Fact Sheet on Dallas Chain of Wetlands

Jan. 29, 2015

The Lower Chain of Wetlands: A community treasure

<u>How it works:</u> During most of the year the Lower Chain of Wetlands is a peaceful wildlife area of interconnected ponds fed year round by reclaimed water from the Central Wastewater Treatment Plant. During flood events, the wetlands lower flood risk by providing an efficient path to convey water through the Dallas Floodway System as shown below:





Jan. 28, 2012: By the following day the floodwaters receded enough to reveal the roadway. It reverts to its role as a wetland wildlife habitat – the low-water stage most visitors see.

Construction history: The federal project began in 2004 with the excavation of Wetland Cell D (next to the I-45 Trinity River Bridge); plantings began in 2005. Excavation of Wetland Cells E, E-West, F-North, F&G were completed in 2008 across a landfill and a golf course. Revegetation in this Lower Chain is complete. Excavation of the adjacent Upper Chain of Wetlands (Cells A, B&C) just upstream is under way with revegetation to follow. Completion target: 2018.



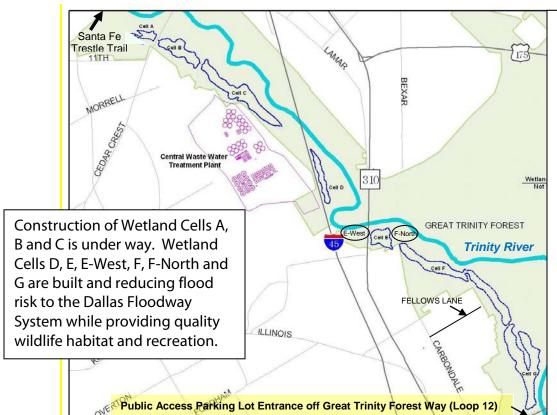
Pink evening primrose, April 2013, Wetland Cell F

Overall wetlands scope: When complete, the 271 acres of the Upper and Lower Chain of Wetlands ecosystem will feature 123 acres of emergent wetlands, 45 acres of open water and 102 acres of grasslands. This system will lower Floodway flood elevations by about four feet.

<u>Project status:</u> The city of Dallas assumes management of the wetlands when the U.S. Army Corps of Engineers completes each section. It will be a public natural area for light recreational use (hiking, birding and bicycling).



Engelmann's (cutleaf) daisy, April 2013, Wetland Cell F



The big picture:

The wetlands are part of the Dallas Floodway Extension, one of two Corps of Engineers projects in partnership with the city of Dallas. The project footprint begins at the Santa Fe Trestle Trail and ends near I-20. Under a separate initiative, the Dallas Floodway Project, the Corps has proposed flood-risk reduction improvements to levees upstream of the Santa Fe Trestle trail and ecosystem restoration by returning the meander to the river, which was channelized in the 1920s when it was moved.



Great blue heron, 2012, Wetland Cell F

How it attracts wildlife: The Corps of Engineers has created a new ecosystem that is far more diverse than the willow-cattail wetlands common in North Texas. Typical wetlands host well under a dozen aquatic plants compared to the 40 species found in the chain of wetlands. This new wetlands chain thrives on a year-round flow of nutrient-rich water while many North Texas wetlands dry up during the summer. Each wetland pond was designed with a variety of underwater shelf depths to promote growth of this diverse collection of aquatic, emergent and floating leaf plants. The bass-bluegill fishery also includes shad, a filter feeder that thrives on the plankton-rich water. Shad live in the deepwater environment where gulls feed. Adjusting water levels seasonally creates beach to provide food during migration of such shorebirds as sandpipers, or higher levels to support dabbling ducks. Wetland managers monitor the wetlands for sedimentation, water quality, macro-invertebrates, invasive or undesirable species, fish, reptiles, amphibians and birds.

Diversity: Thirty-one species of native aquatic plants were planted in the wetlands; still other species – called volunteers – have found a home here. Corps researchers say this ecosystem supports 14 species of mammals, 13 species of reptiles, 6 species of amphibians, 52 species of macro-invertebrates and 109 species of birds. (The Trinity Bird Count documented even more: 129 as of 2014.) Species diversity is improving over time and seems to coincide with progress in the establishment and diversity of the aquatic vegetation. Bird flocks attracted to the wetlands can be large – 2,000 birds at a time at Wetland Cell G – mostly ducks. Bald eagles, double-crested caracaras, white ibis, warblers and Mississippi kites are visitors. Located amid the Central Flyway, it has become a stopover for migrating birds.



Dallas Floodway Extension Project (wetlands) information:

www.swf.usace.army.mil/Missions/WaterSustainment/DallasFloodwayExtension.aspx U.S. Corps of Engineers Fort Worth District contact: Jim Frisinger, james.c.frisinger@usace.army.mil 817-901-9644



Trinity Bird Count: Volunteers gather quarterly to count bird species and numbers at locations along the Trinity River in Dallas County. Developing this historic record is key to a better understanding of the environmental health of our community. Further information at http://tx.audubon.org/trinity-bird-count-0 or by contacting Tania Homayoun at thomayoun@audubon.org