#### **General Project Information**

Project ID: LPL-589

Name: LONG LAKE PRESERVATION ASSOCIATION: Long Lake Management Planning, 1998-99

Type: Lakes Grant

Subtype: Large Scale Lake Planning

 Status:
 COMPLETE

 Start Date:
 10/1/1998

 End Date:
 12/31/2001

Purpose: The Long Lake Preservation Association proposes to conduct a water quality monitoring study on portions of the watershed of

Long Lake, Washburn County. This proposed study will implement recommendations for monitoring that are contained in the Long Lake Management Plan, that was completed with assistance from three previous Lake Management Planning Grants. The project activities include; 1) monitor three watershed lake sites during regular and precipitation event conditions to document phosphorus loading, 2) monitor four tributary stream sites during regular and precipitation event conditions, and 3) conduct additional monitoring dependent upon lab phosphorus analysis results. Project deliverables include a final report listing the monitoring results and comparing them with previous results and the water quality goals listed in the lake management plan. The Department of Natural Resources will be provided with both a paper copy and an electronic copy of the final report. The project results will be disseminated to the public by newsletter(s), public meeting(s), and local newspaper

articles.

Objective:

Comments:
Outcome:

Study Design:

**QA Measures:** 

People						
Name	Role	Status	Start Date	End Date	Organization	Comments
Long Lake Preservation Associa	GRANT_RECIPI ENT	ACTIVE	10/1/1998	12/31/2001	Long Lake Preservation Association	

Project Statuses				
Date	Reported By	Status	Comments	

Actions				
Action	Detailed Description	Start Date	End Date	Status
Watershed Mapping or Assessment		10/1/1998	12/31/2001	PROPOSED

Grant Awarded	The Long Lake Preservation Association proposes to conduct a water quality monitoring study on portions of the watershed of Long Lake, Washburn County. This proposed study will implement recommendations for monitoring that are contained in the Long Lake Management Plan, that was completed with assistance from three previous Lake Management Planning Grants. The project activities include; 1) monitor three watershed lake sites during regular and precipitation event conditions to document phosphorus loading, 2) monitor four tributary stream sites during regular and precipitation event conditions, and 3) conduct additional monitoring dependent upon lab phosphorus analysis results. Project deliverables include a final report listing the monitoring results and comparing them with previous results and the water quality goals listed in the lake management plan. The Department of Natural Resources will be provided with both a paper copy and an electronic copy of the final report. The project results will be disseminated to the public by newsletter(s), public meeting(s), and local newspaper articles.	10/1/1998		COMPLETE
Lake Management Plan Development		10/1/1998	12/31/2001	PROPOSED
Monitor Water Quality or Sediment	10100762	10/1/1998		PROPOSED

Monitoring Stations				
Station ID	Name	Comments		
663090	Long Lake (T37r11ws10) - Site C			
663088	Long Lake - Deep Hole/Site A			
663061	Long Lake - Near Slim Creek			
663063	Long Lake - Nr Little Mud Lk Outlet			
663062	Long Lake - Nr Mud Lk Outlet			
663118	Long Lake - Site F			
663064	Slim Creek at Twn Rd Nr Long L			
663067	Unnamed Str - (Baileys) - Sec 14			
663065	Unnamed Str - (Dennisons) - Sec20			
663066	Unnamed Str - (Pepper) - Sec 3			

Assessment Units				
WBIC	Segment	Local Name	Official Name	
2106800	1	Long Lake	Long Lake	
2107700	1	Mud Lake	Mud Lake	
2108400	1	Slim Creek	Slim Creek	

5515900 1 Local Water Unr	nnamed
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Lab Account Codes

Account Code Description Start Date End Date

**Forms** 

Form Code Form Name

**Methods** 

Method Code Method Description

Fieldwork Even	its			
Start Date	Status	Field ID	Station ID	Station Name
4/27/1999 10:00	COMPLETE	BA-1	663067	Unnamed Str - (Baileys) - Sec 14
4/27/1999 10:00	COMPLETE	DN-1	663065	Unnamed Str - (Dennisons) - Sec20
4/27/1999 10:00	COMPLETE	L-A-SURF	663088	Long Lake - Deep Hole/Site A
4/27/1999 10:00	COMPLETE	L-F-SURF	663118	Long Lake - Site F
4/27/1999 10:00	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
4/27/1999 10:00	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
4/27/1999 10:00	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
4/27/1999 10:00	COMPLETE	PCR-1	663066	Unnamed Str - (Pepper) - Sec 3
6/9/1999 10:00	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
6/9/1999 10:00	COMPLETE	TOP	663118	Long Lake - Site F
6/9/1999 10:00	COMPLETE		663067	Unnamed Str - (Baileys) - Sec 14
6/9/1999 10:00	COMPLETE		663066	Unnamed Str - (Pepper) - Sec 3
6/9/1999 11:00	COMPLETE	TOP	663088	Long Lake - Deep Hole/Site A
6/9/1999 11:30	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
6/9/1999 11:30	COMPLETE		663090	Long Lake (T37r11ws10) - Site C
6/10/1999 10:00	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
7/12/1999 10:45	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
7/12/1999 10:55	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
7/12/1999 11:00	COMPLETE	L-A-SURF	663088	Long Lake - Deep Hole/Site A
7/12/1999 11:05	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
7/12/1999 12:00	COMPLETE	L-F-SURF	663118	Long Lake - Site F
8/10/1999 10:00	COMPLETE	L-F-SURF	663118	Long Lake - Site F
8/10/1999 10:30	COMPLETE	L-A-SURF	663088	Long Lake - Deep Hole/Site A
10/20/1999 10:00	COMPLETE	BA-1	663067	Unnamed Str - (Baileys) - Sec 14
10/20/1999 10:00	COMPLETE	DN-1	663065	Unnamed Str - (Dennisons) - Sec20

