

Reflections: Standley Lake by Kelly Cline, October, 2008

How It All Began

The Standley Lake story began as Blue Bird Jones Lake, which was owned by Joseph Standley. This lake was below Kinnear Lake on Big Dry Creek. It was the largest natural body of water in Jefferson County. Joseph Standley told this little lake that some day “you will be a great big reservoir and I will call you Standley.” Joseph formed the Denver Reservoir Irrigation Company and began proposing this reservoir to anyone who would listen.



“This reservoir will cover 2000 acres and have an earth filled dam a mile long and a thousand feet wide,” exclaimed Joseph Standley. “A mile long dam, and made of dirt? Are you crazy?” exclaimed the water purveyors. No it turns out Joseph wasn’t crazy. His company later became the Farmers Reservoir and Irrigation Company (FRICO) as I understand it and Standley Lake was born.

Standley Lake was originally constructed as part of the Farmers Reservoir and Irrigation Company (FRICO) system for agricultural

users. Standley Lake was constructed on Big Dry Creek during 1907 to 1912.

The present reservoir covers approximately 1200 surface acres, with adjoining land covering an additional 2000 acres, which together make up the Standley Lake Regional Park. A total of 42,000 acre feet of water can be stored in Standley Lake. The residence time is about 1.0-1.2 years.

About 96% of the water is received from Clear Creek via irrigation canals, with additional water coming in from adjacent drainages and trans-basin deliveries. Water from Standley Lake is used as a municipal water supply for Westminster, Northglenn and Thornton and as an agricultural water supply for FRICO. Storage space in Standley Lake is allocated among the parties based on their water rights, ownership of storage capacity, and contractual agreements. Standley Lake Regional Park is a popular destination for fisherman, boaters, camping folks, wildlife watchers and weekend “get the heck away from home” travelers.



Drinking It Up: Standley Lake Becomes a Municipal Water Supply

In the summer of 1962, poor drinking water quality from Kershaw ditch triggered complaints from Westminster citizens that eventually culminated in the “Mothers’ March on City Hall”. After two failed

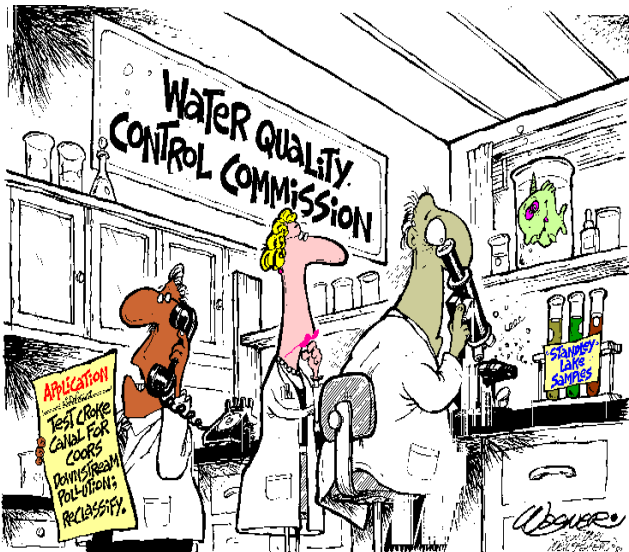


referendums to pursue water from Denver, citizens of Westminster approved a 3.5 million dollar bond for the City to buy into the Standley Lake system. An agreement was reached with FRICO in 1963, which called for Westminster to rehabilitate the capacity of the reservoir and in return Westminster received the use of the reservoir capacity exceeding 30,000 acre feet. The rehabilitation was completed in 1966.

Is this the end of the story? Oh no! Some time in the 70's, Thornton and Northglenn were attempting to develop additional

water supply and eventually an agreement between Westminster, Thornton, Northglenn and FRICO was negotiated regarding Standley Lake. The so called “Four –Way Agreement” was signed in 1977 and resolved many conflicts between the parties and established a committee with one representative from each of the entities to manage and operate the lake.

In 1977 and early 1980's, taste and odor events occurred that brought to light the sensitivity of the “new” water supply. It turned out that there was a plethora of problems to solve. One issue was nutrient rich and metal laden storm water being delivered to Standley Lake through the feeder canals. A resolution was developed through the canal companies that required developers in the watershed to bypass storm water from the canals. All the major drainages were bypassed from the canal except one.



Another issue the Standley Lake users faced was from Coors et al, discharging wastewater effluent into Clear Creek. In 1988, an agreement was signed that had the discharge being delivered below the diversion canals. With all the Standley Lake users and increased focus on source water protection the Cities formed a new management group focused on protecting and enhancing the water quality of Standley Lake, which today is called the Standley Lake Cities.

