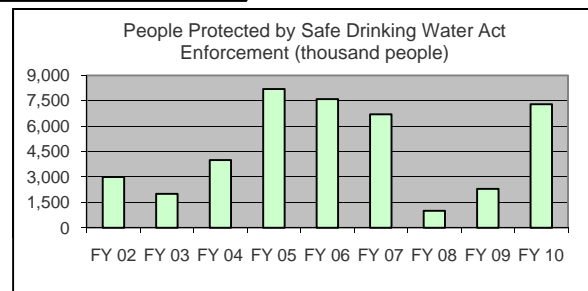
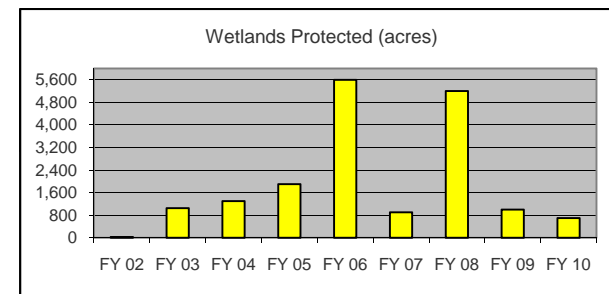
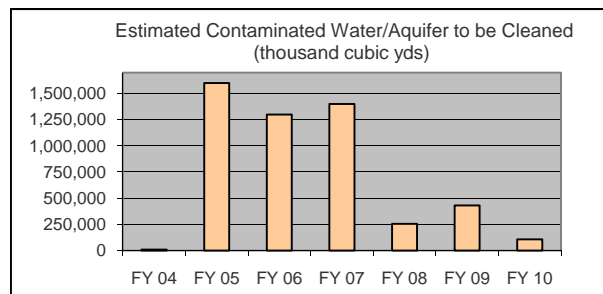
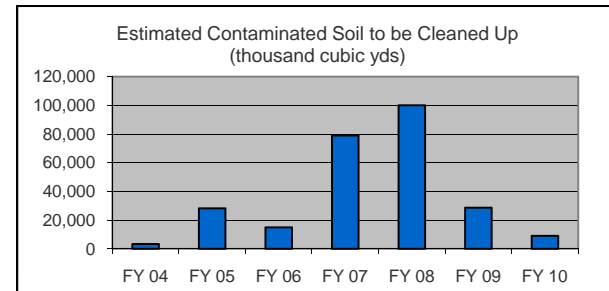
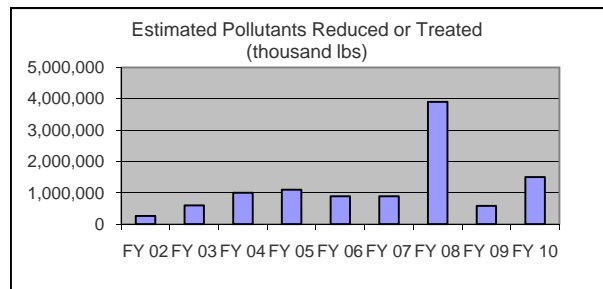




## National Enforcement Trends (NETs)

# Estimates of Direct Environmental Benefits Achieved through EPA's Concluded Enforcement Actions When All Complying Actions Have Been Completed FY 2002 - FY 2010





## National Enforcement Trends (NETs)

# Estimates of Direct Environmental Benefits Achieved through EPA's Concluded Enforcement Actions When All Complying Actions Have Been Completed FY 2002 - FY 2010

ESTIMATED NATIONAL DIRECT ENVIRONMENTAL BENEFITS									
Categories	FY 02	FY 03	FY 04	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10
Estimated Pollution Reduced, Treated or Eliminated Commitments (thousand lbs)	260,000	600,000	1,000,000	1,100,000	890,000	890,000	3,900,000	580,000	1,500,000
Estimated Hazardous Waste Treated, Minimized, or Properly Disposed of (thousand lbs)	NC	NC	NC	NC	NC	NC	6,500,000	780,000	11,800,000
Estimated Contaminated Soil to be Cleaned Up (thousand cubic yds)	**	**	3,400	28,200	15,000	79,000	100,000	28,700	9,000
Estimated Contaminated Water/Aquifer to be Cleaned Up (thousand cubic yds)	***	***	9,500	1,600,000	1,300,000	1,400,000	255,000	431,000	107,000
Wetlands Protected (acres)	29	1,050	1,300	1,900	5,600	900	5,200	1,000	700
People Protected by Safe Drinking Water Act Enforcement (# of people in thousand)	3,000	2,000	4,000	8,200	7,600	6,700	1,000	2,300	7,300

