

**Donna Reservoir and Canal Site
Donna, Hidalgo County, Texas**

EPA Region 6

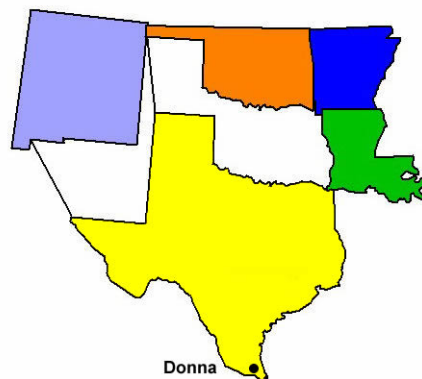
EPA ID: TX0000605363

Site ID: 0605363

State Congressional District: 39

Contact: Leos Valmichael 214-665-2283

Updated: March 2009



Removal Action

In August 6, 2008 an action memorandum was signed and approved by EPA Region 6 for the removal of contaminated fish in the Donna Reservoir and Canal (Site). The contaminated fish have been identified to have concentrations of polychlorinated biphenyls (PCBs) above the 2.0 parts per million (ppm) safe consumption Food and Drug Administration level.

The removal action involved the depopulation of edible size PCB-contaminated fish from the canal area. The removal was conducted in a two phase event. The first phase of the fish removal event began on August 23, 2008. The second phase began on February 16, 2009, to ensure that response action goals are being met. The collected fish were sampled as needed for hazardous waste categorization.

The removal is being coordinated with US Fish and Wildlife Service (FWS), Agency for Toxic Substances and Disease Registry (ATSDR), Texas Department of State Health Services (DSHS), Texas Commission on Environmental Quality (TCEQ), and the Donna Irrigation District (DID). This action will not prevent long-term recontamination of the remaining fish as they grow in size, but it will assist in removing the immediate health threat to the public and allow EPA along with other state and local authorities the opportunity to continue work on a long-term management and removal of the contamination source. All collected fish will be properly disposed of at an appropriate permitted facility.

Remedial Actions

As of March 2008 the Site has been listed on the Superfund National Priorities List (NPL) for clean up and special funding by Congress. The next step in the remedial process involves a comprehensive remedial site investigation (RI) to identify the source of contamination and potentially responsible parties (PRPs) for the clean up. Currently the source of the PCB contamination of the suspended sediment at the Site is unknown.

Phase I Removal Activities

On August 23, 2008 the EPA finished conducting phase one of the contaminated fish removal from the Donna canal and demobilized from the site.

A total of approximately 7,800 fish were collected, 22 different species were identified by USFWS, the smallest fish caught was a mosquito fish (2.8 cm in length, weighing <1 gram) and the largest fish was a Smallmouth Buffalo (76 cm in length, weighing approximately 7 kilograms or 15.4 lbs.). Of the 22 different species identified, a total of 22 whole body, and 19 fillets from 9 different species of fish were sent to a laboratory for analysis of PCBs. The samples of fish were taken from three separate areas along the entire length of an 8 mile stretch of the canal.

A brief summary of the fish samples are as follows:

No Arochlors were detected in any sample from segment 1. Almost all of the samples from segments 2 and 3 contained arochlors, however many of the concentrations were less than the quantification limit of 33 ug/kg (ppb). The highest concentrations detected were the 410 ug/kg from a whole body Gar sample from segment 2, a 350 ug/kg fillet sample of a Smallmouth Buffalo in segment 2, and a 130 ug/kg whole body Tilapia sample from segment 2.

On September 19, 2008 a roll off box (10 fish, 1 PPE, 6 trash) containing 17 55-gallon drums of non-hazardous PCB-contaminated fish were disposed of at an EPA approved landfill whose plans are for immediate burial to minimize odor.

Phase II Removal Activities

On February 16, 2009, EPA, USFWS, and EPA contractors re-mobilized to the site to conduct Phase 2 of the fish depopulation work. This phase mirrored the work done in Phase 1 and was conducted to remove fish missed during the first phase.

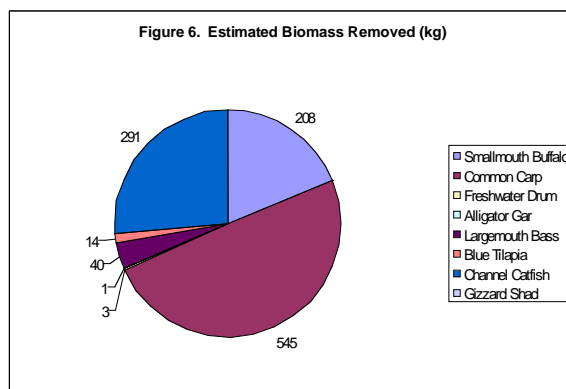
A total of approximately 15,182 fish were collected and 25 different species identified by USFWS during the Phase 2 work.

