore Length
	% of Shoreline	Shore Length	% of Shoreline	Shore Length	
High	0.00%	0	High	0.00%	0
Moderate	0.00%	0	Moderate	16.04%	597
Low	100.00%	3719	Low	83.96%	3122
None	0.00%	0	None	0.00%	
				Shore Length	3718.8





**Figure 15:** The natural and disturbed shore length of areas classified as having and High, Moderate, or Low Juvenile Rearing ranking.



**Figure 16:** The percentage of High, Moderate, or Low Juvenile Rearing ranking in 2004 and 2010.



Table 9: The shore length and percentage of shoreline areas classified as having High, Moderate, or Low Juvenile Rearing Value on Okanagan Lake in 2004 and 2010.

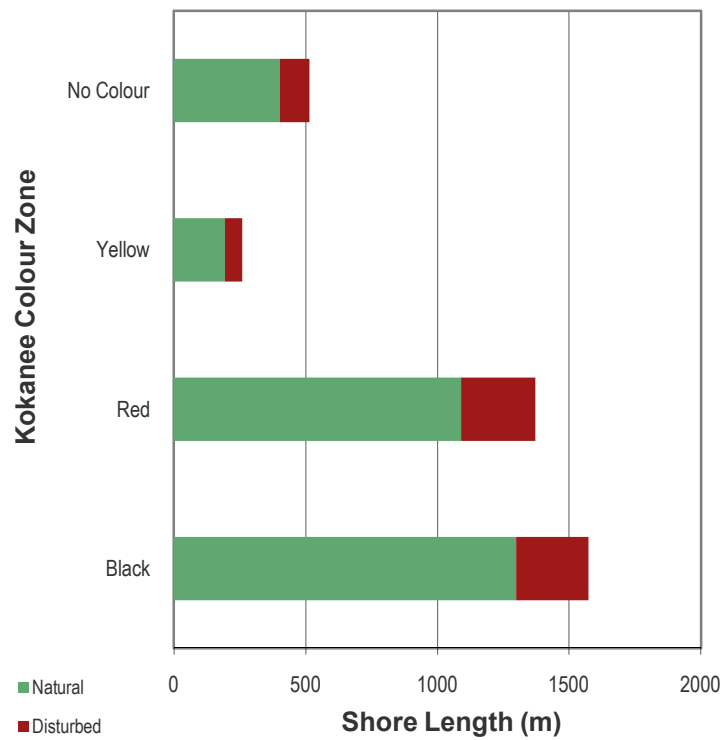
Juvenile Rearing Category	# of Segments	2004					2010						
		Shore Length (m or %)					Shore Length (m or %)						
		Natural (m)	Natural (%)	Disturbed (m)	Disturbed (%)	Total	Natural (m)	Natural (%)	Disturbed (m)	Disturbed (%)	Total		
High	3	3030.7	81.50%	688.136	18.50%	3719.7	High	3	2987.0	80.3%	731.9	19.7%	3719.6
Moderate	0	0.0	0	0	0	0	Moderate	0	0.0	0	0.0	0	0
Low	0	0.0	0	0	0	0	Low	0	0.0	0	0.0	0	0

0

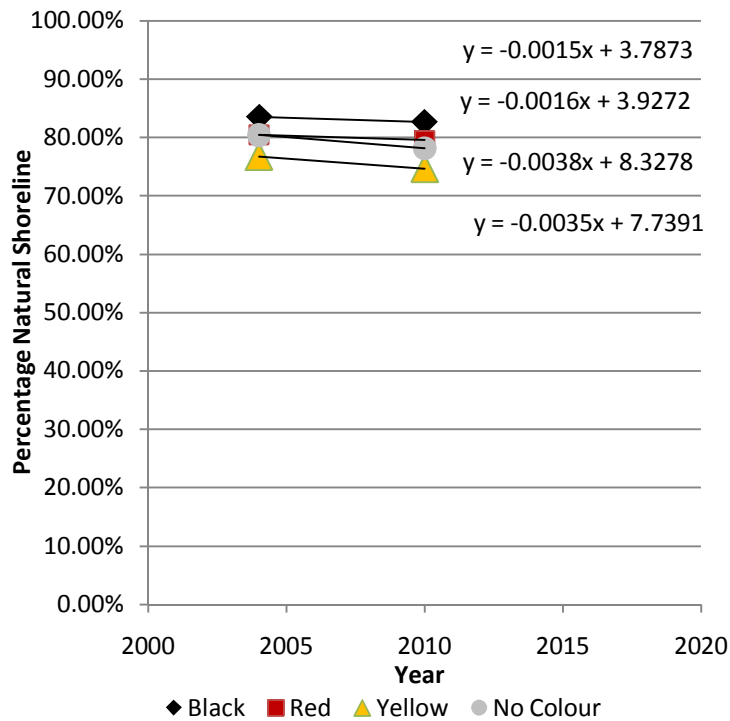
Table 10: The length of natural and disturbed shorelines within the different Okanagan Large Lakes Protocol Kokanee Shore Spawning areas in 2004 and 2010.

