

2003 Project Inspection Report



Wenck

Prepared for
**Clearwater River
Watershed
District**

June 2003



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June 6, 2003

Mr. John Tracy
Chairperson
Clearwater River Watershed District
P.O. Box 481
Annandale, MN 55302

Re: 2003 Project Inspection Report
Wenck File #0002-56

Dear Mr. Tracy:

This 2003 Project Inspection Report was prepared for the Clearwater River Watershed District as part of the operation and maintenance activities for the District's Projects.

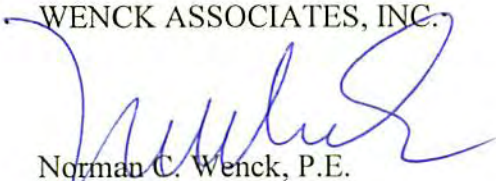
The District's projects were inspected between April 10, 2003 and May 30, 2003. The attached Table 1 contains the inspection results and our recommendations of maintenance activities with estimated costs. The figures show where maintenance activities are required and the photographs show existing conditions for each project. Repair work at the Pleasant Lake Outlet Project, Carp Trap Project and Lake Augusta Erosion Control Project is recommended for this year.

Our recommendation is to solicit at least three quotes and complete the required maintenance work this summer or fall as weather permits. The work at the Carp Trap was completed on May 31, 2003 by Randy Kramer Excavating. The optional cost to remove the aerator buildings is assuming a resale of the air compressors for \$500 each.

The estimated contractor costs are \$13,850, plus 46 hours for Kevin Wittrock to perform minor maintenance items.

Sincerely,

WENCK ASSOCIATES, INC.



Norman C. Wenck, P.E.
Chairman

Attachments

c: CRWD Board of Managers
Merle Anderson, Administrator

Table

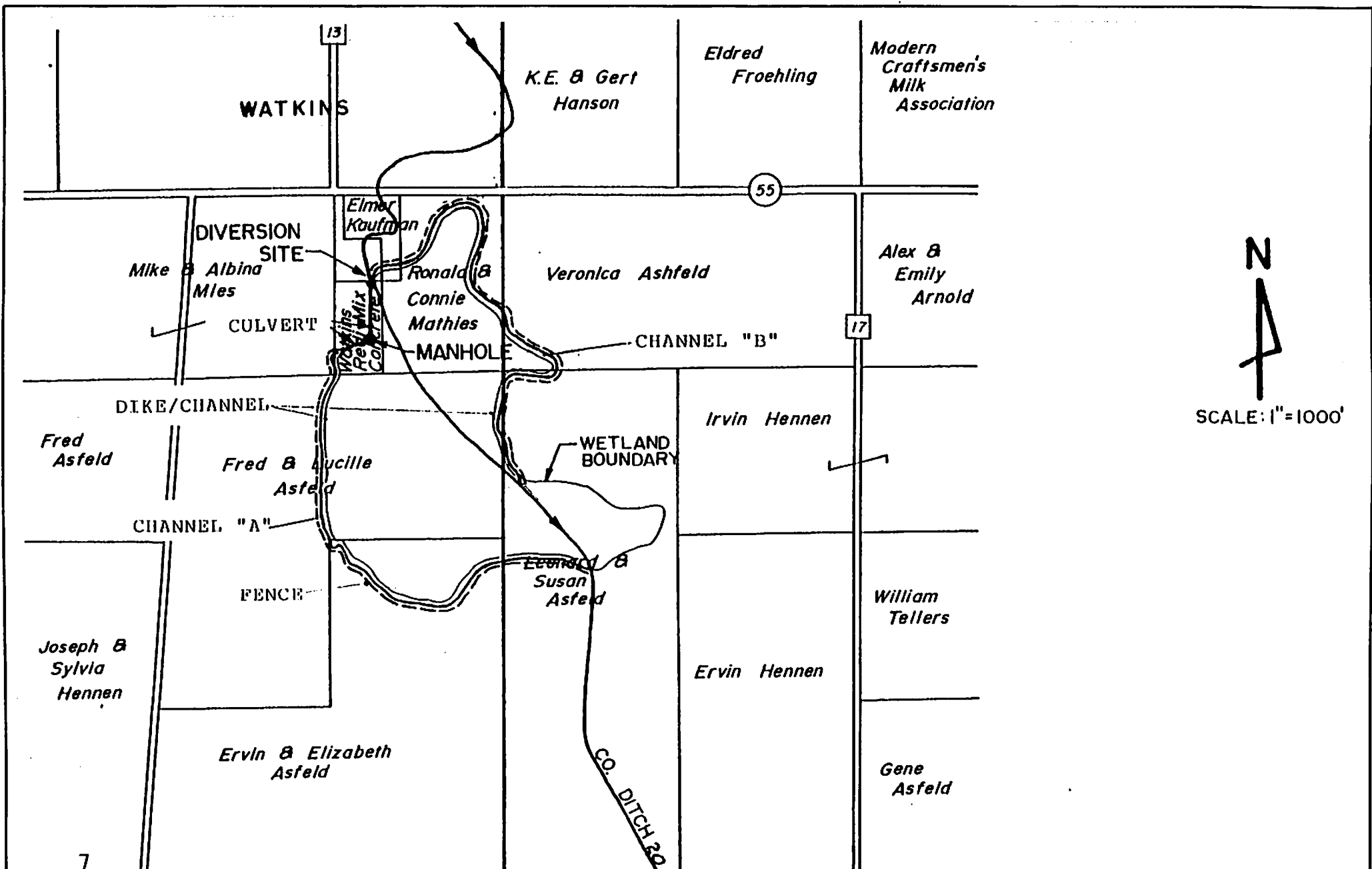
Table 1
Clearwater River Watershed District
Annual Project Inspection
May 2003

