Wastewater to Wetlands

Positive Choices for People and the Environment

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The Power of Perspective

Artist's view of a U.S. Landsat satellite. Credits: NASA.

A wastewater wetland is a human designed facility with the purpose of naturally cleaning the liquid waste from water treatment plants while reestablishing habitat for native flora and fauna. Constructed wetlands do this by bringing together water, plants, animals, microorganisms and the environment – sun, soil, air – to improve water quality. Like a natural wetland, the constructed wetland works as a bio-filter, removing sediments and pollutants, such as heavy metals, from the water. Two examples of waste water wetlands in Arizona are Tres Rios Constructed Wetlands in Phoenix and Sweetwater Wetlands Park in Tucson.

Tres Rios

Tres Rios Water Treatment Facility Phoenix, AZ 11-29-2006

Tres Rios Constructed Wetlands Phoenix, AZ 3-13-2013

Ground view from Tres Rios showing new vegetation

http://cms3.tucsonaz.gov/water/sweetwater

The top image shows the Tres Rios Wastewater Facility with adjacent agriculture fields. The bottom image shows the constructed wetland with basins and trails. Images from Google Earth historical imagery.
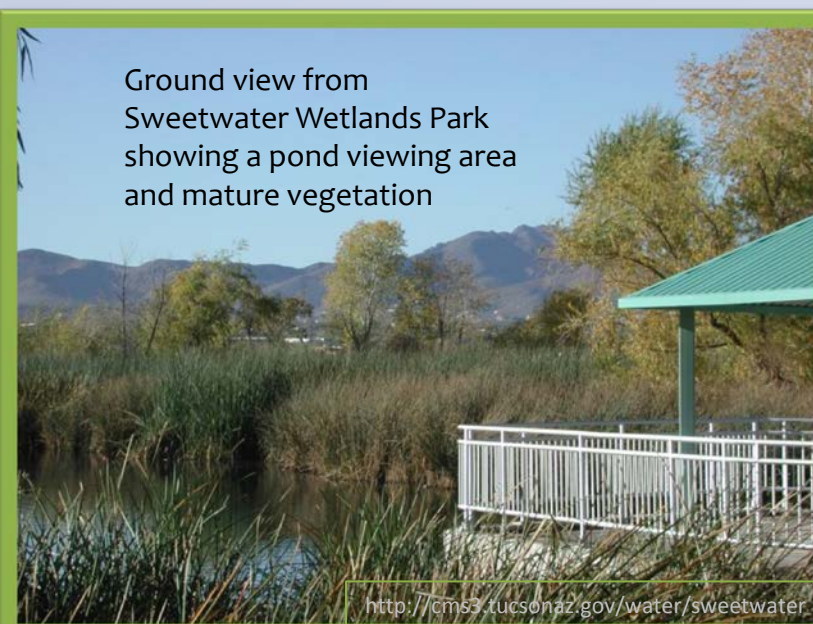
Sweetwater

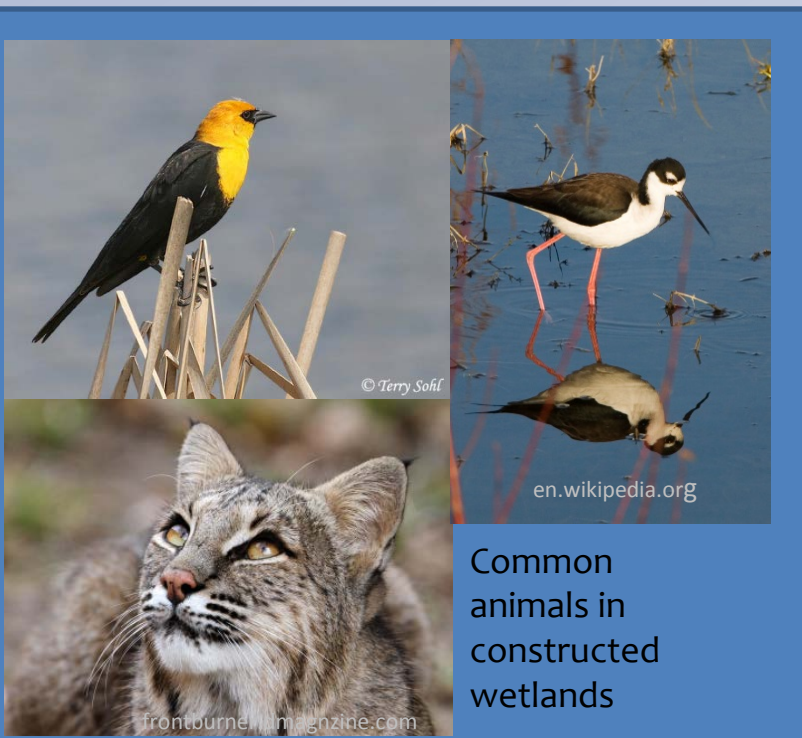Roger Road Water Treatment Plant Tucson, AZ 5-15-92

Sweetwater Wetlands Park Tucson, AZ 3-8-2011

The top image shows the Roger road Treatment Plant with adjacent fields. The bottom image shows Sweetwater Wetlands Park with ponds, basins, and nature trails. Images from Google Earth historical imagery.

Common animals in constructed wetlands

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Ground view from Sweetwater Wetlands Park showing a pond viewing area and mature vegetation

http://cms3.tucsonaz.gov/water/sweetwater

ARIZONA-SONORA DESERT MUSEUM

PSI Planetary Science Institute

ARIZONA WET Water Education For Teachers

Laurel Clark earth camp An Arizona-Sonora Desert Museum/U of A College of Science Collaboration