

2013



[2013 PROJECT INSPECTION REPORT]

The mission of the Clearwater River Watershed District is to promote, preserve, and protect water resources within the boundaries of the district in order to maintain property values and quality of life as authorized by MS 103D.

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Summary

This 2013 Project Inspection Report serves to provide an overview of existing District projects and their operational and maintenance needs. The projects were inspected by Dennis Loewen and Cole Loewen in May and June of 2013.

The Project Inspection Table (next page) contains the inspection results and recommendations of maintenance activities with estimated costs. The included figures show where a previously noted maintenance activity is located, and its potential design. The photographs show existing conditions for select projects.

Maintenance work is recommended at: the Annandale Wetland Treatment System, Kingston Wetland Treatment System, Watkins Wetland Treatment System, the District's Aerator Buildings, Hidden River Sewer System, Rest-A-While Sewer System, Clearwater Harbor Sewer System, Swartout Lake Inlet and Outlet Fish Barriers, Illsley Avenue Fish Barrier, and Segner Pond. Optional maintenance work is included for: the Watkins Wetland Isolation Project, Watkins Wetland Treatment System, Highway 55 Fish Trap, Lake Augusta Erosion Control Project, School Section Lake Outlet Control Project, Pleasant Lake Outlet Control Project, Kimball Stormwater Phase I, Rest-A-While Sewer System, Henshaw Lake Outlet Fish Barrier, Swartout Lake Outlet Fish Barrier, and Segner Pond Fish Barrier.

The table below lists the estimated costs for recommended and optional maintenance activities based on respective funds.

Fund	Recommend or Optional	Staff Hours	Other Costs	Outside Contractor
203	Optional	6	\$300	
206	Optional			\$30,000
210	Recommended	80	\$3,000	\$8,000
210	Optional	86	\$1,850	
215	Recommended	44	\$4,000	
215	Optional	40	\$2,300	
610	Recommended	16	\$2,400	
620	Recommended	8	\$300	
620	Optional	6	\$500	
630	Recommended	12	\$600	

Total estimated costs to undertake all recommended maintenance work is 160 hours and \$18,300. Total estimated costs to undertake all optional maintenance work is 138 hours and \$34,950.