Whole body and fillet samples collected from several different edible species of fish were sent to a laboratory last week for analysis of PCBs and % Lipids (Whole body only). Three surface water samples from Donna Canal and one drinking water sample from the City of Donna Water Treatment Plant were also collected and submitted to the laboratory for analysis last week.

Field work for Phase 2 was completed on February 27, 2009.

Benefits

- Public awareness campaigns by local, state, federal, press and media outlets have resulted in an increased knowledge of the fish ban and dangers associated with eating contaminated fish from the Donna Canal Site.
- In total, more than 1,100 kilograms of biomass from fish collected and disposed of during Phase I have also been removed by just 8 species (Figure 6).



National Priorities Listing (NPL) History

Site Hazard Ranking System Score: 50
Proposed Date: 9/19/07
Final Date: 3/19/08

Site Description

Location: The site begins at the Donna Irrigation District #1 Pump Station located on the Rio Grande River, and extends north to Donna Reservoir, with irrigation canals extending to just south of La Blanc and San Carlos, Texas. Measured from the north side of the siphon (point of highest documented suspended sediment contamination), the Site is located at 26.096547 degrees north latitude and 98.072556 degrees west longitude, and is referenced on the U.S. Geological Survey (USGS) 7.5-minute San Juan SE and Donna Quadrangles.

Population: Donna, Texas is a community of approximately 15,846 residents as of the July 2005 US Census.

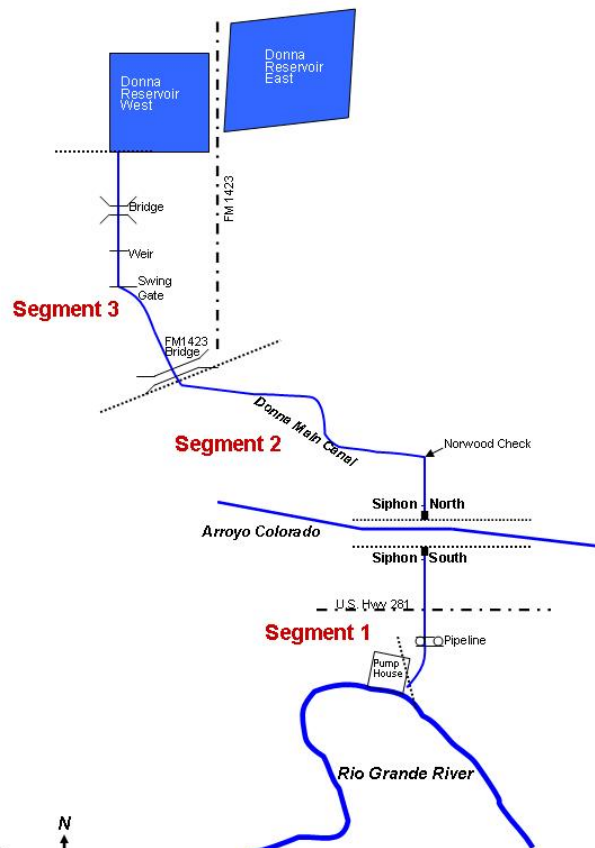
Setting: Donna Reservoir is a 400-acre impoundment located southwest of the city of Donna in southeast Hidalgo County, within the Arroyo Colorado watershed (see Attachment I). Water for the Donna Reservoir is pumped from the Rio Grande, through a seven mile elevated earthen Main Canal, to the reservoir, which is used for water supply and irrigation storage by the city of Donna and surrounding areas. The area around the reservoir and canal is primarily irrigated crops and pastureland, with scattered residences.

Principal Pollutants

The principal pollutants at the Donna Reservoir and Canal Site is polychlorinated biphenyls (PCBs).

Site Map and Photographs

Donna Canal & Reservoir Site Map



Donna Canal

Legend:

..... Segment Boundary

Not To Scale
Updated: 02/22/09 TMN

ate: March 10, 2009

Site pollution reports and photographs from the Removal can be viewed on the Internet at:
<http://www.epaosc.net/donnacanna>

Health Considerations

The primary risk to human health from the PCBs is from suspended sediment in the water and the consumption of contaminated fish. The major hazards from exposure to PCBs relate to their toxicological properties. As a group they are generally thought to be carcinogenic by ingestion, and readily accumulated in the body. There is evidence to suggest that PCBs also may cause reproductive disorders and behavioral defects in newborns and infants. The primary target organ is the liver. Effects of overexposure may include skin acne and cancer (Attachments 6 and 7). Effects on animals and marine life are thought to be similar, and food and other aquatic organism bioaccumulate PCBs and pass them up to consumers, including larger predators and humans.

Wastes and Volumes

- In total, more than 1,100 kilograms of biomass from fish collected and disposed of during Phase I have also been removed by just 8 species (Figure 6).

Site Contacts

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