The first order of business for the Standley Lake Cities was to propose a rule making before the Colorado Water Quality Control Commission, to establish a nutrient limitation standard for Standley Lake. The proposal was opposed and defeated. Alternate approaches were established in 1993 with the Clear Creek Watershed Management Agreement. The Standley Lake Cities,

“It would be premature to declare Coors responsible for the water's bad taste, but it isn't everyday we see a water flea doing the Beer Barrel Polka.”

FRICO, and 20 wastewater and land use entities in the Upper Clear Creek and Standley Lake basins agreed to a narrative standard for Standley Lake. It read, “The trophic status of Standley Lake shall be maintained as mesotrophic as measured by a combination of common indicator parameters such as total phosphorus, chlorophyll-a, secchi depth, and dissolved oxygen. Implementation of this narrative standard shall only be by Best Management Practices and controls implemented on a voluntary basis.”

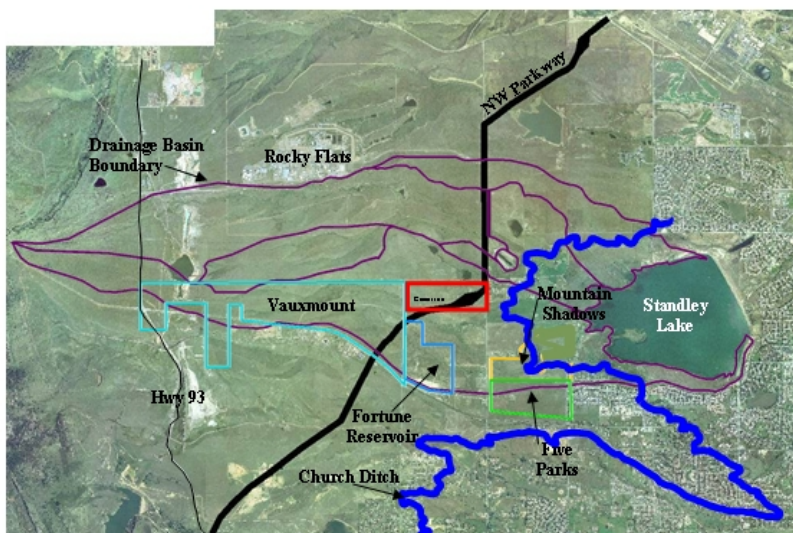
In 1993, a combined monitoring program was developed by the participating parties and an annual report is delivered to the Water Quality Control Commission on a yearly basis. So all is well...right? Oh no! Rising concerns about Rocky Flats storm water led to the Standley Lake Protection Project and the construction of the Woman Creek Reservoir and the Kinnear Ditch Pipeline. These projects were primarily funded by the Department of Energy for 30 million dollars to protect Standley Lake from Rocky Flats storm water.



How about now? Is the lake protected yet? Nope! Around 2000, Black Hawk-Central City proposed taking water from Clear Creek and replacing it with wastewater effluent upstream of the canals that divert to Standley Lake. Oh no! Not again! Yep! Back to negotiations! The stipulation that was reached required Black Hawk-Central City to implement wastewater treatment with biological nutrient removal, partially funded by the downstream entities.

So what could possibly be next? Well, in 2004, The Standley Lake Dam Renovation Project was completed that re-developed the spillway, moved the outlet works, and stabilized the mile long

Developments in Standley Lake Watershed



earthen dam. Did you say mile long earthen dam? Yep! What, are you crazy? Nope! Okay, what about today? What is going on? Are you done yet?

The threat of storm water from development west of the lake was significantly reduced by the construction of the Church Ditch Water Quality Project in 2008. This project basically changed the location of the Church Ditch turnout to Standley Lake and used the existing Church Ditch on the west side of the lake for capturing overland storm water flows so that it could be diverted around the lake.

Standley Lake: It Isn't Just For Drinking

Enough already about water quality protection! Tell us something interesting about the park! In 1994, Westminster started developing the Standley Lake Regional Park with Jefferson County. In 1998, Westminster annexed some existing Jefferson County land to form Standley Lake Regional Park. Land uses in and around the lake and recreational practices are regulated by the Standley Lake Park IGA. The IGA was developed by Westminster, Northglenn, and Thornton to protect the water quality of Standley Lake.

There is limited recreation on the lake. Boating is allowed from May 1st – Sept 30th. No more than 150 boats are allowed on the lake at one time, however boats that have greater than 20 hp may purchase a seasonal permit. Boats with less than 20 hp motors, electric engines, or are non-

motorized are allowed with a daily permit. There is a lovely four-lane boat ramp which is available to accommodate boaters in the park and a fish cleaning station for fisherman who catch their dinner. Visitors can also water ski and sail board, but there is absolutely no swimming or over night boat mooring allowed. Several horseshoe pits and volleyball courts are also available to entertain visitors when they aren't off boating or fishing.

