Barr Lake and Milton Reservoir Watershed Association

Lake Appreciation Month at Barr Lake

July is national Lake Appreciation Month thanks to efforts by EPA, NALMS, and countless volunteers across the country that participate in the big Secchi Dip-In event. Here in Colorado, the Governor has again declared July as a month to give back to Colorado's lakes and reservoirs. The Colorado Lake & Reservoir Management Association lends its support to local lake events every year in July. This year, Barr Lake will again have a shoreline clean-up day.

On July 12th, hundreds of volunteers will come to Barr Lake State Park to participate in volunteer activities in the morning and then enjoy a free lunch before heading down to the water's edge to participate in fun activities. The goal of Lake Appreciation Month is to create time during the busy summer season for lake users to see their favorite lake from a different perspective while giving back in a way that is beneficial to the lake.

Shoreline clean ups at Barr Lake are always interesting. It is amazing what finds its way into the lake from the S. Platte River, some 19 miles up the Burlington Ditch. Tires, appliances, tennis balls, water bottles, propane tanks, and more tires have all been common items found during the shoreline clean ups.

For Milton, which is much more secluded from the public, there will also be a couple of activities in July. The Pelican Lake Ranch home owners enjoy Milton on occasion and have adopted Lake Christina as their main fishing hole. Door hangers with information on picking up pet waste will be shared with the home owners.

How the September 2013 floods impacted Barr and Milton

Last September, both Barr and Milton were at their lowest elevation for the year. Then the rains came and created flooding problems along the Front Range. Within the watershed, the largest flooding problems were on Sand Creek. Sand Creek flows over the Burlington Ditch so only a minor amount of actual flood water was sent to Barr Lake.

The biggest impact from the flood was that water levels rose quickly in both reservoirs and were close to full by the end of October. The South Platte River water used to fill the reservoirs consisted largely of stormwater which diluted nutrient concentrations in the lakes. Bear Creek Reservoir detained a large amount of flood water that was released right after the flood. Bear Creek releases made their way down the South Platte and eventually some ended up in Barr Lake. Consequently, Barr Lake may have different water quality signs this year.

Smartweed, What is it?

The dominate aquatic plant at Barr Lake each year is Water Smartweed (*Polygonum amphibium*). This plant grows just as well in water as on land so the plant is seen around the edges of Barr for most of the growing season.

It is a native, non-invasive plant that is very beneficial for Barr Lake. The plant grows in about 8 feet of water with a pink flower that emerges slightly from the surface. The plants are great for slowing down waves thereby reducing shoreline erosion. The plant also provides nursery habitat for aquatic bugs which the smaller fish like to eat. Smaller fish use these beds of smartweed to hang out in and to stay safe from predatory fish. The plants can also help keep algae growth to a minimum by taking up nutrients from the water. Carp utilize the smartweed beds for laying their eggs each summer. The photo shows a typical patch of water smartweed with a fish trap staked in the middle for a fish population study.

How many Carp live in Barr and Milton?

The common carp, even though it is a non-native, invasive nuisance fish, has been a resident of the Barr/Milton watershed for close to 100 years. Carp live in the S. Platte River and are diverted to Barr and Milton through inlet ditches. Once in the reservoirs, carp can harm the water quality. They are known to dig up to 12 inches into the soft, nutrient-rich lake sediments looking for food. The resulting "bioturbation" can increase nutrients in the water, keeping the lake green.

This spring, fish traps were put into Milton and Barr to help estimate carp population size. For Milton, is was determined here are around 2,200 carp. Milton was completely drained dry in the fall of 2009 so there are not as many as in Barr. For Barr, the fish trapping did not work. For some reason the larger carp were not easily lured into the traps. Based on visual observations, there could be as many as 10,000 carp in Barr Lake.

Story: Carp Suppression at Barr Lake

This summer when Barr Lake is at its lowest elevation, Colorado Parks and Wildlife staff will assist the Association with a carp removal project. The goal is not to remove all the carp but to remove a majority such that a reduced population will have less of a detrimental effect on water quality.

Long nets will be anchored at the shore and then pulled by boat out into the lake. Once the net has been stretched out, the skiff will make a large arc back to shore, corralling as many fish as possible into the shallow shoreline. Captured carp will be removed by truck and recycled as fertilizer. Other captured species of fish will be returned to the lake.

Both Barr and Milton meet pH standard for 2013

Each year, both reservoirs are closely monitored for pH. Each reservoir is sampled approximately 20 times a year to collect pH data from top to bottom in the water column. Out of all data points, 85% of need to be below a pH of 9.0. For the first time in recent sampling history, both Barr and Milton had a pH below 9.0 85% of the time. A more detailed pH report can be accessed at www.barr-milton.org.

Bike Tour a Great Success

In May, the Colordao Foundation for Water Education (CFWE) conducted its annual, free bike tour along the S. Platte River. This year, the tour included the stretch of river between the Cherry Creek and Clear Creek confluences, about a 7 mile section of river. Close to 30 people participated in each tour (May 13th and 15th). The tours stopped at important areas along the way where speakers talked about the history and importance of the river. Speakers included the Greenway Foundation and OWOW program by Cherry Creek, FRICO at the Burlington head gate, Metro Wastewater Reclamation District by the new plant upgrades, and Upper Clear Creek Watershed and City and County of Denver by Clear Creek. The tour was such a success that there is a good chance CFWE will host a similar bike tour next spring.

Important Websites:

BMW Association http://www.barr-milton.org/

Barr Lake State Park http://www.cpw.state.co.us/placestogo/parks/BarrLake

Rocky Mountain Arsenal National Wildlife Refuge www.fws.gov/refuge/rocky_mountain_arsenal/

Weather www.crh.noaa.gov/bou/

H2ONLY KEEPITCLEAN

Welcome to the quarterly newsletter of the Barr Lake and Milton Reservoir Watershed (BMW) Association assembled by the BMW Information and Education Committee. The mission of the Committee is to reach out to all people in the watershed and provide water quality information important to the health of Barr Lake and Milton Reservoir.

Mark your calendar for these upcoming events in the watershed

Barr Lake Lake Appreciation Day, July 12th, 8am to 2pm

Day on the Rez at Bear Creek Reservoir, July 20th

Adams County Fair, July 30th to August 2nd

Commerce City Neighborhood Event, August 16th, 4-8 pm

Barr Lake Fall Birding Festival, September 6th

National Water Quality Awareness Week/World Water Quality Monitoring Day, September 18th

Brighton Eco Fair, September 20th

Barr Lake Trail Ride, September 20th

Phosphorus-free lawn fertilizers keep your lawn and Barr Lake clean

A new watershed-based educational campaign is starting up to warn people about the impacts of using lawn fertilizers with phosphorus, especially if they wash into the storm water system. The new Keep It Clean campaign has developed an algae monster ad warning how phosphorus from fertilizers can easily wash downstream to Barr and Milton and contribute to the unwanted growth of algae. Nutrients in the form of nitrogen are important for your lawn, but phosphorus is not needed to grow a healthy lawn. Aquatic systems need nutrients too but only in very small quantities. Just a small amount of phosphorus (parts per billion) can quickly turn a clear, blue lake into a scummy green one.