

Environmental Contaminants

		2006 Actual	2007 CR	2008			Change From 2007 (+/-)
				Fixed Costs & Related Changes (+/-)	Program Changes (+/-)	Budget Request	
Environmental Contaminants	\$000)	10,874	11,077	+397	-302	11,172	+95
	FTE	92	93		-2	91	-2
Impact of the CR			[+22]		[-22]		

Summary of 2008 Program Changes for Environmental Contaminants

Request Component	Amount	FTE
Program Changes		
• General Program Activities	-302	-2
• Impact of the CR [non-add]	[-22]	0
Total, Program Changes	-302	-2

Justification of 2008 Program Changes

The 2008 budget request for Environmental Contaminants is \$11,172,000 and 91 FTEs, with a program change of -\$302,000 and -2 FTEs from the 2007 President’s Budget.

General Program Activities (-\$302,000; -2 FTEs)

The Service proposes to reduce Environmental Contaminants (EC) general program activities by \$302,000 in an effort to address higher strategic funding priorities. The EC program will absorb this reduction by reducing certain activities that have been determined to be of lower priority to the Service and the EC program during the development of our recently completed Strategic Plan. The EC program will reduce or eliminate the following activities:

- **Reviewing proposals to use pesticides on Service lands** – The EC program plans to shift oversight for reviewing pesticide use proposals (PUPs) to the National Wildlife Refuge System and limit the involvement of the EC program to providing technical assistance when necessary.
- **Providing consultations under the Clean Water Act (CWA) for the discharge of municipal and industrial wastewater** – The EC program will conduct fewer CWA consultations for permits under the National Pollution Discharge Elimination System (NPDES) and total maximum daily load (TMDL) requirements. The development and implementation of national water quality criteria will reduce the need to conduct individual NPDES/TMDL permit consultations.
- **Conducting Section 7 pesticide and CWA consultations for impacts to non-Service owned lands** – Counterpart regulations developed with the U.S. Environmental Protection Agency (50 CFR Part 402) will increase the efficiency of the consultation process which will allow the EC program to devote less time to these activities.

- **Completing contaminant investigations on non-Service owned lands** – The EC program will reduce the number of contaminant investigations conducted on non-Service owned lands. While these investigations may support the development of new NRDAR settlements and restoration for injured resources, we will limit this reduction to an investigation that may not lead to a NRDAR case.
- **Conducting pre-acquisition contaminant surveys on land of interest to the National Wildlife Refuge System** – The EC program plans to transfer responsibility for conducting level I pre-acquisition surveys to the Service's Division of Realty. However, the EC program will maintain our responsibilities under the All Appropriate Inquiries requirement (EPA regulation 40 CFR 321 – November 1, 2006. This is the EPA's rule for "evaluating a property's environmental conditions and assessing potential liability for any contamination.).

The EC program will also absorb the reduction in funding by minimizing our program costs. We will achieve these cost savings by implementing the following program changes:

- **Developing and implementing new and revised procedures at the Analytical Control Facility (ACF)** – New and revised procedures will improve the speed and efficiency of obtaining analytical results and will provide greater opportunities to address non-routine analytical requests. For example, the ACF will implement a three-tiered pricing scheme to allow for cost reductions for many analytical requests.
- **Reducing the cost of the medical monitoring program** – Field biologists that respond to spills participate in a medical monitoring program that consists of an annual physical. Most field offices use a local medial provider and the costs vary widely. Beginning in FY 2007, the Service will establish a national agreement with Federal Occupational Health Services to provide physicals to field biologists for a set cost. This agreement will save approximately 30% over the current individual costs of a physical.

Impact of the CR (-\$22,000)

The 2008 budget restores the priorities of the 2007 President's Budget by funding 2007 programmed fixed cost increases, eliminating unrequested 2006 congressional earmarks, and implementing the program enhancement and program reduction initiatives included in the 2007 President's budget.

Program Performance Change

Measure	2004 Actual	2005 Actual	2006 Actual	2007 CR ^{1/}	2008 Base Budget (2007 PB + Fixed Costs)	2008 Plan	Program Change Accruing in 2008	Program Change Accruing in Outyears
					A	B=A+C	C	D
4.1.3 # of wetland acres enhanced/restored through NRDA (1) (SP) *	1,000	13,782	10,506	7,600	7,600	7,850	250	
3.2.3 # of riparian stream/shoreline miles restored/enhanced through NRDA (1) (SP) *	10	12	43	50	50	55	+5	
# of restoration settlements having a recreational component *	n/a	n/a	n/a	7	7	20	+13	
Comments								
The EC program will continue to focus on habitat restoration activities conducted as part of the Natural Resource Damage Assessment and Restoration Program (NRDAR). Because of this prioritization, we expect to increase the number of wetland acres restored, the number of stream miles restored, and the number of settlements having a recreational component after FY 2008. (1) – The number of wetland acres and stream miles restored may vary widely from year to year and these numbers may be impacted by a single, large restoration project. Therefore, clearly defined trends are difficult to forecast.								
4.7.1 # of pesticide use proposals reviewed (2) *	1,508	1,029	947	317	317	230	-87	
# of Clean Water Act (CWA) consultations (NPDES, TMDLs, and Triennial Reviews) (3) *	8,975	5,424	1,445	826	826	752	-74	
# of Section 7 Consultations – Pesticides *	373	231	118	78	78	72	-6	
# of Section 7 Consultations – CWA (3) *	6,852	918	367	295	295	5	-290	
# of contaminant investigations – Off Service Lands *	22	13	25	30	12	12	0	

