



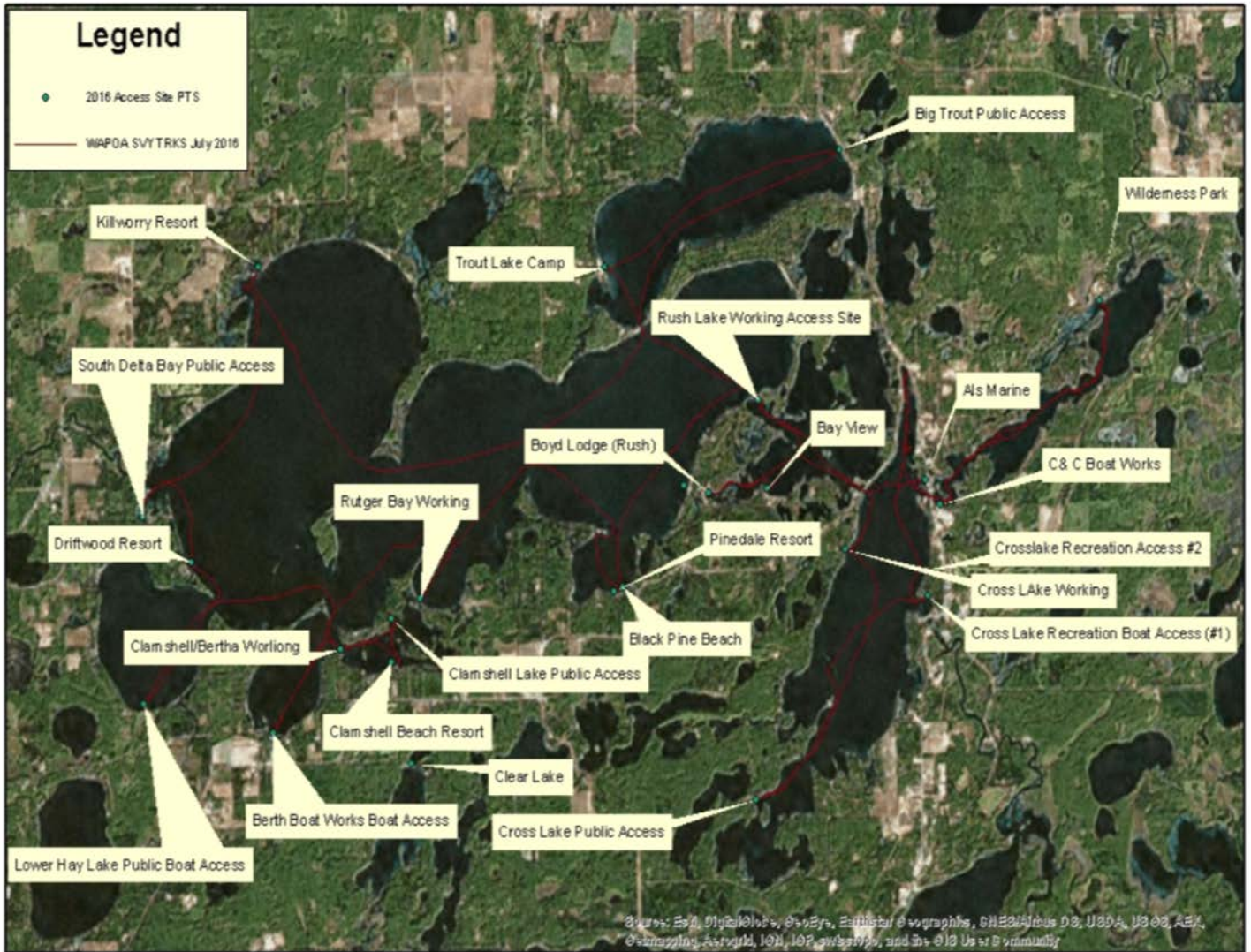
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Whitefish Area Property Owners Association
2016
Access Site Report

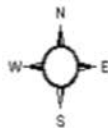
Legend

◆ 2016 Access Site PTS

— WAPOA SVY TRKS July 2016



WAPOA Access Site Survey July & September 2016



0 2,000 4,000 8,000 12,000 16,000 feet

PLM Lake & Land
Management Corp.

