



Department of the Interior Central Hazardous Materials Fund

Crab Orchard National Wildlife Refuge

Crab Orchard National Wildlife Refuge (Refuge) is adjacent to Marion, Illinois. The Refuge, is approximately 43,500 acres, and is managed by the U.S. Fish and Wildlife Service (FWS). Congress established the Refuge in 1947, at the end of World War II, to support wildlife conservation, agriculture, recreation, and industry. Prior to the transition, approximately 22,000 acres of the Refuge was occupied by the Illinois Ordnance Plant (IOP), and managed by the War Department. Over 500 buildings were erected, and the IOP produced artillery shells, bombs, mines and other materials to support the war effort. Approximately 200 tenants have leased the former IOP buildings to manufacture and store residential home building materials, boats, explosives, pesticides, electrical components and more. Currently, there are multiple large corporations that lease buildings on the refuge.

Over half of the Refuge is oak-hickory forest. Around 20 percent of the Refuge is made up of open water, including Crab Orchard Lake, a nine mile long, 7,000-acre reservoir. Farming and ranching take place in the refuge under cooperative agreements with local farmers and ranchers. These land types provide habitat for a wide variety of species. Visitors may be able to see bobcat, bald eagles and wild turkey on the Refuge. Popular activities on the Refuge include hunting, fishing, wildlife viewing, and camping.

Approximately 50 percent of the Refuge, the former IOP, is closed to visitors. This area was listed on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL) in 1987. The FWS, EPA, Department of the Army, and the Illinois EPA continue to be actively involved in the Site's remediation under the CERCLA program.

Currently, there are seven Operable Units (OUs) at the site that are various stages of investigation and cleanup. Several OUs have moved into the operations and maintenance phase or have been closed, while others are currently undergoing investigations.



Crab Orchard National Wildlife Refuge is located in 'southwestern Illinois.



The Crab Orchard National Wildlife Wilderness Area contains 4,050 acres and includes several hiking trails.



Visitors enjoy kayaking on Crab Orchard Lake.

A DAY AT CRAB ORCHARD

With activities such as boating, fishing, hunting, camping, environmental education, and wildlife viewing; Crab Orchard is a premier recreation attraction. Visitation at the park tops nearly 1,000,000 visitors per year.



Water Tower 1, once supplying water to the Crab Orchard National Wildlife Area residents, was felled and removed in August 2000.



Contaminated soil removal work being completed at Crab Orchard National Wildlife Refuge.

Water Tower Operating Unit

The Water Tower OU was completed in 1993. This OU was made up of three water towers, two previous Water Tower Areas, and the surrounding soil. The interiors and exteriors of the water towers were sandblasted and repainted on numerous occasions during the 1980s and as recently as 1991. Sandblasting sand, lead based paint chips, and paint debris accumulated on the surrounding ground. Investigations of the debris identified that the surficial debris and surrounding soils were found to contain elevated lead concentrations. In 1993, it was identified that the proposed Visitor's Center (former Refuge fire station), had been painted with lead based paint, and the surrounding soil had been contaminated as well. The Visitor's Center was added to the Water Tower OU.

The Central Hazardous Materials Fund (CHF) provided FWS \$950,000 to complete a removal action of the contaminated debris and soil for the Water Towers OU. The removal action was completed in 1993. Approximately 2,800 cubic yards of lead contaminated soils were excavated and disposed off-site. The cleanup around the Visitor Center created safe conditions for adult and children visitors. There are over one million visitors per year at the Refuge.

For more information on the Refuge, visit:

http://www.fws.gov/refuge/Crab_Orchard

To learn more about the Water Tower OU, visit:

http://www.fws.gov/midwest/craborchardcleanup/watertowers_ou.htm

The CHF is the Department's principal source of funds for the cleanup of the most highly contaminated sites located within national parks, national wildlife refuges, and other Department-managed lands.

In total, the CHF has provided the Refuge \$60.1 million for work at the site. \$27.8 million of the total funding provided has been recovered by the Department from payments made by the responsible party. In addition, the responsible party has performed approximately \$79.9 Million of in-kind work.

To learn more about the CHF, visit: <http://www.doi.gov/oepc/hq-teams/eclm-team>



A map showing all of the active CHF sites across the U.S. divided by bureaus.