Project	Maintenance			Estimated Cost
	Required	Optional	No Action Now	
Watkins Wetland Treatment System (south) (see Figure 1 and photos 1 and 2).				
1. West side (Channel A) flowing normal, channel ports open.			✓	
2. East side (Channel B) flowing normal, channel ports open.			✓	
Upper Watkins Wetland Isolation Project (north) (see Figure 2 and photo 3).				
1. Ditches and overflow structures in good condition.			✓	
2. Fence needs repair and tightening.	✓			Kevin 8 hrs.
Annandale Wetland Treatment System (see Figure 3 and photos 4 and 5).				
1. Ditch and overflow structure in good condition.			✓	
School Section Lake Outlet Project (see photo 6).				
1. Outlet structure and culverts in good condition.			✓	
2. Downstream culvert and structures in good condition.			✓	
Pleasant Lake Outlet Project (see photo 7).				
1. Outlet structure moved up by ice.				
2. Sheet piling to be cut off.	✓			Kevin 8 hrs. plus \$200 equipment
Kingston Wetland Treatment System (see Figure 4 and photo 8).				
1. Sediment basin in good condition.			✓	
2. Ditches and channel ports open.			✓	
3. Fence repair and tightening.	✓			Kevin 16 hrs.
Aerator Buildings (see photos 9 and 10).				
1. Lake Augusta – good condition.			✓	
2. Lake Marie – paint new door.	✓			Kevin 2 hrs. \$50
3. Remove aerator buildings, piping in lake and restoration.		✓		\$3,000 ea.

Table 1
Clearwater River Watershed District
Annual Project Inspection
May 2003

Project	Maintenance			Estimated Cost
	Required	Optional	No Action Now	
Carp Trap Project (see photo 11).				
1. Carp trap needs riprap and bottom leveling (completed 5/31/03).	✓			\$3,000
Lake Augusta Erosion Control Project (see Figure 5 and photos 12, 13, and 14).				
1. Sedimentation basin in good condition.			✓	
2. West drop inlet structure needs 18" manhole riser section, sediment and tree removal, and baffle adjustment.	✓			\$5,000
3. South drop inlet structure needs sedimentation removal.	✓			\$2,000
4. Riprap at outlet in channel needs to be pulled out of the channel and replaced around apron.	✓			\$1,000
Clear Lake Sedimentation Basin (south) (see photo 15).				
1. Sedimentation basin in good condition.			✓	
Clear Lake (northeast) Wetland Outlet Structure (see photo 16).				
1. Outlet structure in good condition.			✓	
Hidden River Sewage Treatment Facility (see photo 17).				
1. Treatment facility in good condition.			✓	
2. Signs need to be installed around drainfield to keep out 4-wheelers and snowmobiles.	✓			Kevin 4 hr. \$300
3. Area needs mowing.	✓			Kevin 8 hr. \$100
4. Septic tank pumping (2).	✓			\$400
5. Replace plantings around site.	✓			\$1,800
Rest A While Sewage Treatment Facility (see photos 18, 19 and 20).				
1. Treatment facility in good condition.			✓	
2. Sedimentation basins have major erosion.	✓			Have owner repair.