10/20/1999 10:00	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
10/20/1999 10:00	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
10/20/1999 10:00	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
10/20/1999 10:00	COMPLETE	PCR-1	663066	Unnamed Str - (Pepper) - Sec 3
10/20/1999 11:00	COMPLETE	L-A-SURF	663088	Long Lake - Deep Hole/Site A
10/20/1999 11:00	COMPLETE	L-F-SURF	663118	Long Lake - Site F
5/15/2000	COMPLETE	BA-1	663067	Unnamed Str - (Baileys) - Sec 14
5/15/2000	COMPLETE	DN-1	663065	Unnamed Str - (Dennisons) - Sec20
5/15/2000	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
5/15/2000	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
5/15/2000	COMPLETE	PCR-1	663066	Unnamed Str - (Pepper) - Sec 3
5/15/2000	COMPLETE	SCR-1	663064	Slim Creek at Twn Rd Nr Long L
5/15/2000 12:00	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
6/21/2000 10:00	COMPLETE	SCR-1	663064	Slim Creek at Twn Rd Nr Long L
6/21/2000 10:15	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
6/21/2000 10:30	COMPLETE	BA-1	663067	Unnamed Str - (Baileys) - Sec 14
6/21/2000 10:45	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
6/21/2000 11:00	COMPLETE	DN-1	663065	Unnamed Str - (Dennisons) - Sec20
6/21/2000 11:00	COMPLETE	PCR-1	663066	Unnamed Str - (Pepper) - Sec 3
6/21/2000 12:00	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
6/26/2000 9:30	COMPLETE	BA-1	663067	Unnamed Str - (Baileys) - Sec 14
6/26/2000 9:45	COMPLETE	PCR-1	663066	Unnamed Str - (Pepper) - Sec 3
6/26/2000 10:15	COMPLETE	DN-1	663065	Unnamed Str - (Dennisons) - Sec20
6/26/2000 10:30	COMPLETE	SCR-1	663064	Slim Creek at Twn Rd Nr Long L
7/11/2000	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
7/11/2000 10:30	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
7/11/2000 11:00	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
5/8/2001	COMPLETE	LK-LTML	663063	Long Lake - Nr Little Mud Lk Outlet
5/8/2001 9:00	COMPLETE	DN-1	663065	Unnamed Str - (Dennisons) - Sec20
5/8/2001 9:30	COMPLETE	LK-ML	663062	Long Lake - Nr Mud Lk Outlet
5/8/2001 9:30	COMPLETE	LK-SC	663061	Long Lake - Near Slim Creek
5/8/2001 9:30	COMPLETE	SCR-1	663064	Slim Creek at Twn Rd Nr Long L
4/30/2002 10:00	COMPLETE	L-F-SURF	663118	Long Lake - Site F
4/30/2002 11:00	COMPLETE	L-A-SURF	663088	Long Lake - Deep Hole/Site A
6/10/2002 10:00	COMPLETE	L-F-SURF	663118	Long Lake - Site F

6/10/2002 11:00	COMPLETE	L-A-SURF	663088	Long Lake - Deep Hole/Site A

Documents				
Title	Description	Author	Published	Comments
LONG LAKE MANAGEMENT PLANNING, 1998-99	Since its "discovery" in the late 1800's as a logging site, until the mid 1900's development around the lake has been slow. In recent years however, as development has increased the LLPA is concerned that additional development in the watershed result in degradation of the lakes water quality. The areas that were monitored are shown on figure 1. After the first year it was reconunended that Stations A and F and the creeks be more heavily monitored and this was done. Graph 1 shows the average of total phosphorus tests in 1994. Graphs 2 and 3 show the average of tests from 1998 to 2001.	Barr Engineering Co.	12/31/2001	

#### **Budget**

Combined Budgets: Combined WSLH:

Combined Total: \$0.00

Funding					
Organization	Source	Туре	Amount	Start Date	<b>End Date</b>