1/ The performance and cost data in the 2007 CR column is presented at the 2007 Plan level, which is based upon a projection of 2007 likely enacted made during the first quarter of 2007. The 2008 plan builds on the 2007 plan. To the extent Congress enacts a 2007 appropriation that is different from the 2007 project, the 2008 plan may require revision.

NOTE: Projected costs may not equal program changes as these are full costs, which may include funds from other sources and (or) use average cost.

Column A: the level of performance and costs expected in 2008 at the 2007 President’s budget level plus funded fixed costs. Reflects the impact of prior year funding changes, management efficiencies, absorption of prior year fixed costs, and trend impacts, but does not reflect the proposed program changes.

Column D: Out year performance beyond 2008 addresses lagging performance – those changes occurring as a result of the program change (not total budget) requested in 2008. It does not include the impact of receiving the program change again in the subsequent outyear.

Program Overview

The EC program contributes directly to the Department of Interior's Strategic Plan *Resource Protection Goal of Improving the Health of Watersheds and Landscapes under DOI Management or Influence* by working with other Service programs to implement natural resource restoration actions that directly improve the biological function of watersheds and landscapes injured from the release of contaminants. The program also contributes to the Department's Resource Protection Goal by uncovering potential contaminant problems before they fully manifest and then working with many other agencies and industry groups to develop workable solutions to resolving ongoing effects. In addition, the EC program's Natural Resource Damage Assessment and Restoration program is a model of the President's Management Agenda as demonstrated by its developing dozens of partnerships with various private and public groups to resolve contentious environmental problems and restore hundreds of acres of habitat and various threatened, endangered, and injured species of fish and wildlife.

Long-term vision – The overall goal of the biologists and toxicologists in the EC program is to ensure contaminants do not become a major factor causing any Fish and Wildlife Service trust resource (e.g., threatened and endangered species, migratory birds, fishery resources and refuge lands) to decline. We intend to accomplish this goal by continuing to investigate contamination events and resolve potential contaminant problems before they become significant and by working with industry and agency personnel to restore injured natural resources when prevention measures fail.

Means and strategies – The EC program delivers on-the-ground results in part through the very strong partnerships field staff have developed with other Service programs and governmental and non-governmental organizations such as the Environmental Protection Agency (EPA), National Oceanic and Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), the U.S. Coast Guard (USCG), most states, many tribes, and various industry representatives.

Strategic Plan – In FY 2006, the EC program completed its strategic plan. This plan outlines the goals and priorities for the program and allow for the development of step down plans by regional and field offices. The five goals in the Strategic Plan are as follows:

- Conserve trust resources and their habitats through contaminant prevention
- Restore and recover trust resources and their habitats when harmed by contaminants
- Deliver high quality and relevant scientific advice to support sound management decisions
- Increase accountability, cross-Service program coordination, and visibility of the EC program
- Maintain and support an adequately sized workforce with state of the art training, equipment, and technological capabilities.

Use of Cost and Performance Information

The EC program has been using performance-based information for several years in its resource allocation process.

- The EC program uses contractors for chemical analysis because they are a cost effective means to obtain necessary analytical information. We maintain the highest quality data by working closely with the contractors before, during and after analysis through strict QA/QC protocols.
- The EC Program uses performance information to allocate resources for investigations conducted both on Service owned land and on non-Service owned land. We evaluate proposals based on scientific merit, management outcomes, impact to trust resources, and a score based on the five-year Regional Performance. If Regions do not complete investigations in a timely fashion, their allocation is impacted. Through the Peer Review process, we prioritize the investigations, refuge cleanups and contaminant assessments. This process ensures that the study will meet the needs.
- For over a decade, the NRDA branch of the EC Program has provided tremendous value to other Service programs through OUR NRDA associated restorations. NRDA restoration projects have added hundreds of acres to National Wildlife Refuges, restored numerous migratory bird populations, provided nesting, spawning, or refugia habitat to many listed, threatened or endangered species and restored natural habitat along many streams, rivers, shorelines and wetlands. All of these restoration projects have benefited other Service programs and allowed them to meet or increase their own performance measures

