U.S. Fish & Wildlife Service

Fisheries and Habitat Conservation

Environmental Contaminants Program

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Our mission is working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

Pollution is one of the American public's greatest environmental concerns. Like the proverbial "canary in the coal mine," fish and wildlife often signal pollution problems that ultimately affect people and their quality of life. The U.S. Fish and Wildlife Service (Service) is the primary federal agency dedicated to protecting wildlife and their habitats from pollution's harmful effects, helping to create a healthier world for all living things.

U.S. Fish and Wildlife Service Environmental Contaminants (EC) Biologists have unique expertise and experience that sets them apart from other biologists in the Service. They are experts on:

- Oil and chemical spill response,
- Restoring habitats harmed by pollution,
- Water quality effects on fish and wildlife, and
- Pesticide effects on fish and wildlife.

The EC Program's operations are interwoven with all other Service activities, and the Service's Contaminants Biologists regularly work as partners with other agencies and organizations that have come to rely on our expertise.

USFWS

Oiled crested auklet from M/V Selendang Ayu spill. The spill occurred on December 8, 2004 and impacted the Alaska Maritime National Wildlife Refuge. Nearly half a million gallons of fuel were spilled. This was the biggest spill in Alaska since Exxon Valdez.

Dolores Savignano/USFWS

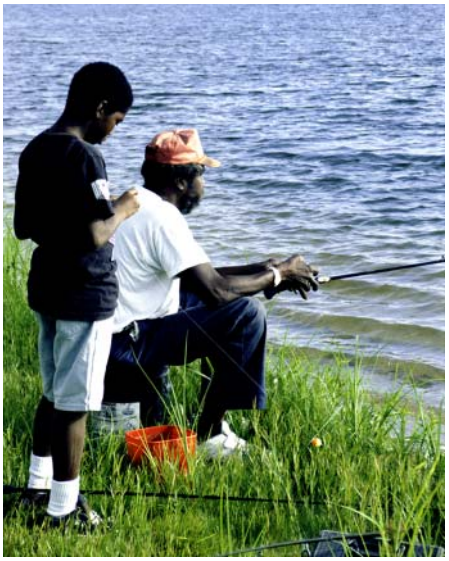
This mussel release is part of a program to restore mussels in the Clinch River. In 1998, nearly all aquatic life for seven miles was killed when over 1,300 gallons of a toxic chemical were spilled.

SPILL RESPONSE

Serious, long-term ecological damage often accompanies major oil and hazardous waste spills. To prevent or reduce the impacts of these events on fish, wildlife and their habitats, the Service's EC Program places a strong emphasis on pre-spill contingency planning at local, state, and national levels. During a spill, EC Biologists advise the Federal On-Scene Coordinator about possible impacts of response actions to threatened and endangered species, migratory birds, anadromous fish, some marine mammals, and Service lands. Environmental Contaminant Biologists also oversee the collection and rehabilitation of oiled wildlife and evaluate the extent of wildlife injury caused by a spill.

RESTORATION

Service Contaminant Biologists play a major role in restoring habitats and natural resources degraded by pollution. The entities responsible for spilling oil or releasing hazardous



Phyllis Cooper/USFWS

The Environmental Contaminants Program works to ensure clean water and healthy habitats throughout the United States. Father and son fishing at Eufaula National Wildlife Refuge.

substances are liable for restoring or funding restoration of natural resources affected. In partnership with other affected state, tribal, and federal natural resource trustees, EC Biologists plan and implement natural resource restoration activities.

WATER QUALITY

Aquatic species are declining at an alarming rate. More than 400 aquatic species either have, or need, special protection in at least part of their natural or historic range. These species include important recreational and commercial fish such as salmon, sturgeon, and trout. The Service's EC Program helps the U.S. Environmental Protection Agency (EPA) and others evaluate how water pollutants affect fish and wildlife and their habitats. This information is critical for developing effective water quality standards, which protect these valuable resources and the watersheds that support them.

PESTICIDES AND PEST MANAGEMENT

Pesticides can benefit society when used to manage disease-causing organisms and other pests. Pesticides also pose some risk to the environment. To prevent and minimize unintended impacts of pesticides, EC Biologists work cooperatively with EPA during pesticide registration and labeling. National Wildlife Refuges use pesticides as part of an integrated pest management (IPM) approach to manage invasive plant and animal species or potential disease carrying organisms, like mosquitoes. When Service land managers determine that pesticide use will be necessary, EC Biologists help to ensure fish, wildlife, and people are protected through an internal pesticide use proposal review and approval process.

INVESTIGATIONS

The EC Program designs and conducts investigations to identify and quantify contaminant impacts to fish and wildlife resources on and off Service lands. The investigations result in specific management actions, which prevent, reduce, or eliminate these impacts. Recent examples include investigating contaminants in fish feed and fish raised at National Fish Hatcheries, and an ongoing cooperative effort between the United States and Canada to determine the sources of lead causing trumpeter swan poisonings and die-offs.

HEALTHY NATIONAL WILDLIFE HABITAT

Approximately 17% of National Wildlife Refuges have major contaminant issues that must be addressed. Refuges face a wide variety of contaminant threats including impaired air and water quality and an ongoing threat of spills. EC Biologists investigate potential sources of contamination on refuge lands, prioritize cleanups, and assist Refuge Managers on cleanup and restoration. EC Biologists survey lands prior to acquisition to prevent the Service from unknowingly acquiring contaminated parcels that will be costly to clean up.

TECHNICAL SUPPORT

The EC Program provides contaminants expertise to all Service programs including the National Wildlife Refuge System, Endangered Species, Migratory Birds, Fisheries, Marine Mammals, International Affairs, and Law Enforcement. Our Analytical Control Facility is responsible for sample analysis, sample quality control, and database management. This emphasis on quality assurance results in high quality data that decision-makers can rely on for making management decisions. The EPA, U.S. Coast Guard, Department of Defense, or other Federal or State agencies responsible for cleaning up contaminated areas often call on EC Biologists to ensure that fish and wildlife and their habitats are adequately protected during, and upon completion of, the cleanup.

Mike Horne/USFWS

A former sludge pit that was contaminated with cadmium, lead, and zinc, now cleaned and converted to a lush vernal pool that provides valuable breeding habitat for New Jersey endangered blue-spotted salamanders.

Roxanna Hinzman/USFWS

U.S. Fish and Wildlife Service Environmental Contaminants Biologists conducted shoreline and aerial assessments after Hurricane Katrina to locate hazardous materials that threatened human health and the environment. This drum was marked and mapped to facilitate retrieval by EPA.

U.S. Fish & Wildlife Service
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October 2005