Standley Lake offers a comfort station that includes restrooms, drinking fountain and pay phones located near the 60 designated campsites which have both picnic tables and fire pits. Season permit holders may camp in the undeveloped campsites throughout the park. Camping is available May 1st-Sept 29th, on a first come first serve basis, however no hookups or dump stations are available. Pets are welcome, but they are not allowed in the water at any time, and they must be on a leash.

The Standley Lake Nature Center is also a great place to see history and examples of wildlife of the park. Access to the park is made easy, as in addition to the main entrances, there are two adjacent parking lots available for walk-in access.



Standley Lake is a popular destination for fisherman and is a host to a variety of fish species. Rainbow trout, brown trout, walleye, yellow perch, crappie, channel catfish, large and smallmouth bass, wipers, stripers, sunfish, and bluegill. The lake is stocked regularly throughout the summer by the Colorado Division of Wildlife. The Colorado State walleye record came from Standley Lake. The walleye weighed 18 pounds, 13 oz., caught in 1997.

Standley Lake is also a great place to bird watch. Many water birds have been observed at Standley. The year 2001 marked the first time in recent years that great blue herons were known to nest by the lake. Other birds regularly observed at the lake include white pelicans, western grebes, cormorants, gulls, Canadian geese, and a variety of ducks. For several years Standley Lake has been the home to nesting bald eagles. Other raptors seen are Swainson's hawks, prairie falcons and red-tailed hawks.

All these birds can be observed while hiking, biking, or horse back riding more than 14 miles of maintained trails. All trails within the park are open to visitors year-round. Other trails that connect to Standley trails are the Big Dry Creek trail, Farmers High Line Canal trail and a substantial network of different trails on the South side of the lake which link to 63 miles of off road trail outdoor bliss.

In 2008, steps were taken by the City of Westminster to protect the lake from aquatic nuisance species. Since aquatic hitch hikers have been spread throughout the United States via recreational water craft and fisherman a system of inspecting, tagging, and quarantine time was developed in order for boating to continue to be allowed on Standley Lake. No boat or water craft is allowed on Standley Lake until it has met all the requirements of this new inspection program. Wash stations and ranger inspection stations were put in place to guarantee the integrity of the boats entering the lake. Basically, any boat on entering the park will be inspected. If the boat is only used in Standley Lake, and it is on a trailer, then it will receive a green tag, which signifies that this is a Standley Lake boat. If the boat is only ever used on Standley it will continue to receive the green tag and can forgo

power washing and quarantine. If a boat on a trailer goes to other lakes it will receive a red tag, which means it has to be washed, and stored dry for a designated time. Any boat that goes to another lake will be absolutely sterilized, via hot wash and quarantine, before it is allowed to launch in the lake. Upon departure from the lake, the boats will be tagged with a green tag. If this tag is broken, when upon arrival again to Standley Lake, the boat will have to go through the washing and quarantine procedure again. Other watercraft, or boats that are not on a trailer will be require to be inspected and washed before going into the lake every time.

One aquatic nuisance species that has already impacted Standley Lake arrived around 1995. This was an aquatic plant called Eurasian Water milfoil. Milfoil can grow down to depths of 30 feet and can choke out the shallow areas of a Lake. Milfoil interferes with fishing and boating and is considered a real nuisance by people who recreate on lakes. Milfoil grows in dense mats and chokes out beneficial native species of aquatic vegetation, and creates areas where blooms of blue-green algae can occur. These blue-green algae blooms can cause major taste and odor events in drinking water.



During 2002-2003, the Standley Lake Cities pilot tested a biological treatment method, called the Milfoil Process. This process incorporated the use of Eurasian water milfoil weevils, which in various life stages consume the milfoil. During the periods of 2004, 2005, and 2006, over 140,000 weevils were stocked in Standley. The weevils have managed to establish a sustainable population and have demonstrated some control over the milfoil density.

In closing, it seems safe to say that Standley Lake is a highly managed system that has been laced with challenges and successes from the beginning. This lake would not be in the shape that it is in today if not for all the hard work and efforts put in place by many different entities, and groups. Watershed protection, water quality, water resources and controlled development have all been critical steps in the protection of the quality of water in the lake. The historic efforts that have gone into protecting this reservoir will hopefully serve to demonstrate the effort that is required to maintain a good water quality system and inspire the continuation of collaborative efforts by all involved to guarantee its future success.