



City of Carnation



King County

CARNATION WASTEWATER TREATMENT FACILITY PROJECT • UPDATE

Winter • Spring 2008

Treatment plant construction expected to be complete late spring

THE CITY OF CARNATION'S construction of a vacuum pump station and installation of main sewer lines are complete. All side sewers contracted to be done by the city are complete along with a majority of the do-it-yourself side sewers. There is still work to be done to complete the treatment plant before it can start accepting sewage from Carnation homes and businesses.

The treatment plant is now 75 per cent complete. Workers



On January 8, 2008 Carnation City Council toured the plant. Here they look at the "membrane bioreactor" structure. For more information on this treatment technology see <http://dnr.metrokc.gov/wtd/carnation/>

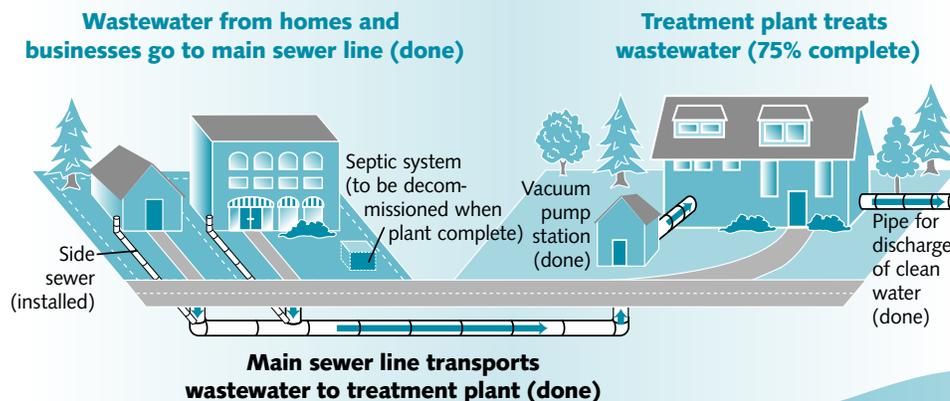
were able to finish much of the outside of the buildings during summer and fall and are now working on completing the inside of the structures and progress is less affected by weather.

They are working some longer days and Saturdays to meet the project schedule.

Start up and initial testing of the treatment plant is expected to take place in early spring. The plant will be accepting wastewater after all testing is successfully completed. The contractor working on the plant experienced some delays because of November 2006 weather and flooding and that has extended the timeline for getting the plant on line. Hopefully there will not be any additional severe weather or other circumstances to result in further delays to the plant start-up schedule.

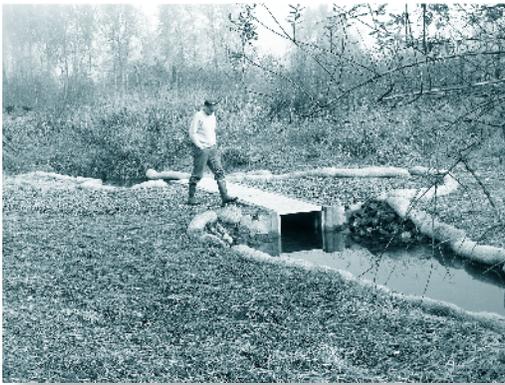
Thanks from Carnation City Manager Candice Bock

Thanks to our citizens for your patience in dealing with any disruptions and traffic caused by this project. It is exciting to see the end in sight. I would also like to thank our contractors who finished installation of the main sewer lines and vacuum station on time and approximately \$800,000 under budget.



Creating Resources from Wastewater

Chinook Bend Wetland Enhancement Construction Complete



Dean Wilson, one of the designers of the wetland enhancement looks over the finished water control structure.

CONSTRUCTION WAS COMPLETED THIS FALL on a wetland enhancement at Chinook Bend Natural Area. The project will use reclaimed water from the new Carnation Treatment Plant to enhance wetland hydrology. It is a result of a unique partnership between the City of Carnation, King County and Ducks Unlimited.

The 59-acre Chinook Bend Natural Area is about two miles north of Carnation. The Snoqualmie River at Chinook Bend provides ideal salmon spawning and other wildlife habitat. Recognizing its ecological importance, the property was donated to King County by Nestlé USA in 2000 with the stipulation that the area be preserved and enhanced for fish, wildlife and passive recreational use.



Restoration is occurring one step at a time. Volunteers have planted over 12,000 trees in the former pasture over the last seven years as the area is restored to a forested floodplain.

The completed wetland design uses soil moisture management techniques to control reed canary grass and native plantings to

enhance marsh and forested wetlands. A fish-passable water control structure has been installed to manage wetland water levels. An existing culvert and pipe system that drained the wetland was removed, daylighting the water flowing out of the wetlands into an existing stream channel. The project increased the size and complexity of the wetland. Minor earthwork created hummocks, depressions and a more diverse shoreline. The earth work and water control structure were finished last fall.

Plantings of native plants and soil moisture management will continue for two years. There are ongoing opportunities to help with volunteer plantings. Planting events are

scheduled for March 1 and 8, from 9 a.m. to 1 p.m. For more information, call Tina Miller at 206-296-2990 or e-mail tina.miller@kingcounty.gov.

This project came from Carnation's need for a wastewater treatment plant to protect public health and water quality. The new treatment plant will use an advanced treatment technology and produce Class A reclaimed water, water that is very highly treated and safe for all human uses except drinking. The water produced by the plant will meet the strictest standards set by the state's departments of Ecology and Health. Reclaimed water goes through additional filtering and disinfecting processes compared to conventional sewage treatment. Questions? Call Jo Sullivan at 206-296-8361 or e-mail jo.sullivan@kingcounty.gov



Chinook Bend wetland hummocks after this fall and winter's plantings.