2008 Program Performance

The EC will continue to use its "Environmental Contaminants On-and-Off Refuge Investigation Manual" to direct its investigations as well as help allocate funding. The first part of this manual identifies the management and scientific processes and requirements for a contaminants investigation. The last part of the manual creates a uniform scoring system which ranks on-going and proposed contaminant investigations. Criterion A, B and C are scientific based and ensure that investigations use the latest and most pertinent scientific information; Criterion D is the Regional Priorities section where the region ranks and scores their investigations according to regional importance; and the final Criterion E is the National Priorities section which includes a score for partnership efforts and a score for regional performance based on the number of interim and final reports compared to the number of incomplete or overdue reports. All this is boiled down to a ranking system, which allows the Program to allocate funds to regions which are completing scientifically sound contaminant investigations.

In FY 2008, EC will continue its shift toward habitat restoration under the Natural Resource Damage Assessment and Restoration (NRDAR) program. The program will restore or enhance 7,850 acres of wetlands through NRDAR projects and restore or enhance 55 miles of riparian/shoreline miles. NRDAR settlements will also provide 20 recreational opportunities. We will pursue these restoration/enhancement performance goals in coordination with other Service programs and outside partners.

The EC program uses funds received from a restoration settlement to leverage additional money to restore trust resources. In FY 2005 and FY 2006, the EC program averaged a 4:1 match for settlement dollars to complete a restoration and often the leveraged funds exceeded the original settlement. For example, the Owuloolt Marsh restoration project (part of the Tulalip Landfill Restoration in Washington) was accomplished using \$111,000 in trustee settlement funds. These funds were used to leverage an additional \$2,770,955 in non-restoration fund money to support this project. This is an almost 25:1 return on this money. The EC program will continue this approach to leverage funds for restoration in FY 2008.

In FY 2008, the EC program will continue to support habitat-based programs within the Service. This support is vital to the Healthy Lands Initiative and we will directly support the Initiative wherever possible. EC program activities also support coastal wetland restorations that protect communities from

storms and provide unique habitat; maintain and enhance hunting and fishing traditions by protecting wildlife, especially in areas of increased recreation, resource extraction, and development; and guard against endangered species listing and promote the de-listing of recovered species. The EC program will continue to evaluate and provide management solutions for water quality criteria, and thereby minimize threats to Gulf coast habitats and the Green River basin from both anthropogenic and natural sources.

Activities conducted by the EC program generally fit into three main categories: Restoration, Prevention, and Investigation. Several FY 2006 EC program accomplishments are provided below as examples of work expected to continue in both FY 2007 and FY 2008:

Restoration – When prevention efforts fail and contaminant releases impact fish, wildlife, and their habitat EC works with our federal, state, and tribal partners and, often industry, to restore injured natural resources. The EC program's Natural Resource Damage Assessment and Restoration (NRDAR) activities expand this effort. In FY 2006 NRDAR activities involved the enhancement and/or restoration of over 10,500 wetland acres, 42 riparian stream or shoreline miles, and numerous other projects focused on restoring and protecting migratory birds, threatened and endangered species, and fish. Many of the restoration projects have occurred on and benefited National Wildlife Refuge lands. In addition to the restoration efforts completed in 2006, EC biologists continue to be involved in nearly 270 ongoing NRDAR cases, final settlements, and/or other NRDAR related environmental settlements. A few NRDAR case specific accomplishments in F7 2006 include:

- A restoration project for the Tenyo Maru oil spill that occurred along the Washington and Oregon coasts benefited both the **Endangered Species Program** and the **National Wildlife Refuge System**. The restoration included permanent protection and restoration of over 900 acres of coastal old growth and high quality second growth forest for the federally threatened marbled murrelet, including one parcel that is now part of Willapa National Wildlife Refuge. Another restoration project on Rush Lake in Wisconsin was used as compensation for injuries to trust resources from PCB releases into the Fox River/Green Bay ecosystem. This restoration benefited bird species important to the **Migratory Bird Program** such as terns, herons, and several species of ducks.
- The Montrose NRDAR case in Southern California has produced numerous restoration projects benefiting seabirds and endangered species such as Bald Eagles. In 2006, reintroduction efforts focused on Bald Eagles produced two chicks from separate nesting pairs of eagles on the Northern Channel Islands off Southern California. These two chicks are the first Bald Eagles born on those islands since DDT extirpated these birds in the late-1950s.
- Restoration activities associated with the Vertac NRDAR case in Arkansas has resulted in the construction of a water control structure allowing the seasonal flooding and enhancement of 3,000 wetland acres on Bald Knob National Wildlife Refuge to benefit wading and diving migratory birds.
- Restoration activities from the Mid American Tanning Site NRDAR in western Iowa included the acquisition and fee title transfer to local governments of over 500 acres of properties consisting largely of wetland habitats. These lands are important nesting and feeding habitat for migratory birds and for recreation such as bird watching and hunting.