Whitefish Area Property Owners Association Access Site Monitoring 2016

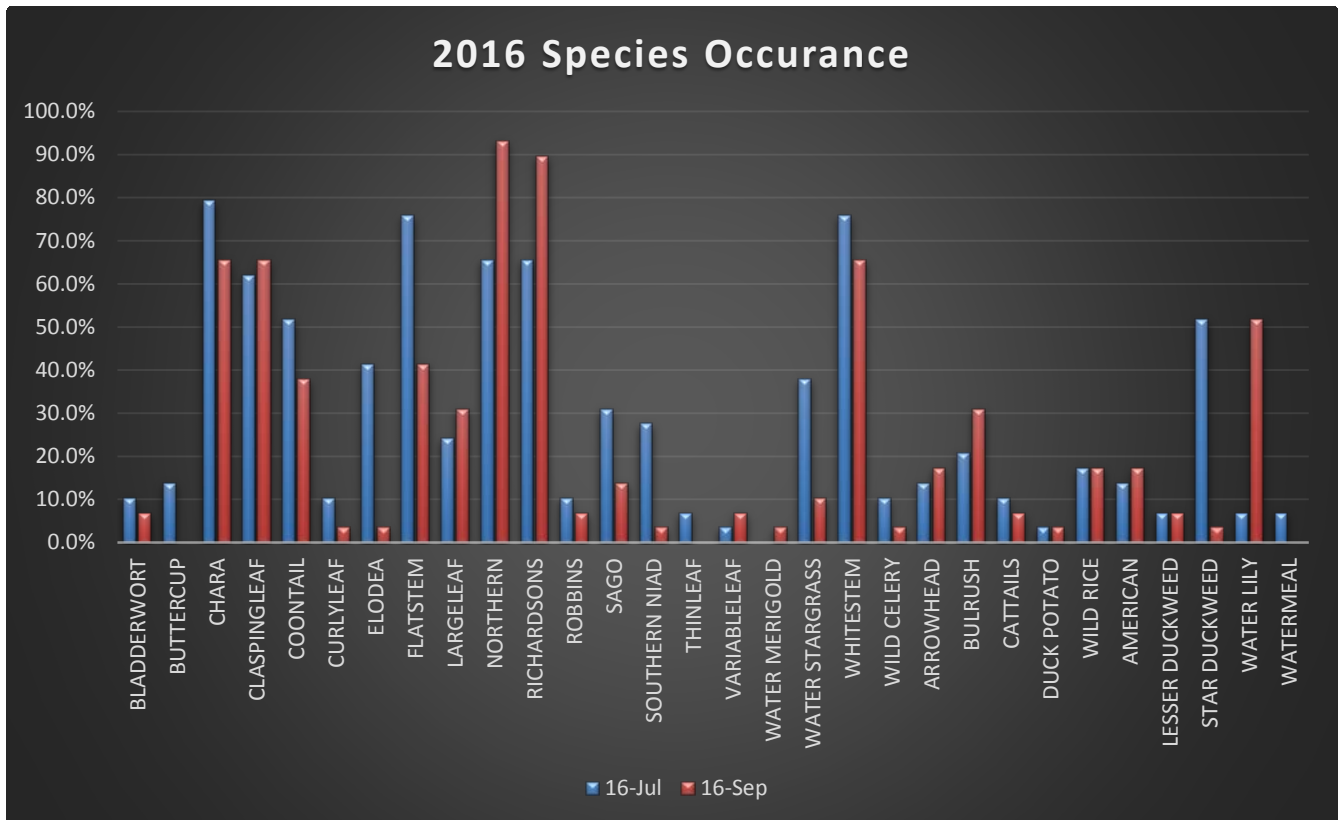
During the summer of 2016, PLM Lake and Land Management Corp. conducted two surveys of public and private boat access sites for the Whitefish Area Property Owners Association. Sample dates include July 12th and two dates in September, the 23rd and 27th respectfully. The intention of such surveys is to help identify any newly introduced Aquatic Invasive Species within the sites sampled. In addition, all species that were present at the time were also recorded. The following table shows the species observed and occurrence.