Figures



SCALE: 1" = 1000'

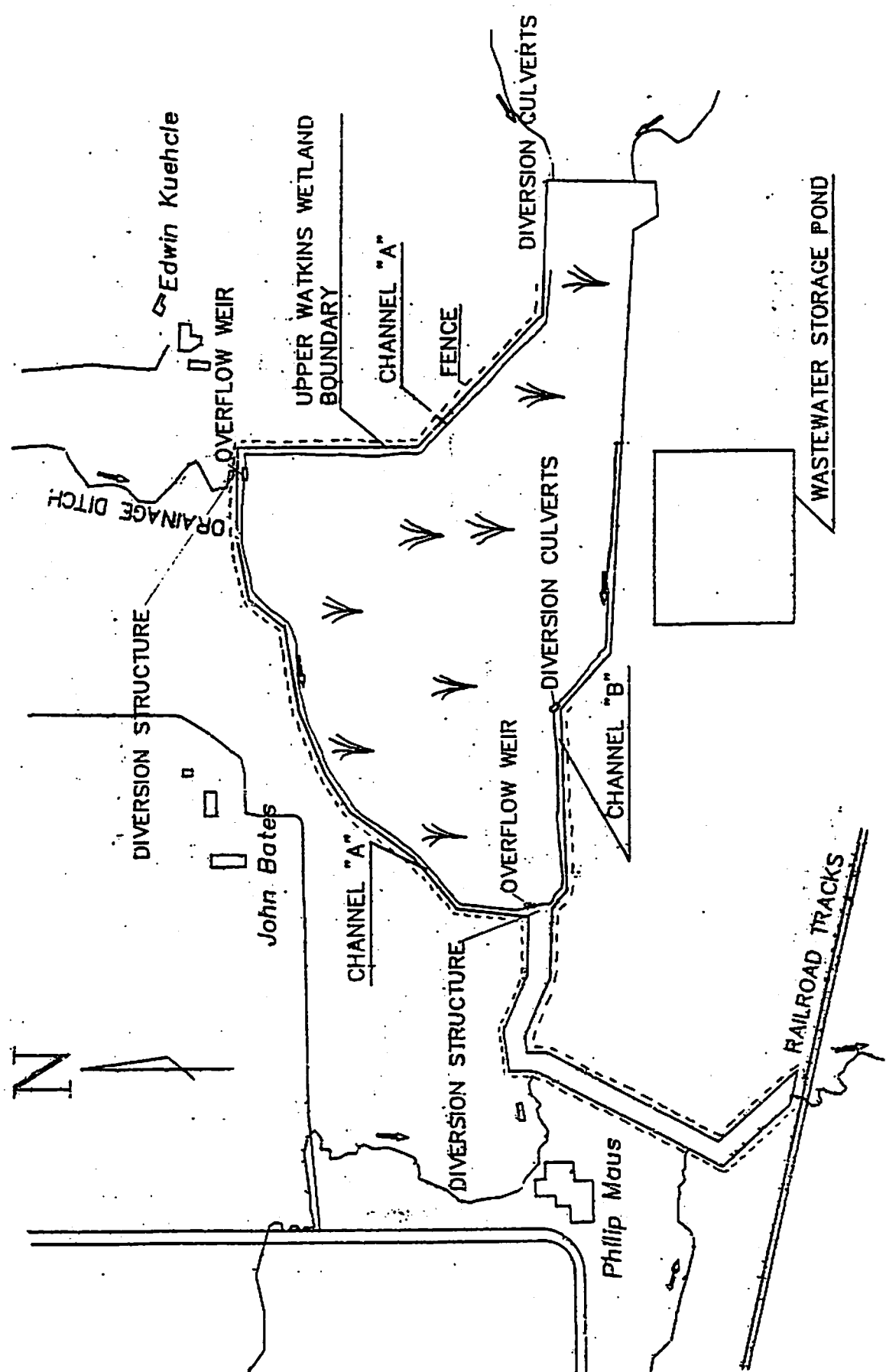
CLEARWATER RIVER WATERSHED DISTRICT

Watkins Wetland Treatment Project


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 Environmental Engineers Maple Plain, MN 55359