Project Inspection Table

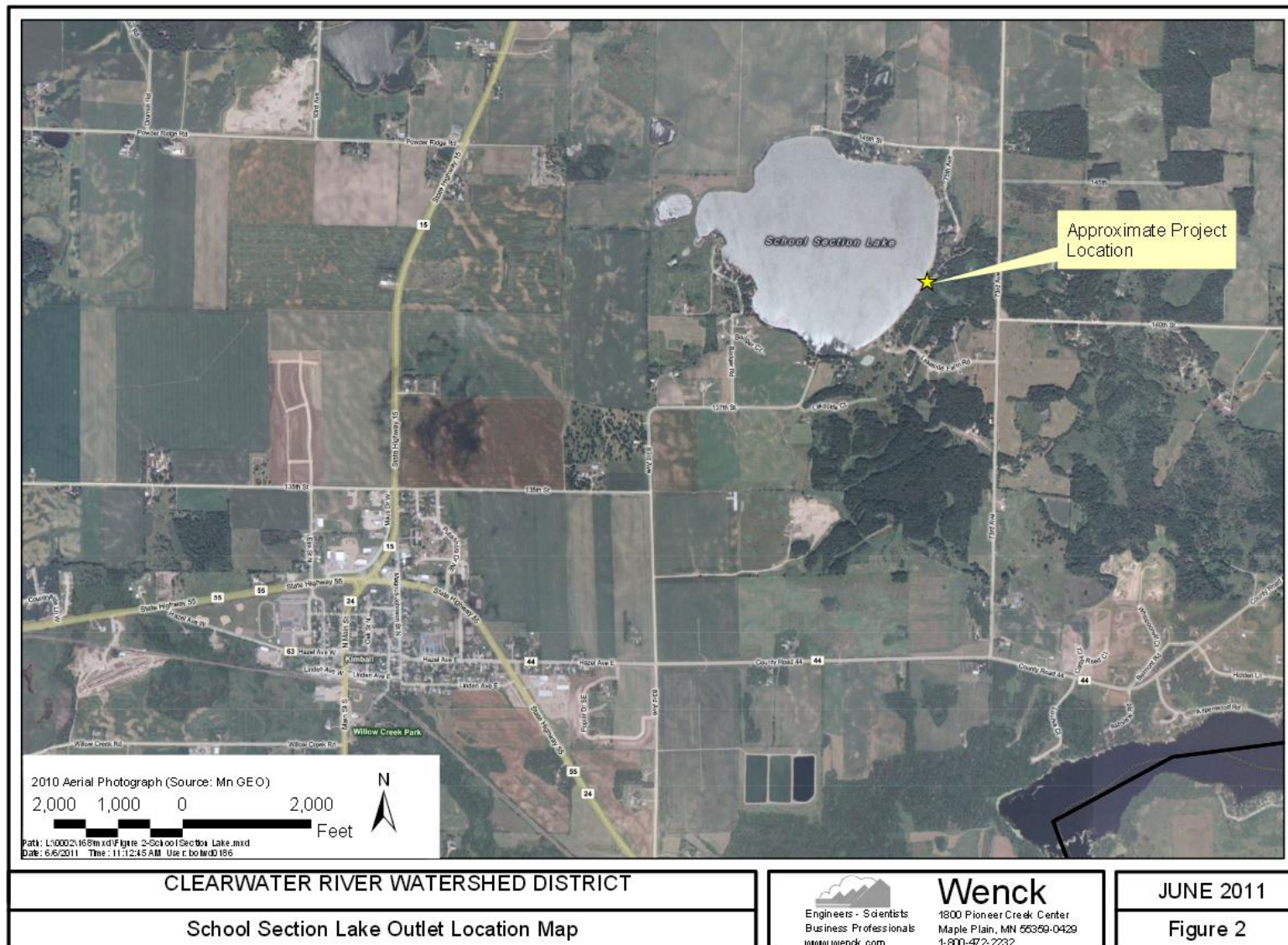
Project	Maintenance			Estimated Cost
	Recommended	Optional	No Action Now	
Annandale Wetland Treatment System (not inspected for this report, tasks are from 2012 report)				
1. Clean debris from ports	✓			Maintenance -16 hrs + \$300 for equipment
2. Outlet structure in good condition.			✓	
Kingston Wetland Treatment System (See Photo 1)				
1. Remove sediment in diversion channel basin	✓			\$8,000
2. Existing Berms are operating properly			✓	
3. Major O&M work recently completed			✓	
Upper Watkins Wetland Isolation Project (North) (See Photo 2)				
1. Berms are in good condition			✓	
2. Wood isolation structures are in good condition			✓	
3. Clear brush/trees growing on and around berms		✓		Maintenance -24 hours + \$300 materials
4. Treatment of noxious weed (as needed)	✓			Maintenance - 12 hours + \$300 materials
Watkins Wetland Treatment System (South) (see Photos 3-5)				
1. Clean debris from ports	✓			Maintenance -24 hours + \$300 materials
2. Berms are in good condition			✓	
3. Repairs needed in fencing	✓			Maintenance -24 hours + \$500 materials
4. Clear brush/trees growing on and around berms		✓		Maintenance -32 hours + \$400 materials