July Survey '16		September Survey '16	
Species	Occurrence	Species	Occurrence
Bladderwort	10.30%	Bladderwort	6.90%
Buttercup	13.80%	Buttercup	0.00%
Chara	79.30%	Chara	65.50%
Clasping Leaf	62.10%	Clasping Leaf	65.50%
Coontail	51.70%	Coontail	37.90%
Curly Leaf	10.30%	Curly Leaf	3.40%
Elodea	41.40%	Elodea	3.40%
Flatstem	75.50%	Flatstem	41.40%
Largeleaf	24.10%	Large Leaf	31.00%
Northern	65.50%	Northern	93.10%
Richardsons	65.50%	Richardsons	89.70%
Robbins	10.30%	Robbins	6.90%
Sago	31.00%	Sago	13.80%
Southern Niad	27.60%	Southern Niad	3.40%
Variable Leaf	6.90%	Variable Leaf	0.00%
Water Merigold	3.40%	Water Merigold	6.90%
Water Star Grass	0.00%	Water Star Grass	3.40%
Whitestem	37.90%	Whitestem	10.30%
Wild Celery	75.50%	Wild Celery	65.50%
Arrowhead	10.30%	Arrowhead	3.40%
Bulrush	13.80%	Bulrush	17.20%
Cattails	20.70%	Cattails	31.00%
Duck Potato	10.30%	Duck Potato	6.90%
Purple Loosestrife	3.40%	Purple Loosestrife	3.40%
Wild Rice	17.20%	Wild Rice	17.20%
American	13.80%	American	17.20%
Lesser Duck Weed	6.90%	Lesser Duck Weed	6.90%
Spatterdock	0.00%	Spatterdock	3.40%
Watermeal	6.90%	Watermeal	0.00%
Water Lily	51.70%	Water Lily	51.70%

Invasive Species

Two types of invasive plant species were observed on the Whitefish Chain and area lakes within the designated search areas. Both Curly Leaf Pondweed and Purple Loosestrife were noted. Although invasive, these species have historically been in the area surveyed and are considered a lower priority compared to other invasive species. Although the case, it will be best to continue to monitor for rapid growth or expansion. The species were observed at the following locations:

- Clear Lake (CLP/Purple Loosestrife)
- Eagle (CLP)
- Mitchell (Purple Loosestrife)
- South Delta Bay (CLP)
- Upper Hay (CLP)



	DEPTH (FT)	BLADDER WORT	Butter Cup	CHARA	CLASPIN G LEAF	COONTAI L	CURLYLE AF	ELODEA	FLATSTE M	LARGELE AF	NORTHER N	RICHARD SONS	ROBBINS	SAGO	SOUTHER N NIAD	Variable Leaf	Water Merigold	WATER STAR GRASS	Whiteste m	WILD CELERY	ARROWH EAD	BULRUSH	CATTAILS	DUCK POTATO	PURPLE LOOSE STRIFE	WILD RICE	AMERICA N	LESSER DUCK WEED	WATER LILY	WATERM EAL	Number of Species
Als Marine	2.6	0	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	8
Bay View	4.0	0	1	1	1	1	0	1	1	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	11
Bertha Boat Works Boat Access	2.4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	
Big Trout Public Access	1.6	0	0	1	1	1	0	0	0	0	1	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	8	
Black Pine Beach	5.0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Boyd Lodge-Rush	4.3	0	0	1	1	1	0	1	1	0	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0	0	0	0	1	16	
C&C Boatworks	5.7	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3		
Clamshell Beach Resort/Towering Pines	3.2	0	0	0	1	1	0	1	1	1	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	1	10		
Clamshell Working	4.3	1	0	1	1	0	0	0	1	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	10		
Clamshell Lake Public Access	3.5	0	0	1	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	10		
Clear Lake Public Access	4.0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	6		
Cross Lake Public Access	4.6	0	1	1	1	0	0	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	1	1	0	0	0	1	12		
Cross Lake Recreation Boat Access (#1)	3.8	0	0	1	1	0	0	0	1	1	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	8		
Crosslake Recreation Boat Access (#2)	4.9	0	0	0	1	1	0	0	1	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	7		
Crosslake Working	5.2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2		
Driftwood Family Resort	2.5	0	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	1	9		
Eagle Lake Public	4.9	0	0	1	1	1	1	0	1	1	1	0	0	0	0	0	1	0	0	1	0	1	1	0	0	1	0	1	13		
East Fox Public	4.0	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	7	
Kego Lake Public	5.5	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3		
Killworry Resort	2.5	1	0	1	1	0	0	1	1	0	1	1	1	1	0	1	0	0	0	1	0	1	1	0	0	1	1	1	1	18	
Lower Hay Lake Public	3.3	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	6		
Mitchell Lake Public	4.6	0	0	1	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	8		
Pinedale Resort	4.2	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5		
Rush Lake Working	2.8	0	1	1	1	1	0	1	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	10		
Ruttger Bay Working	5.9	0	0	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	7		
South Delta Bay Public Access	2.8	1	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0	1	1	1	0	0	1	0	1	0	1	1	19	
Trout Lake Camp	3.0	0	0	1	1	0	0	1	1	1	1	1	0	1	0	1	0	0	1	1	0	1	0	0	0	0	1	0	13		
Upper Hay Public	4.0	0	0	1	1	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6		
Wilderness Park	3.6	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	7		
Total Occurrence:	29	3	4	23	18	15	3	12	22	7	19	19	3	9	8	2	1	0	11	22	3	4	6	3	1	5	4	2	15	2	246
Percent Occurrence:		10.3%	13.8%	79.3%	62.1%	51.7%	10.3%	41.4%	75.9%	24.1%	65.5%	65.5%	10.3%	31.0%	27.6%	6.9%	3.4%	0.0%	37.9%	75.9%	10.3%	13.8%	20.7%	10.3%	3.4%	17.2%	13.8%	6.9%	51.7%	6.9%	848.3%