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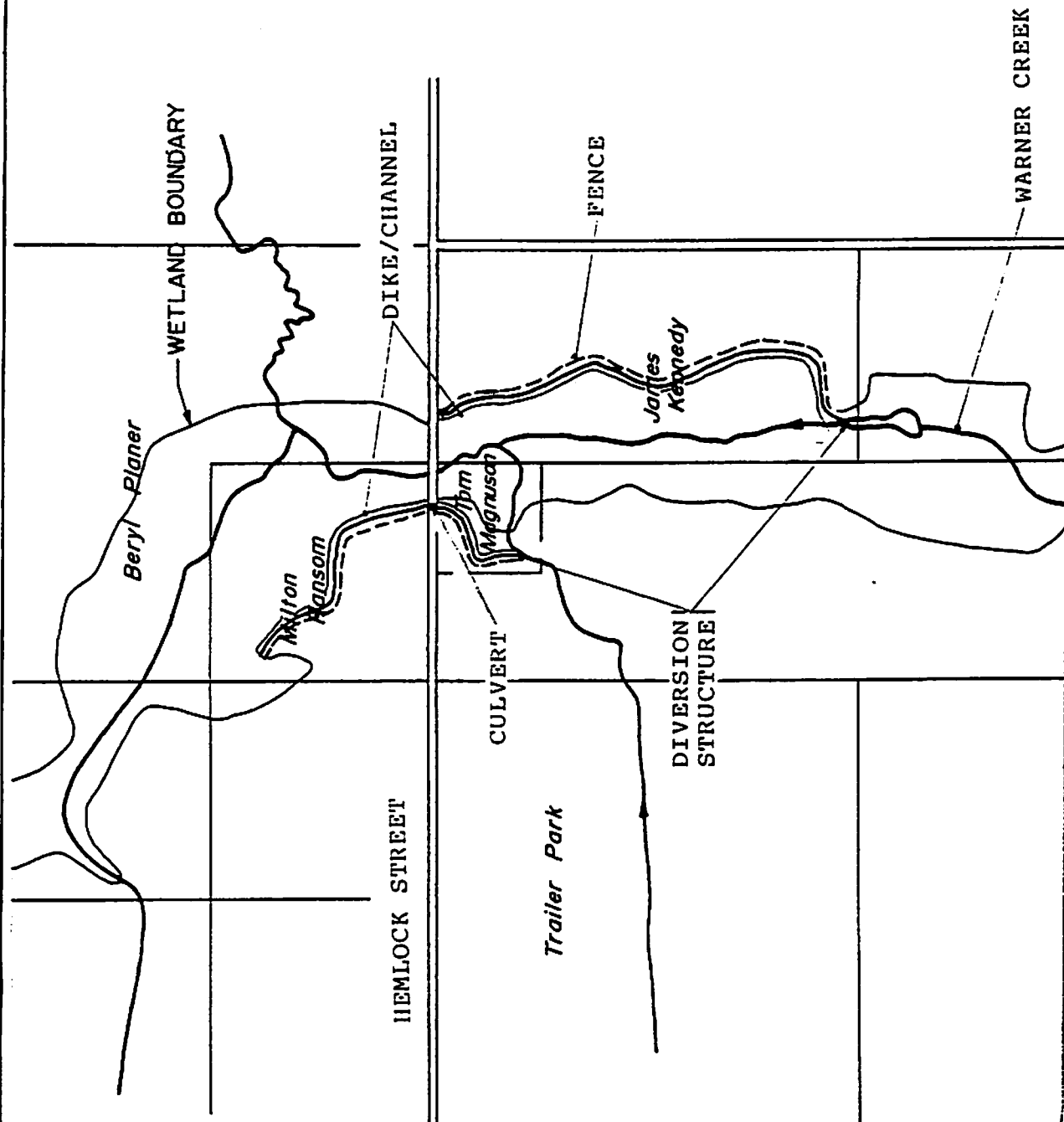
Figure 1



CLEARWATER RIVER WATERSHED DISTRICT
 Upper Watkins Wetland Isolation Project

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 Environmental Engineers
 1800 Pioneer Creek Center
 Maple Plain, MN 55359
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 Figure 2