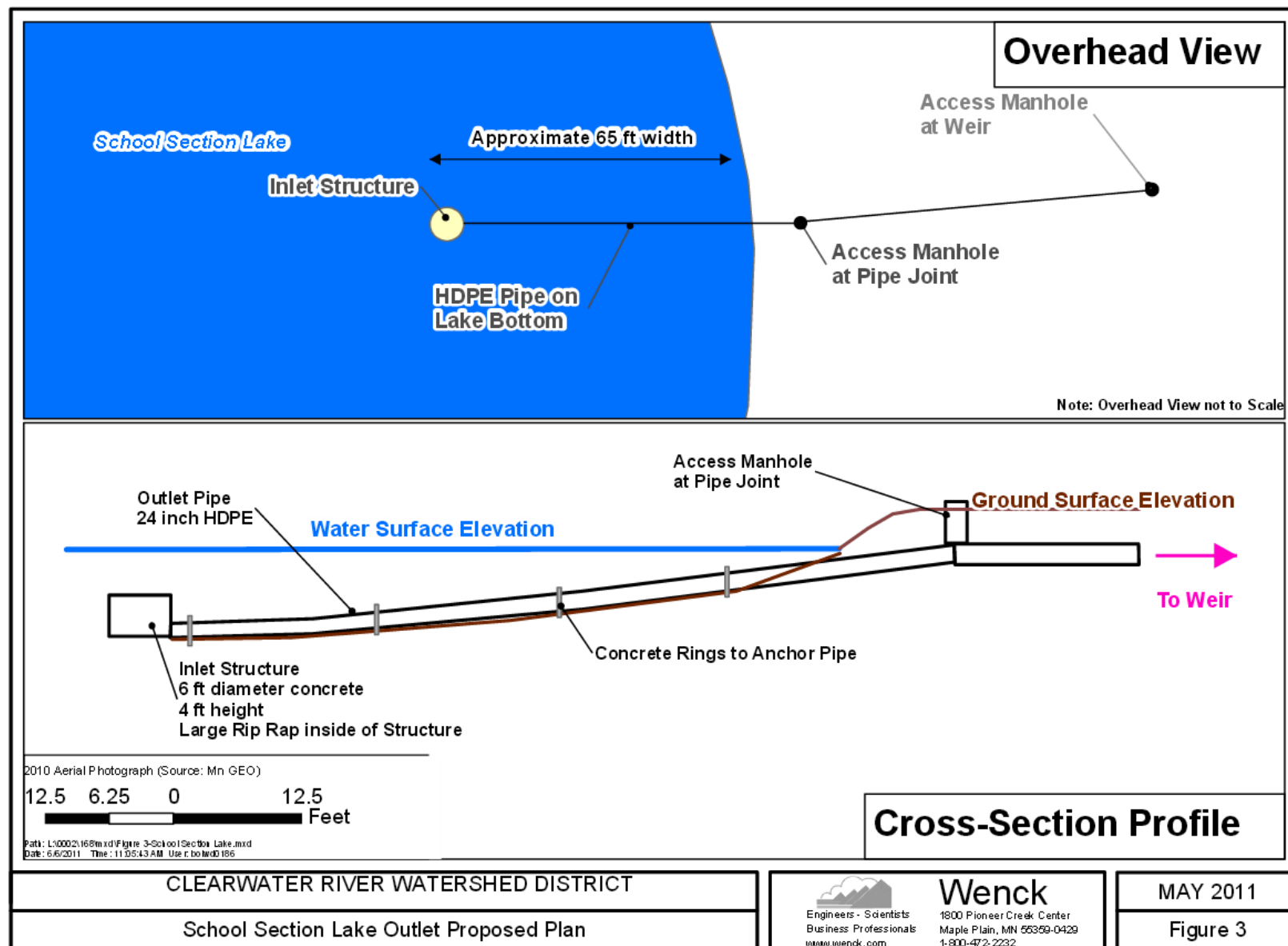
Project	Maintenance			Estimated Cost
	Recommended	Optional	No Action Now	
Nistler-Geislinger Basin				
1. Basin in good condition			✓	
Ostmark Basin				
1. Basin in good condition			✓	
Highway 55 Fish Trap (See Photo 6)				
1. Improvements to fish trap		✓		District will coordinate with commercial fisherman
Aerator Buildings (See Photos 7-8)				
1. Lake Augusta-Repair to soffits and eaves	✓			District will coordinate repair-approximately \$1,500
2. Lake Marie- New coat of paint	✓			Maintenance - 4 hrs. + \$100
Lake Augusta Erosion Control Project (See Photo 9).				
1. Outlet and riser in good condition (slight lean in riser)			✓	
2. Inlet boxes are in okay condition			✓	
3. Repair bent portions of fence, clear brush/trees from fence		✓		Maintenance - 6 hrs + \$300 for materials
Norton Ave Sediment Basin				
1. No maintenance needed			✓	
Eddie Schultz Buffer				
1. No maintenance needed			✓	
Clear Lake North Inlet V-Notch				
1. V-notch weir outlet structure in good condition			✓	
Clear Lake South Inlet Notch				
1. Notch weir outlet structure in good condition			✓	
2. Sand-Iron Filter in good condition			✓	
School Section Lake Outlet Project (See Photo 10 and Figures 2 and 3).				
1. Proposed alterations to outlet		✓		\$30,000