July Site Field Data- 0=Absent 1 = Present

	DEPTH (FT)	BLADDER WORT	Butter Cup	CHARA	CLASPIN G LEAF	COONTAI L	CURLYLE AF	ELODEA	FLATSTE M	LARGELE AF	NORTHER N	RICHARD SONS	ROBBINS	SAGO	SOUTHER N NIAD	Variable Leaf	Water Merigold	WATER STAR GRASS	Whiteste m	WILD CELERY	ARROWH EAD	BULRUSH	CATTAILS	DUCK POTATO	PURPLE LOOSE STRIPE	WILD RICE	AMERICA N	LESSER DUCK WEED	Spatterd ock	WATER LILY	WATERM EAL	Number of Species
Als Marine	5.6	1	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	10	
Bay View	4.4	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Bertha Boat Works Boat Access	2.6	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	9	
Big Trout Public Access	2.1	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	
Black Pine Beach	3.9	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Boyd Lodge-Rush	3.1	1	0	0	0	1	0	0	1	1	1	1	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	11	
C&C Boatworks	8.1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	6	
Clamshell Beach Resort/Towering Pines	2.8	0	0	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	8	
Clamshell Working	2.2	0	0	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	6	
Clamshell Lake Public Access	3.8	0	0	0	0	1	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	1	0	9	
Clear Lake Public Access	2.0	0	0	1	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	9	
Cross Lake Public Access	4.2	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	1	0	8	
Cross Lake Recreation Boat Access (#1)	4.4	0	0	1	1	0	0	0	1	1	1	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	8	
Crosslake Recreation Boat Access (#2)	5.1	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
Crosslake Working	5.3	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	
Driftwood Family Resort	2.4	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	
Eagle Lake Public	2.4	0	0	0	0	1	0	0	1	0	1	1	0	1	0	0	1	0	0	1	0	1	1	1	0	1	0	0	1	0	12	
East Fox Public	3.6	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	6	
Kego Lake Public	3.7	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4	
Killworry Resort	2.0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	0	8	
Lower Hay Lake Public	2.7	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	
Mitchell Lake Public	3.1	0	0	1	0	1	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	1	1	1	1	0	1	0	1	0	14	
Pinedale Resort	4.2	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Rush Lake Working	3.6	0	0	1	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0	1	10	
Ruttger Bay Working	4.1	0	0	1	1	0	0	0	1	0	1	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	8	
South Delta Bay Public Access	3.0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	0	1	8	
Trout Lake Camp	2.1	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
Upper Hay Public	3.3	0	0	1	1	1	0	0	0	1	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7	
Wilderness Park	4.9	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	1	0	6
Total Occurrence:	29	2	0	19	19	11	1	1	12	9	27	26	2	4	1	0	2	1	3	19	1	5	9	2	1	5	5	2	1	15	0	205
Percent Occurrence:	6.9%	0.0%	65.5%	65.5%	37.9%	3.4%	3.4%	41.4%	31.0%	93.1%	89.7%	6.9%	13.8%	3.4%	0.0%	6.9%	3.4%	10.3%	65.5%	3.4%	17.2%	31.0%	6.9%	3.4%	17.2%	17.2%	6.9%	3.4%	51.7%	0.0%	706.9%	

September Site Field Data- 0 = Absent 1 = Present

General comments and discussion

As you can see from the above tables, 2016 got off to a rapid start much like the 2015 season. With arguably one of the latest ice on dates with a low snow cover, followed by an earlier ice off the species had a significant chance to grow. What's more, Whitefish Chain and area lakes still show evidence of having a very healthy native population. Although the case the species do appear to be growing deeper, perhaps due to the increased clarity of the water along with a longer growing season. Continuing to monitor the access sites will provide the Whitefish Property Owners Association with the information needed regarding the wellbeing of the body of water.