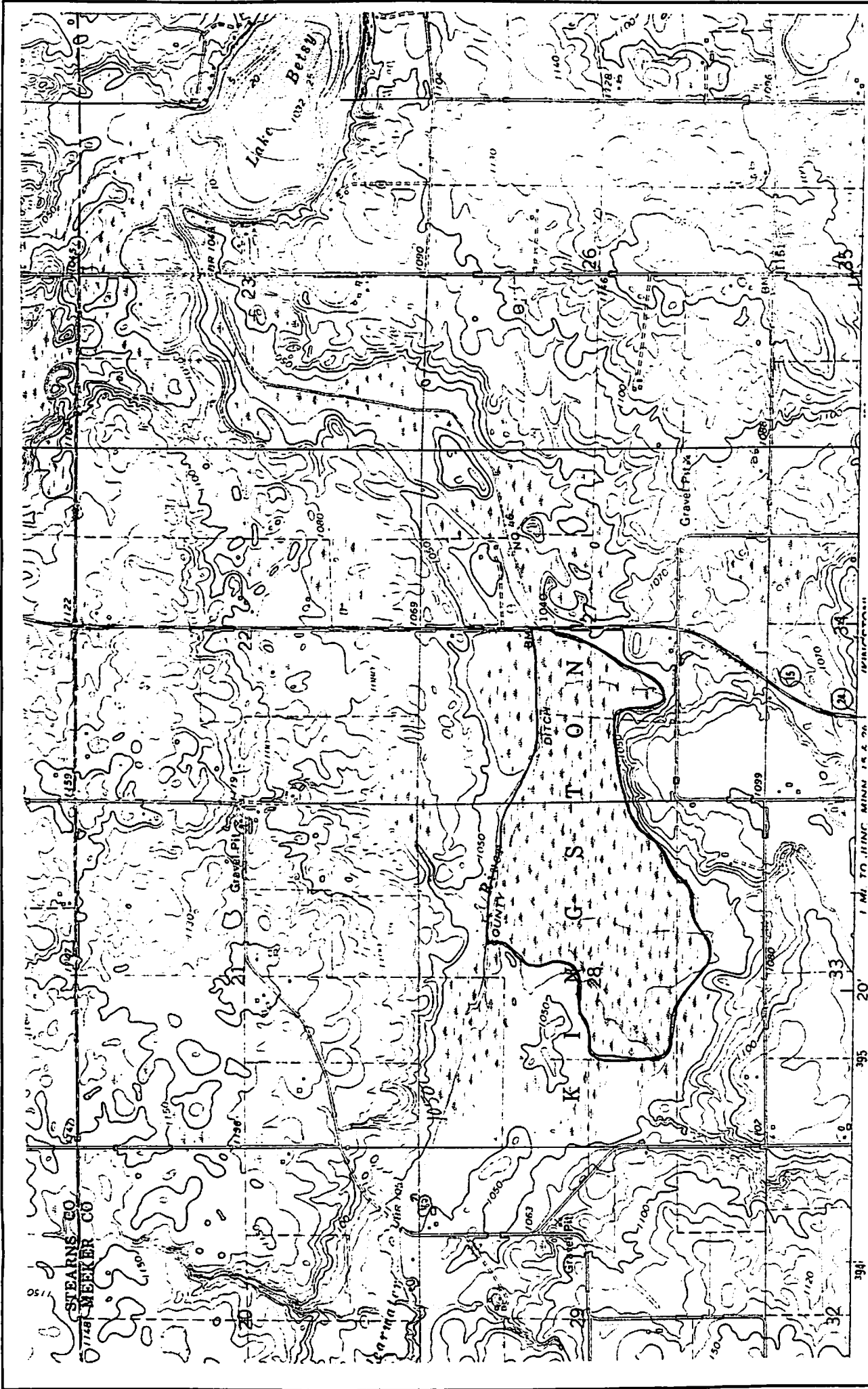
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CLEARWATER RIVER WATERSHED DISTRICT
Annandale Wetland Treatment Project

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Figure 3



CLEARWATER RIVER WATERSHED DISTRICT
 Kingston Wetland Treatment Project

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 Figure 4

Photographs



Photograph 1: Watkins Wetland – west side (Channel A).