2004								2010							
Black		Red		Yellow		No Colour		Black		Red		Yellow		No Colour	
Natural	Disturbed	Natural	Disturbed	Natural	Disturbed	Natural	Disturbed	Natural	Disturbed	Natural	Disturbed	Natural	Disturbed	Natural	Disturbed
83.54%	16.46%	80.47%	19.53%	76.70%	23.30%	80.43%	19.57%	82.7%	17.3%	79.5%	20.5%	74.6%	25.4%	78.2%	21.8%
1313.78	258.945	1103.76	267.904	199.472	60.597	413.695	100.69	1300	273	1091	281	194	66	402	112





**Figure 17:** The length of natural and disturbed shoreline in the different shore spawning kokanee zones.



**Figure 18:** The percentage of natural shoreline in the different shore spawning kokanee zones in 2004 and 2010.





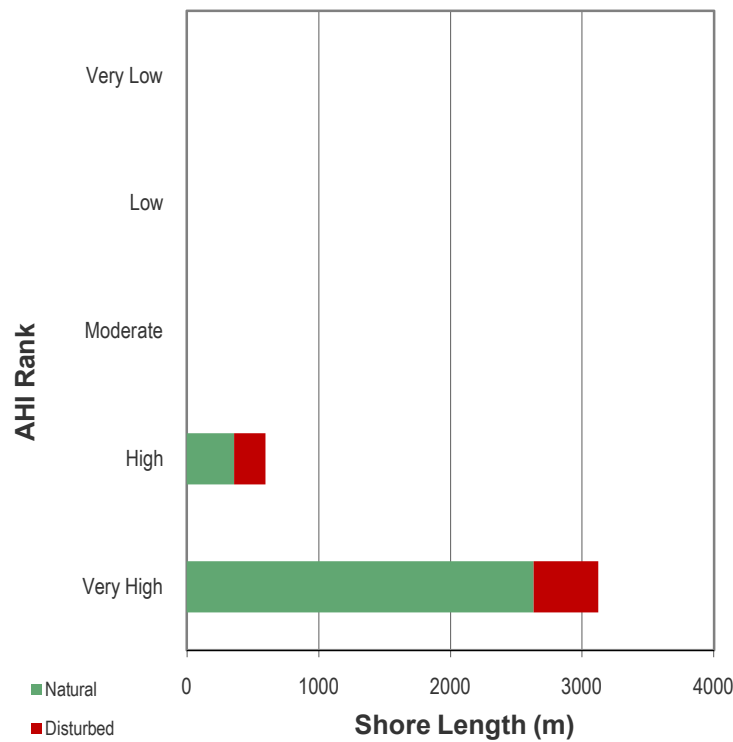


Figure 18: The length of natural and disturbed shoreline in the different AHI rankings.

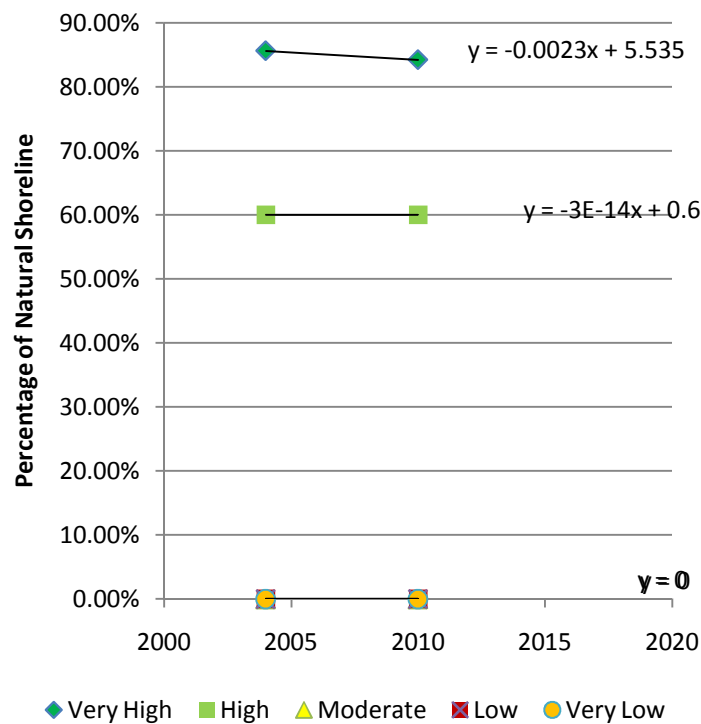


Figure 19: The length of natural shoreline in the different AHI rankings in 2004 and 2010.



Table 11: The shoreline that is natural and disturbed (m and %) within each of the different AHI rankings in 2004 and 2010.

AHI Rank	2004				AHI Rank	2010			
	Natural		Disturbed			Natural		Disturbed	
	m	%	m	%		m	%	m	%
Very High	2672.73	85.60	449.490	14.40	Very High	2629	84.2%	493.229	15.8%
High	9	60.00	238.645	40.00	High	357.96	60.0%	238.645	40.0%
High	357.968		3		High	8		3	
Moderate	0	0	0	0	Moderate	0	0	0	0
Low	0	0	0	0	Low	0	0	0	0
Very Low	0	0	0	0	Very Low	0	0	0	0

