### Friends of the Desert Wetlands Park Newsletter

Spring 2008

Volume 11 Issue 1



# Wetlands Park News & Views

# SCOP

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## Information?

Call Wetlands Park Information Center 455-7522



Friends of the Desert Wetlands Park

The mission of the FDWP is to cooperate with public and private entities to increase public awareness and contribute to the quality of life in the Las Vegas valley by: Supporting the Desert Wetlands Park; Preserving and enhancing the wetlands environs, and Promoting stewardship of the valley watershed.

A major construction project will begin along the Wash this July. The City of Las Vegas, City of Henderson, and Clark County Sanitation District own and operate wastewater treatment facilities that pass treated effluent to Lake Mead via the Las Vegas Wash. These entities formed the Clean Water Coalition (CWC) in 1999 to address the issue of the effluent "plume" can possibly effect the water quality of Lake Mead, which is our potable water supply. The CWC initiated the Systems Conveyance and Operations Program (SCOP) project to study alternate effluent discharge sites.

The proposed "solution" is to directly pipe the highly treated effluent from the waste treatment facilities directly to the middle of the lake. The first leg, the Effluent Interceptor, will impact the Wetlands Park the most. The pipe, 8 to 12 feet in diameter, will be installed with the "trench and fill" method, requiring a 175 foot wide easement. Once the exact route in defined, we'll have a better idea on the impact to the Park. Regardless, there will

be a great deal of environmental restoration work required after construction is completed. The second leg, the Lake Conveyance system, will be a 9 mile long tunnel through River Mountain to a Hydropower Generation Station. The station will take advantage of the 400 foot drop along the pipeline for power generation. The third leg will carry the effluent water out to the lake.

The plan is to still allow 30 to 60 million gallons a day to flow down the wash, a significant reduction from the 150 million gallons or more currently in the channel. The reduced flow will also impact the dilution effect the relatively pure treated effluent has on the contaminated ground water and the storm water that also flows down the channel to the lake.

Expected to be completed in 2012, the same year for the third straw completion, and is expected to cost approximately \$780 million. The Final Environmental Impact Statement EIS, and previously in the Draft EIS (the latter was released in September 2005), assessed the full spectrum of fore-

seeable environmental consequences, and appropriate mitigation measures identified, for each alternative considered. These documents can be found on the internet.





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# **QUAGGA MUSSELS**

We have a new invasion of an invasive species in Lake Mead. It may be the worst invasive species ever to hit the U.S. On January 6, 2007, a small mussel was discovered at the Marina in Lake Mead. Over the next few weeks, divers found more mussels of the same variety at locations throughout the Boulder Basin, the western lobe of Lake Mead. First thought to be zebra mussels, they were soon confirmed to be quaggas. The quagga mussel (*Dreissena rostriformis bugensis*) is one of seven Dreissena species. This species is indigenous to the Dnieper River drainage of Ukraine. Based on size measurements, it is estimated that the lake's population was approximately 2 years old and in that time, now probably numbered in the millions.

The Southern Nevada Water Authority found quaggas on the outside of one of its Lake Mead intakes, some 90 feet below the surface. Down stream, California Water District divers found quaggas outside an intake for the Colorado River Aqueducts. Also divers found mussels at the Central Arizona Project intakes and on an intake structure for Davis Dam.

The quagga mussel was first observed in North America in September 1989 when it was discovered in Lake Erie near Port Colborne, Ontario. It was not identified as a distinct species until 1991. The species was called the quagga Mussel after the quagga, an extinct subspecies of African zebra mussel, possibly because, like the quagga, its stripes fade. It causes many of the same problems (damaging boats, power plants, and harbors and destroying the native mussel population) as the equally invasive Zebra mussel of Russia. Each female mussel can produce millions of eggs each year. The Quagga Mussel eggs hatch into free swimming forms called veligers and can be easily transported in live cells or bilge water of recreational boats and commercial shipping. The veligers attached themselves to virtually any surface and proceed to grow into a mussel, if the environment is suitable. They most likely found their way to the Great Lakes via international shipping and then spread via recreational boating not aware they were harboring hitchhikers.

Each mussel that survives to maturity can filter more than a liter of water every day, taking in algae and other edible

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particles and spewing out clear water. The purification process has its down sides, disrupting the food chain that feed other aquatic invertebrates and so forth up the food chain. Clearer water in the lake allows sunlight to reach deeper and encourages the bloom of new species of algae. The mussel's filtering prowess can concentrate toxins and contaminates thereby putting at risk, anything that might feed on them. The lifespan of the mussel is about two years, then there's the contamination problem as they die off.

While the quagga mussel can be controlled at water intakes with chemical treatments, eradication on any scale is expensive. Boat hygiene in and out of the lake will become the rigor to help control its spread. Time, and a lot of work will tell

the story of how this latest lake crisis will turn out.