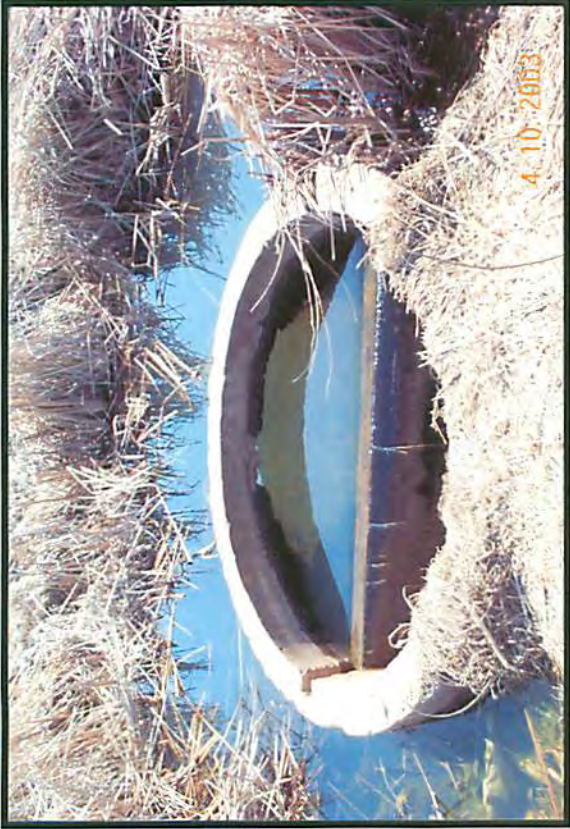
Photograph 2: Watkins Wetland – east side (Channel B).



Photograph 3: Upper Watkins Wetland Isolation Project.



Photograph 4: Annandale Wetland – south ditch.



Photograph 5: Annandale Wetland – outlet structure.



Photograph 6: School Section Lake – outlet structure.



Photograph 7: Pleasant Lake – outlet structure.



Photograph 8: Kingston Wetland – west ditch.



Photograph 9: Lake Marie – aerator building.



Photograph 10: Lake Augusta – aerator building.



Photograph 11: Carp Trap – Clearwater River.



Photograph 12: Lake Augusta Erosion Control Project – west drop inlet structure.



Photograph 13: Lake Augusta Erosion Control Project - south drop inlet structure.



Photograph 14: Lake Augusta Erosion Control Project - sedimentation basin.



Photograph 15: Clear Lake Sedimentation Basin (south).



Photograph 16: Clear Lake northeast wetland outlet structure.



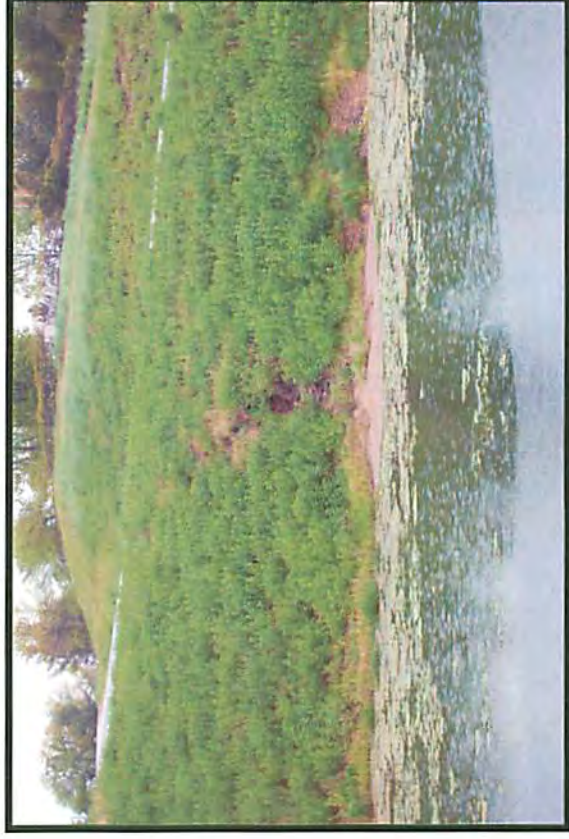
Photograph 17: Hidden River Sewage Treatment Facility.



Photograph 18: Rest A While Sewage Treatment Facility.



Photograph 19: Rest A While - east sedimentation basin.



Photograph 20: Rest A While - west sedimentation basin.



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