Project	Maintenance			Estimated Cost
	Recommended	Optional	No Action Now	
Pleasant Lake Outlet Project (See Photo 11)				
1. Repairs to wood structure		✓		Maintenance - 6 hrs + \$300 for materials
Kimball Stormwater Phase I				
1. No maintenance necessary (City of Kimball covers)			✓	
2. Add additional plantings and clean up rain garden		✓		Maintenance - 24 hrs + \$850 for plantings
Hidden River Wastewater Treatment System (See Photo 12)				
1. Summer weed control and ditch mowing	✓			Maintenance- 8 hrs + \$300 for equipment
2. Pump 9 individual septic tanks as required by schedule	✓			Contract Pumper: Estimated \$1,600
3. Remove brush/trees growing inside fence	✓			Maintenance- 4 hrs + \$300 for equipment
4. Repair broken sections of fence	✓			Maintenance- 4 hrs + \$200 for materials
Rest-a-While Shores Wastewater Treatment System (See Photos 13-14)				
1. Fence off eroding hillside "trail," seed grass, place additional "No Trespassing" signs	✓			Maintenance - 8 hours + \$300 materials
2. Remove debris piled on property		✓		Maintenance - 6 hours + \$500 for hauling
Clearwater Harbor Wastewater Treatment System				
1. Summer weed control and ditch mowing	✓			Maintenance- 8 hrs + \$300 for equipment
2. Remove brush/trees growing inside fence	✓			Maintenance- 4 hrs + \$300 for equipment
Wandering Ponds Wastewater System				
1. Rely on Bernie Miller report			✓	
Vergin Grass Waterway				
1. No maintenance necessary			✓	

Project	Maintenance			Estimated Cost
	Recommended	Optional	No Action Now	
Henshaw Lake Outlet				
1. Fish barrier in good condition but needs to be moved to reduce bank erosion		✓		Maintenance - 8 hrs + \$300 for equipment
Swartout Lake Fish Barriers (See Photos 15-16)				
1. Barrier at outlet has undercut, needs to be repositioned due to change in outlet dam	✓			District will coordinate repairs with grant work later this year
2. Barrier at inlet needs to be repositioned	✓			Maintenance - 16 hrs + \$1,500 for equipment
3. Make alterations to fish barrier.		✓		Maintenance - 16 hrs + \$1,000 for materials
Illsley Ave Fish Barrier (See Photos 17-18)				
1. Place rip rap on wings of barrier to stop erosion of banks, replace temporary repair on western wing	✓			Maintenance - 12 hrs + \$500
Segner Pond (See Photos 19-20)				
1.Diversion structure operating properly			✓	
2.Add limestone to low spots in limestone berm	✓			Maintenance - 16 hrs + \$2,000 for materials
3. Make alterations to fish barrier		✓		Maintenance - 16 hrs + \$1,000

Figures





Select Photographs



1-Sediment in Kingston Wetland Diversion Channel Basin



2-Brush/Trees on Berm at Watkins Isolation Project



3-Example of Port at Watkins Wetland Treatment System



4-Missing Portions of Fence at Watkins Wetland Treatment System (TS)



5-Brush/Trees on Berm at Watkins Wetland TS



6-Highway 55 Fish Trap



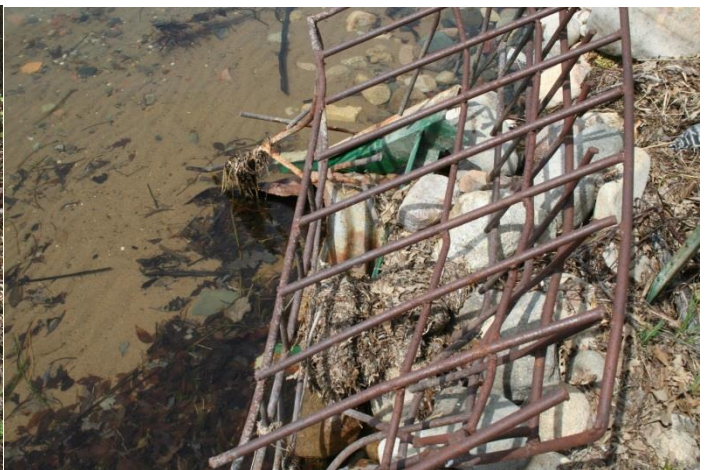
7-Lake Augusta Aerator Building



8-Lake Marie Aerator Building



9-Bent Fencing at Lake Augusta Erosion Control Project



10-School Section Lake Outlet Damaged by Ice



11-Pleasant Lake Outlet Control Structure



12-Broken Fence at Hidden River Sewer System



13-Eroding Hillside "Trail" at Rest-A-While Shores Sewer System



14-Debris Pile on Property inside Tree Line



15-Swartout Lake Outlet Fish Barrier



16-Swartout Lake Inlet Fish Barrier



17-Eroding Bank at Illsley Ave Fish Barrier



18-(Left) Temporary Repair at Illsley Ave Fish Barrier



19-Segner Pond



20-Segner Pond Fish Barrier