Aquatic Lands Enhancement Account Grant Amenities

KING COUNTY STAFF SUCCESSFULLY obtained a grant for \$397,500 from the Recreation and Conservation Funding Board, Aquatic Lands Enhancement Account. This grant that will pay for enhanced facilities at the Chinook Bend Natural Area including a safer parking lot for the site, American Disability Act accessible trails, and a river and wetland overlook with interpretive signage. These steps will require a year for planning and permitting with construction scheduled for 2009.

And there will be art!

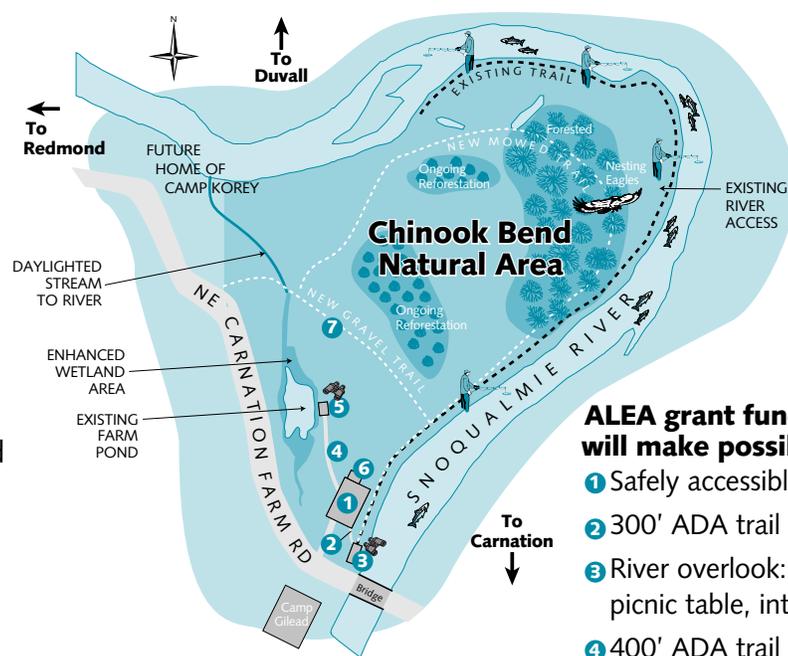
RENOWNED INTERNATIONAL ENVIRONMENTAL ARTIST Betsy Damon was selected to work with the project team to create artwork that will be part of the experience at this site. The artwork is funded through the King County Percent for Art Program, administered by 4Culture in partnership with our division.

The goal of the art is to celebrate the use of reclaimed water as a water resource and enhance interpretive experiences on site. For the last decade Damon's artwork has focused on promoting the preservation, protection and restoration

of natural and engineered water systems. Some of her most well-known projects include the Living Water Garden in Chengdu China, Sounds of Water in Turtle Bay Arboretum in Redding CA, and the Beijing Olympic Forest Park. Check out <http://www.keepersofthewaters.org/>.

Proposed Enhancement of the Chinook Bend Natural Area

ANOTHER PROJECT PLANNED for the area will re-establish some of the key ecological processes that have been lost on the Snoqualmie River. To accomplish this a portion of the levee on the site will be removed allowing the Snoqualmie River to flow through the site and create a more active and natural stream channel. This will benefit the Chinook salmon, a threatened species under the Endangered Species Act. For levy information call 206-263-6319.



WELCOME CAMP KOREY!



Camp Korey is purchasing the historic 818-acre Carnation Dairy Farm property from Nestlé USA. Camp Korey, a new, year-round facility providing programs and camp experiences for seriously ill children of the Pacific Northwest is scheduled to open summer 2008. It is the farm's agricultural heritage that will make the camp so special.

We hope the campers will enjoy Chinook Bend Natural Area next door!

ALEA grant funding will make possible:

- 1 Safely accessible parking area
- 2 300' ADA trail to river overlook
- 3 River overlook: bench, picnic table, interpretive signage
- 4 400' ADA trail to wetland overlook
- 5 Wetland overlook
- 6 Restroom facility
- 7 Enhanced gravel trail

CARNATION WASTEWATER TREATMENT FACILITY PROJECT UPDATE WINTER 2008

Save the date!

Carnation Sewer System dedication

Monday, June 2, 3-6:30 p.m.

The information in this newsletter is available on request in accessible formats by calling 206-296-8361 or 711 (TTY).

INTERESTED IN THE TREATMENT PROCESS and how the system works?

Until tours are available here in Carnation, they are available at King County's other regional treatment plants. On a tour, you'll see first hand how wastewater from homes and businesses is treated and turned into valuable water, nutrient and energy resources. Call 206-296-8286 or check the Web at <http://dnr.metrokc.gov/wtd/tours/> to arrange a tour for yourself, a group or a class.



A class tour at one of our treatment plants.

The treatment plant is getting closer to completion everyday!

Save the date of **June 2, 2008** for the sewer system dedication.



A recent tour at the Carnation Treatment Plant.

For more information on the county's portion of the project, call 206-296-8361 or check out <http://dnr.metrokc.gov/wtd/carnation>. For more information on the City's portion of the project, call Carnation City Hall at 425-333-4192 or check out <http://www.ci.carnation.wa.us>.