Prevention – EC works with our federal, state, and tribal partners to prevent releases from occurring and to help them set standards for necessary discharges that are protective of fish and wildlife. To protect fish and wildlife, the standards often need to be set below the levels that are protective of human health. EC biologists reviewed and approved/commented on over 900 proposals to use pesticides on Service lands, conducted in excess of 6,000 spill prevention and response actions, participated in nearly 1,500 consultations under the Clean Water Act (CWA), and assisted the Endangered Species program on 485

Section 7 consultations involving pesticides or contaminant releases under the CWA. Some examples of these activities include:

- EC biologists from every Service region were involved in Hurricane Katrina and Rita response operations through the early part of FY 2006. After initially being involved in search, rescue and humanitarian relief operations, EC biologists played a major role in responding to the thousands of oil and hazardous material spills resulting from the hurricanes. Many of these spills impacted Refuge land and many more threatened to affect Refuge lands if not addressed. The expanse and breadth of these response efforts were enormous. In Alabama and Mississippi alone, EC biologists were an integral part of federal and state teams that responded to more than 2,700 incidents, assessed approximately 140,000 square miles of waterways and 6,400 miles of shoreline.
- EC biologists from many regions continue to play a major role in CWA consultations on selenium. Our efforts range from consulting and commenting on variance and site-specific criteria for individual stream segments, to triennial reviews of state water quality standards, to coordinating on a national level with EPA on specific overriding water quality criteria for selenium. EC biologists continue to cooperate and collaborate with numerous states, federal, county, and city governments as well as landowners to resolve selenium related issues on a local, state, and national level. The selenium issue has also led to EC biologists providing technical assistance on Section 7 consultations for threatened and endangered species, such as the desert pupfish, Topeka shiner, and Colorado pikeminnow.

Investigation – The EC program investigates the ecological impacts of contaminants released into the environment through municipal and industrial discharges and from oil or hazardous material spills. Biologists in the EC program completed 25 off-refuge and 30 on-refuge investigations in FY 2006. In addition, EC biologists conducted dozens of contaminant surveys on land of interest to Refuges or to State and local officials, including over 57,000 acres in the Everglades alone. Some examples of these completed investigations include:

- EC biologists determined the effects of selenium on the viability of desert pupfish populations in Imperial Valley agricultural drains and shoreline pools at the Sonny Bono Salton Sea National Wildlife Refuge. This study improved the understanding of selenium threats to the endangered desert pupfish and guided water resource management decisions. Partners included other Service programs and USGS.
- Investigating contaminant effects on frog development at Great Bay National Wildlife Refuge. Results from the study led to water management recommendations for the refuge, continued abnormality sampling, and a recommendation for sediment sampling in the future. Partners included other Service programs, USGS, and the University of New Hampshire.
- Determining the role environmental contaminants may play in the pathology of beak deformities among black-capped chickadees in south-central Alaska. This study examined the scope and potential cause of deformities along with the survival and reproductive success of deformed chickadees. Partners included USGS.

Program Performance Overview: Environmental Contaminants

	2004 Actual	2005 Actual	2006 Plan	2006 Actual	2007 Plan	2007 Change from 2006	2008 Plan	2008 Change from 2007
4.1.3 # of wetland acres enhanced/restored through NRDA (including NRDA restoration) (EC) (SP) *	1,000	13,782	6,950	10,506	7,600	-2,906	7,850	250
3.2.3 # of riparian stream/shoreline miles restored/enhanced through NRDA (EC) (SP) *	9	12	47	42	50	+8	55	+5
4.7.1 # of pesticide use proposals reviewed (EC) *	1,508	1,029	240	947	317	-739	230	-87
# of spill prevention activities and spill responses (EC) *	11,859	392	400	6,024	400	-5,624	384	-16
# ongoing NRDA cases, final settlements, and other environmental assessments (EC) *	316	175	250	266	250	-16	250	0
# of completed contaminant investigations and restoration on Refuges (EC) *	34	30	32	30	32	2	32	0
# of completed contaminant investigations off Refuges (EC) *	22	13	12	25	12	-13	11	-1
# of Clean Water act consultations (NPDES, TMDLs, Triennial Reviews) (EC) *	8,975	5,424	1,408	1,445	826	-619	752	-74
# of Section 7 Consultations Pesticides -- Off Service lands - State and EPA consultations and technical assistance (EC)	343	231	200	118	78	-40	72	-6
# of Section 7 Consultations CWA -- Off Service lands - State and EPA consultations and technical assistance (EC)	6,852	918	6	367	295	-72	5	-290
# of restoration settlements having a recreational component (EC)	10	0	18	0	7	+7	20	+13