

Lake Association News

A newsletter for the Association for the Preservation of Clear Lake

WINTER 2009

Ventura Marsh Plan to be Released for Public Review

LAKE FRIENDLY LAWN CARE

Compost Facility



The Compost Facility is an excellent free resource for Clear Lake residents to properly dispose of yard waste. It is located in the 1400 block of 4th Ave. S and is operated from April through November. It is open Monday and Wednesday from 3 p.m. to 7 p.m. and on Saturdays from 9 a.m. to 4 p.m.

Pet Waste Bags



The APCL has partnered with Clear Lake Parks & Rec. to have more than 20 pet waste bag dispensers distributed in parks throughout the city. Picking up after pets is necessary to help keep bacteria and pathogens from entering the lake.

Zero Phosphorus Fertilizer



Established lawns do not need additional phosphorus and the unused fertilizer can be washed off lawns and enter the lake. So, choose a fertilizer that has "0" as the middle number. The long awaited feasibility investigation for Ventura Marsh is nearly ready for public review. The process of getting a plan to improve Ventura Marsh from the Corps of Engineers began six years ago in 2003. Natural disasters such as hurricane Katrina and the Iowa flooding slowed the

Corps progress on the Ventura Marsh project, but it is now steadily moving forward. Corps staff met with

DNR officials and APCL board members in January to provide an update on the project. Corps Project Manager Camie Knollenberg fully expects

the project to be bid this fall with construction activities beginning in about a year from now. Preliminary design work has been completed and the next few months will be spent having a public review process, completing the design, and preparing bid documents. A PowerPoint presentation that describes the project can be viewed at this site: www.clearproject.net/ marsh.html A link to the feasibility study will also be listed on the site when it is ready for review this spring.

The construction of the project will take place in two



The primary goal of the Ventura Marsh Project is to keep common carp populations in the marsh at very low levels so the marsh can re-vegetate.

> phases and is not scheduled to be completed until 2011. The first phase will be replacing the existing stop log structure, installing a new pumping station, and then de-watering the marsh. DNR wildlife managers anticipate keeping the marsh in a dry condition for two seasons to allow the marsh to revegetate. While the marsh is

dry, it will allow for the other aspects of the construction such as building a sediment control basin and dredging a flow channel.

Nearly all funding for the project has been secured. Congress appropriated \$2.5

> million for the project in FY'08 and an additional \$910,000 is expected to be appropriated in FY'09 to complete the federal funding. The local cost share amount has not yet been finalized, but the vast majority of the cost will be covered by in-kind credits.

The ultimate goal of the project is to reduce carp populations to improve the

water quality and wildlife habitat the marsh provides. The marsh is currently inputting about 40% of the sediment Clear Lake receives annually, so it is a vital part of the overall lake restoration project.

We would like to thank Congressman Tom Latham and Senators Tom Harkin and Chuck Grassley for their continued support.

Water Quality Data Shows Continued Improvement

The levels of the primary contaminants in Clear Lake (nutrients and sediment) continued to decline in 2008. The average total phosphorus (TP) level decreased to 58 parts per billion (ppb) in Clear Lake last year. The last time Clear Lake had levels of TP that averaged less than 60 ppb was in 1974.

When the Clear Lake Diagnostic and Feasibility study was written in 2000, the current level of TP was at 198 ppb and increasing at a rate of 4 ppb per year. At that rate of increase, the anticipated level of TP in 2008 was 208 ppb. The Clear Lake Enhancement and Restoration (CLEAR) Project has worked with many partners to implement lake improvement activities over the past eight years. This has helped decrease the TP level in the lake to the 58 ppb that was seen in 2008, which is 150 ppb less than what was expected if no action was taken.

In order for reduced algae production and better water clarity, it is important to keep TP levels at or below about 50 ppb. Interestingly, several other Iowa lakes have also shown a decline in TP levels to various degrees over the past 8 years. Some of this can be attributed to environmental conditions, but hopefully is also an indication of conservation practices throughout the state being implemented to improve water quality.



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2008 Water Quality Monitoring Results

STORM WATER IMPROVEMENTS CONTINUE

Installation of storm water filtration systems continued in Clear Lake until early winter. Construction began at 7 sites last fall and will be completed this spring. Over the winter months, engineering and design work took place on an additional 7 sites that are planned for construction in the fall of 2009. After these 14 sites are completed, a total of 37 storm water improvements will have been made in the Clear Lake watershed. The installation of these best management practices keep 45 tons of sediment, enough to fill 5 large dump trucks, and 150 pounds of phosphorus from entering Clear Lake every year. Nearly \$2 million has been invested by private, local, state, and federal partners on the improvements.



Grit collection chamber prior to installation at Bayside Ave. boat ramp.

LAKE NEWS

200 188 180 160 129 140 Total P (ppb) 120 103 100 80-60 40 20 0 1998- 2000 2001 2002 2003 2004 2005 2006 2007 2008

Clear Lake Total P Concentation



Total Phosphorus (TP) is a measurement of the amount of organic and inorganic P in the water. Phosphorus is the nutrient primarily responsible for algae growth in the lake. It enters the lake via runoff from urban and ag areas.

Year



Total Suspended Solids (TSS) is a measurement of the amount of particulate matter, often referred to as sediment in the water. These particles cloud the water and give it a brownish color. Secchi disk depth is a measurement of water clarity. Water clarity is influenced primarily by the amount of algae and sediment in the water. Our goal is to average over 3 feet of water clarity during the summer months.



Chlorophyll a is a measurement of the amount of algae in the water. Algae levels are influenced primarily by nutrient and light availability. Excessive algae decreases water clarity and promotes undesirable fish species.

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