

# Natural Resource Damage Assessment and Restoration Program

## *Pine Street Canal, Vermont*

### The Problem

The Pine Street Canal Superfund Site is an 80-acre site located in the City of Burlington, Vermont. The site includes a former coal gasification plant, an abandoned canal and turning basin used to transport lumber during the 1800s, and surrounding wetland and upland habitats. The U.S. Environmental Protection Agency designated the area a Superfund Site in 1981 after studies conducted by the State of Vermont revealed high levels of coal tar, volatile organic compounds, and cyanide in the canal and surrounding wetlands. Contaminants in wetland sediments reduced aquatic invertebrate populations; this impairment adversely affected other wetland-dependant species such as amphibians and migratory birds.

### Restoring the Resources

In a 1998 settlement with the Responsible Parties (RPs), the U.S. Fish and Wildlife Service (USFWS) and the State of Vermont agreed to an RP-led restoration of an 11-acre pond, also located in Burlington. The pond, originally constructed as a wetland mitigation project, had failed to provide quality wildlife habitat due to construction mistakes that left steep slopes and straight shorelines. Six acres of shoreline were re-graded to increase emergent wetland habitat, and wetland plants, shrubs and trees were planted. The RPs also purchased a conservation easement on 8 acres adjacent to the pond.

### A Partnership for Success

With State and USFWS oversight, the RPs enhanced 6 acres of wetland habitat. Twenty-six acres, including the wetland and surrounding habitat, were protected in perpetuity through a combined effort of the RPs and the State.

### Highlights

Restored 6 acres of wetland and protected 26 acres of wetland and upland in perpetuity.

Total Project Cost: \$300,000, plus the cost of the easement

Partners: USFWS, State of Vermont, Responsible Parties

Status: Restoration was completed in 2002; monitoring will continue through 2006.



S. Schuyler

*Steep, rocky pondshore lacked vegetation and provided little wetland transition prior to restoration at Howe Farm Pond.*



S. Schuyler

*After the shoreline was re-graded, re-shaped and planted, the habitat quality surrounding the pond improved and additional wetland habitat was created.*



USFWS

© Marie Reac

*Forage for dabbling ducks, such as wood ducks, mallards, and American black ducks, has improved following restoration.*

**For more information, contact:**  
**U.S. Fish and Wildlife Service**  
**New England Field Office**  
**70 Commercial Street, Suite 300**  
**Concord, NH 03301-5087**  
**603/223 2541**

**Federal Relay Service**  
**for the deaf and hard-of-hearing**  
**1 800/877 8339**

<http://www.fws.gov>

**October 2005**

