

Lake Association News

A newsletter for the Association for the Preservation of Clear Lake

SUMMER 2011

APCL RECEIVES

This spring, the APCL was recognized by the Clear Lake Earth Day Committee for their efforts to "clean up" Clear Lake. The Green Jacket and traveling trophy are awarded annually to one team that has gone above and beyond in their efforts to clean up the community. The award is based on a variety of factors that include number of participants, amount of garbage removed, and volunteer hours. For the past two years, the APCL has been cleaning the Clausen's Cove area as part of the Earth Day clean up. The team removed several bags of garbage from the area as well as large items ranging from tires to recliners. Thankfully, the second year of cleaning the same location resulted in less trash having to be removed, a good sign for the future. In addition to their efforts to clean up as part of the Earth Day events, the APCL was also chosen for the award due to their involvement with lake restoration efforts over the past several years. Thanks to all the APCL Directors who volunteered their time and braved the elements to make an impact for the Clear Lake community.



Study Shows Clear Lake Most Visited Natural Lake in Iowa

A 2009 study by the Center for Agriculture and Rural Development (CARD) at Iowa State University revealed that Clear Lake is the most visited natural lake in the State. West Okoboji Lake placed a close second. The only lakes with more visitors were Saylorville Lake near Des Moines and Coralville Lake near Iowa City, both man-made lakes.

The CARD study was a follow-up to a previous lakes valuation study completed from 2002-2005. The 2009 data was generated by compiling results of more than 6,000 survey respondents of randomly selected households. The 2009 survey was used to evaluate how lake usage may have changed from the previous study period.

The study revealed that a 30% increase in visitation to Clear Lake occurred since the study was last performed in 2005. The study estimated that in 2009, there were over 500,000 household trips taken to Clear Lake. Overall, Iowa lakes experienced an increase in the intensity of visitation.

The CARD report explained that there are a number of possible explanations for the increase in visitation related to economic conditions (cost of gasoline, employment conditions, etc.) as well as the conditions of the lakes. Over the period of time being studied, a number of lakes saw substantive restoration efforts designed to improve water quality. Of the four lakes with the largest increase in total visitation from the base year average to 2009 (Saylorville, Clear Lake, Lake MacBride, and Storm Lake), three of them had undergone restoration projects.

The increase in visitation also led to an increase in the revenue generated from Clear Lake visitors. On average, each visitor party spent about \$163 per trip to Clear Lake. Not surprisingly, non-residents staying multiple days incurred the greatest expenditures. The direct spending impact by visitors totaled over \$66 million in 2009. The spending estimates from the 2002 survey were adjusted to 2009 dollars for comparability. This revealed that annual visitor spending at Clear Lake was \$15 million more in 2009 than it was in 2002.

"The CARD study illustrates how important improving the water quality of Clear Lake is to our local economy. It also shows that the public has recognized the improvement and responded to it," said Terry Unsworth, APCL President.



Microcystins Monitoring at State Park Beaches

Microcystins is probably not a term most people are familiar with; however, they are monitored every week at our State Park swim beaches. To understand microcystins, one must first learn about what produces them: blue green algae. There are thousands of blue green algae (cyanobacteria) species and most do not produce toxins that are harmful to people or animals. However, some types of blue green algae produce toxins within their cells which are released when the cells die off or are ruptured. The Iowa Department of Natural Resources monitors state beaches for microcystins because (1) they are the most commonly occurring and widespread of the cyanotoxins and (2) the World Health Organization has established guidelines for issuing health alerts for recreational waters based on this group of toxins. Concentrations of 20 micrograms per liter of water total microcystins indicate a moderate risk of cyanotoxin-associated illness, and swim advisories are posted when this threshold is exceeded. Reports of health effects associated with cyanotoxin exposure are rare, but exposure can cause skin irritations and allergy-like symptoms, while ingestion of the toxin can lead to gastrointestinal discomfort. The presence of algal scum elevates the risk of exposure to concentrations exceeding this threshold. In general, people should avoid swimming, wading, or playing in lake water that appears covered with scum or blue-green algae. Clear Lake has not had any swim advisories for microcystins since the monitoring began a few

years ago. However, this year the DNR has changed the way microcystins samples are collected, slightly increasing the chance for advisories. Two Iowa lakes have had advisories this year.

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BMP FOCUS: SEPTIC SYSTEM UPGRAGE

Improperly connected septic systems are common in rural areas throughout the state. At one time, septic tanks were frequently connected to field tiles or other conduits that drained directly to a nearby stream or ditch. Those waterways feed rivers and lakes that we recreate in and draw drinking water from. The discharge from improperly connected septic systems is often high in phosphorus and bacteria, making them a source of pollutant loading to our waters. Any septic system that does not contain secondary treatment (typically a leach field) is now considered unpermitted systems. State law requires that these systems must be upgraded when the property is sold. This spring, the APCL launched a new incentive program for landowners in the Clear Lake watershed to upgrade their unpermitted septic systems. The program offered a grant of \$3,000 to the landowners. So far, five landowners have signed up for the program, and three upgrades have been completed. There are a total of about 30 unpermitted

systems in the watershed. Call 641-923-2837 for info.

LAKE NEWS

APCL Donates Beach Cleaner Machine to DNR



Clear Lake's beaches are looking better than they have in years thanks to a beach cleaner/sand sifter machine that was purchased by the APCL this spring. The machine is being used on beaches at Clear Lake State Park, McIntosh Woods State Park, and City Beach throughout the summer months. The primary purpose of the machine is to help reduce bacteria loading to the lake by removing goose litter from the beaches. Another important benefit the cleaner provides is to remove rocks, garbage, and other debris from the beach sand. Especially during the initial cleaning, a large amount of small rocks were removed from the sand. Those rocks are being applied to trails in the park to make

use of the material.

The machine can clean to a depth of up to 4 inches and provides a groomed appearance to the beach. The machine works by raking sand over a screen. All objects larger than the screen size are as frequently as possible collected in a hopper on the back of the machine while the is high. cleaned sand falls back onto the beach. Four different screen sizes were included with the machine, ranging from 5/16" to 3/4" in size. The larger screen sizes have been used for the first couple cleanings, and then the smaller screen sizes are used subsequently.

"We've had the opportunity to use the beach cleaner multiple times now, and the results have been outstanding. There has been a lot of positive feedback from the public regarding the appearance of the beaches," said APCL President Terry Unsworth.

The goal is to use the machine once per week at each of the three beaches. Due to reductions in staff at the

State Parks, a handful of APCL members have volunteered to take on the responsibility of using the cleaner part of the time. In order to help reduce bacteria levels, the machine will need to be used when geese use of the beach

The total cost of the cleaner was about \$24,000. The Clear Lake Area Chamber of Commerce donated \$5,000 towards the purchase of the machine, Cerro Gordo County donated \$2,000, and the rest of the funding came from private donations.

The beach cleaners are used at several locations in the U.S. and even aided in the cleanup the Gulf Coast oil spill.



Cherrington Model 440XL Beach Cleaner

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