An adult quagga mussel, measuring less than 2 centimeters in length. Zebra mussels are smaller an have more defined striping on their shells.



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# Wetlands Park Update

By Elsie Sellers, Wetlands Park Project Manager

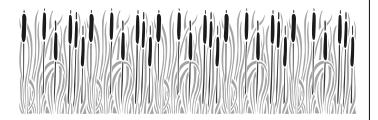
Deputy Director of the Secretary of the Interior, Luke Johnson, visited the Wetlands Park on Wednesday, February 20. Wetlands staff provided Deputy Director Johnson with a two-hour tour of the Nature Preserve and the expansion portion currently under construction and discussed the projects funded by the Southern Nevada Public Land Management Act. Deputy Director Johnson was in town for the groundbreaking ceremony for the Bureau of Land Management's new visitor center at Red Rock Canyon.

The architectural plans for the Wetlands Park Nature Center are presently being reviewed by the Clark County Building Department. It is expected that the building will be advertised for construction by this summer.

Ducks and wading birds will have a new place to call home or visit by the end of the year. The ponds and seasonal wetlands that were designed by Ducks Unlimited are under construction. This project will provide approximately 40 surface acres of ponds and wetlands for birds and other wildlife. A revegetation plan is being developed for a portion of the 112 acre site.

The Duck Creek trail system is getting a facelift. The trails will be rehabilitated to "go with the flow" when flood waters pass through. Look for hardened trails, boardwalks, and bridges. Interpretive signage will be installed along the trails as well. Approximately 25 acres of the non-native tamarisk trees will be removed and replaced with native mesquite trees and other plants and shrubs that provide greater value to wildlife. The project is expected to take about one year to complete. Portions of the trails will be closed during construction.

A contractor has been selected to design the Pabco, Wells, and Magic Way trailheads. We will see amenities such as parking, rest rooms, and picnic tables at these sites in about 18 months.



# Spring Green-Up

The Las Vegas Wash Coordination Committee hosted its 12th semi-annual Wash Green-Up volunteer planting event on Saturday, March 8, 2008. Nick Rice coordinated the Green-Up event this year. The site was the Upstream Historic Lateral South Upper Plateau, which is located on the Las Vegas Wash just upstream of the C-1 Channel and Historic Lateral Weir on the south side of the Wash. Perfect weather conditions brought out approximately 400 volunteers to plant about 2,000 trees and shrubs on 5.7 acres.

The site had been cleared of Tamarisk and had interesting natural contours to the land. The native planting included Creosote Bush, Honey Mesquite, Catclaw Acacia Brittlebush, Broom Baccharis, Fourwing Saltbrush and White Bursage. *(continued on pg 4)* 

Share	Our	Vision!!	Membership	<b>Application</b>
Name:				

**Preferred Mailing Address:** 

City: State: Zip:

Phone: Fax:

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May we show your name on our membership list?

Yes No

Check here if you wish to be contacted for volunteer projects

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Please mail to FDWP, PO Box 28017, Las Vegas, NV 89126 For Membership information, call: 457-8867

# Our Thanks To...

New and Renewing Members: George Hughes, Mary Madrid, Glade Koch, Kennedy Jenks Consultants, William Brandt, Betty Pardo, Marthe Chandler, Leavitt Family, Martha Wood

### **WE NEED YOUR SUPPORT**

The Park is a place to enjoy! Have you visited the Park recently? The temporary Visitor Center is at the very end of Wetlands Park Lane. Cross Boulder Highway and travel 1 mile east, then look for the Wetlands Park sign, just where Tropicana turns into Broadbent Ave. If it has been a while since you've visited the Park, you will be amazed at the changes and improvements that have taken place. The Park is for your benefit, come and enjoy it!

There are many opportunities to get involved and to show your support-not only through membership in the Friends, but by contributing funds or labor for needed physical improvements, and educational materials. If you have put off renewing, remember your membership ends one year from the date you paid your dues. PLEASE CHECK THE EXPIRATION DATE ON YOUR MAILING LABEL TO SEE IF IT IS TIME TO RENEW!

If you have not yet taken the plunge to join, please do so now. You will demonstrate that you want to help in the development of new features in the Park for our community!

# Spring Green-Up (continued from pg 3)

We have planted 176 acres thus far. Grants funded 102 acres and Capital Improvement Projects funded 74 acres. Volunteers have planted 70 acres of this total. There is still a substantial amount of future acreage to be planted with an additional 12 weirs to be constructed.

The next Green-Up planned for this fall will be by the Upper Diversion Weir which should be completed this summer.



The great weather brought out more volunteers than expected

Newsletter Editor, Peter Zavattaro
P.O. Box 28017
Las Vegas, NV 89126-2017
Email: pzwetlands@earthlink.net

Friends of the Desert Wetlands
Park Newsletter

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