NC - Not Collected

\*\*In FY 2002 - FY 2003, Contaminated Soil to be Cleaned was measured in "Pounds of Soil Treated or Removed", and not in cubic yards. The FY 2002 measurement of Soil Treated or Removed is 500 million lbs. The FY 2003 measurement of Soil Treated or Removed is 7.5 billion lbs.

\*\*\*In FY 2002 - FY 2003, Contaminated Water to be Cleaned was measured in "Gallons of Groundwater to be Treated", and not in cubic yards. The FY 2002 measurement of Groundwater to be Treated is 2.8 billion gallons. The FY 2003 measurement of Groundwater to be Treated is 6.5 billion gallons.

## National Enforcement Trends (NETs) Metadata

NETs Page F-6, 1b: FY 2002 - FY 2010 Estimates of Direct Environmental Benefits through EPA's Enforcement Actions when All Complying Actions Have Been Completed	
<b>Note 1</b>	Direct environmental benefits are achieved through direct complying actions. Direct complying actions are taken by defendants/respondents in response to an Environmental Protection Agency (EPA) enforcement action. Direct benefits are those that treat, reduce, or eliminate a pollutant or emission/discharge stream resulting in reduced/eliminated human health exposure or environmental impact (e.g., source reduction, cleaning up a spill, installing new pollution control equipment, remediating contaminated soil or water, etc.). The direct benefit will have an immediate positive effect on the environment and will result in measurable environmental benefits (e.g., pounds of pollution reduced or treated, cubic yards of contaminated water cleaned, cubic yards of contaminated aquifer cleaned, etc.). For some actions, the direct environmental benefits may not have been achieved yet, and estimates of pollution reduced (or other environmental benefits) are projected to be achieved in the future when all complying actions have been completed.
<b>Note 2</b>	Pollutant reductions from a small number of enforcement settlements make up a large percentage of the reductions in most years, creating significant yearly variations. Also relevant to annual variations, the Office of Enforcement and Compliance Assurance (OECA) over time has developed additional guidance for estimating pollutant benefits and conducted extensive training for the EPA Regional Offices. The additional guidance and training has brought greater accuracy and more complete reporting of pollutant benefit data.
<b>Note 3</b>	EPA first implemented the process to capture relevant information on results and environmental benefits of concluded enforcement cases, including pollutant reduction benefits, in FY 1996. The methodology has since been revised and improved and we generally only show data back to FY 2002. Starting in FY 2003 we further improved our data quality assurance of this data.
<b>Note 4</b>	In FY 2003, the two measures, "Contaminated soil/sediment (M lbs)" and "Wastewater/Groundwater treated (M gal)," were replaced by "Estimated Contaminated Soil Cleaned (cubic yards)," and "Estimated Contaminated Aquifer Cleaned (cubic yards)," respectively. These changes implemented the 12/12/03 "Final Methodology for Estimating Superfund and Resource Conservation and Recovery Act (RCRA) Corrective Action Case Conclusion Data Sheet (CCDS) Environmental Benefits." [The cases counted in these two categories are primarily Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA) corrective action cases].
<b>Guidance/ Policy</b>	The guidance, "Final Methodology for Estimating Superfund and RCRA Corrective Action (CCDS) Environmental Benefits," dated 12-12-03, provides guidance for implementing the "Volume of Contaminated Medium Addressed" (VCMA) measure for estimating environmental benefits resulting from concluded RCRA and Superfund corrective action enforcement actions. The VCMA measurement for remediation programs was found to more accurately reflect both the magnitude and nature of an environmental problem addressed by an enforcement action than does a measure of the mass (pounds) of pollutants reduced. The focus is on the physical space that is addressed by the response or corrective action. More information on the VCMA can be found in ICIS (Integrated Compliance Information System) Policy on Demand (IPOD), under the category "Enforcement\Formal Enforcement\Environmental Benefits\Volume of Contaminated Medium Addressed."