| General Project Information |  |
| :--- | :--- |
| Project ID: | LPL-005 (4005-01) |
| Name: | CITY OF WEYAUWEGA: Weyauwega Lake Water Quality Sampling, Data Collection |
| Type: | Lakes Grant |
| Subtype: | Large Scale Lake Planning |
| Status: | COMPLETE |
| Start Date: | $12 / 20 / 1990$ |
| End Date: | 6/30/1993 |
| Purpose: | Assemble and review existing data on the lake and watershed to define data gaps. Additional data gatering to include: a) <br> water quality in 2 sites to include all or some of parameters in table 1 of application, b) 3 different storm sewers sampled <br> twiceand analyzed for suspended solids, total-P, ammonia N, NO3-NO2,BOD5, c) one sediment sample to be analyzed for \% <br> organics, total solids, total-P, ammonia N, Kjeldahl N.Develope and implement public involvement program. Prepare land use <br> map for lake and watershed. Identify and evaluate existing ordinances related to non-point pollution control. Develope draft <br> report for public review and comment. Prepare anddistribute lake management plan. Information will be desiminated to the <br> public by newsletter mailings, fact sheet distributions, public meetings, summary report mailings and local newspaper <br> articles. The project results will be reposited at the Weyauwega City Hall and the Waupaca County Courthouse. |

## Objective:

## Comments:

Outcome:
Study Design:
QA Measures:


| Grant Awarded | Assemble and review existing data on the lake <br> and watershed to define data gaps. Additional <br> data gatering to include: a) water quality in 2 <br> sites to include all or some of parameters in <br> table 1 of application, b) 3 different storm <br> sewers sampled twiceand analyzed for <br> suspended solids, total-P, ammonia N, NO3- <br> NO2,BOD5, c) one sediment sample to be <br> analyzed for \% organics, total solids, total- <br> P,ammonia N, Kjeldahl N.Develope and <br> implement public involvement program. <br> Prepare land use map for lake and watershed. <br> Identify and evaluate existing ordinances <br> related to non-point pollution control. <br> Develope draft report for public review and <br> comment. Prepare anddistribute lake <br> management plan. Information will be <br> desiminated to the public by newsletter <br> mailings, fact sheet distributions, public <br> meetings, summary report mailings and local <br> newspaper articles.The project results will be <br> reposited at the Weyauwega City Hall and the <br> Waupaca County Courthouse. | COMPLETE |  |
| :--- | :--- | :--- | :--- |
| Lake Management Plan Development |  |  |  |

## Monitoring Stations

| Station ID | Name |  | Comments |
| :--- | :--- | :--- | :--- |
| Assessment Units |  |  |  |
| WBIC | Segment | Local Name | Official Name |
| 257400 | 1 | Waupaca River | Waupaca River |
| 257700 | 1 | Weyauwega Lake | Weyauwega Lake |

## Lab Account Codes

| Account Code | Description | Start Date | End Date |
| :--- | :--- | :--- | :--- |
| Forms |  |  |  |


\section*{| Form Code | Form Name |
| :--- | :--- |}

## Methods

Method Code

## Method Description

## Fieldwork Events

| Start Date | Status |  | Field ID Stat | ion ID Station Na |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Documents |  |  |  |  |  |  |
| Title |  | Description |  | Author | Published | Comments |
| Lake Management Plan - <br> Weyauwega Lake - <br> Waupaca County, Wisconsin |  | Weyauwega Lake, an impoundment of the Waupaca River, is located in the City of Weyauwega, Waupaca County, Wisconsin. It drains an extensive (250 sq mi) primarily open/agricultural |  | IPS Environmental and Analytical Services | 10/31/1992 |  |

watershed through several inlets, as well as paved/residential areas through stormwater discharge pipes. Water quality, according to the Trophic State Index, indicated a mesotrophic to eutrophic status (with lower than expected levels of total phosphorus); total phosphorus was very high in rain event inflows. Light penetration was such that the entire lake bottom received sunlight for plant production most of the time. Aquatic plants were widespread and very abundant; coontail and common waterweed, both potentially nuisance species, were most abundant. Nuisance aquatic plant growth makes much of the lake impassible during open water months. Sedimentation in Weyauwega Lake was estimated to be relatively high (like in many impoundments) and contributes to reduced impoundment capacity and increased plant growth. Upstream areas of dense emergent and submergent vegetation help to filter sediment during periods of relatively lower flow. Management recommendations target reduction of nutrient and sediment inflows, improved recreational and aesthetic values, and improvement of wildlife and fishery habitat: - Water quality monitoring should be continued on a similar schedule to track trends; event and Self-Help monitoring should be continued to further assess stomwater inputs. - Riparian land use practices, including fertilizer, sediment and runoff management, should be encouraged. - Effective localized macrophyte harvest should be implemented to improve access and maximize edge. - Use zones (upstream E. downstream) should be considered. - The feasibility of stormwater discharge reduction or redirection should be assessed. Efforts to establish the Waupaca River Watershed as a priority watershed should continue to facilitate implementation of Best Management Practices (BMPs) throughout the watershed. - Dredging options may be addressed, but only after a

# Wisconsin Department of Natural Resources <br> SWIMS Project Summary 

watershed-wide erosion control plan is designed.

## Budget

Combined Budgets:
Combined WSLH:
Combined Total: $\$ 0.00$


