Goal 4: Healthy Communities and Ecosystems

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
GOAL 4: HEALTHY COMMUNITIES AND ECOSYSTEMS **Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.**	
4.1 Chemical and Pesticide Risks: By 2011, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.	**4.1 Chemical and Pesticide Risks:** By 2014, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.
4.1.1 Reduce Chemical Risks: By 2011, prevent and reduce chemical risks to humans, communities, and ecosystems.	**4.1.1 Reduce Chemical Risks**
By 2011, eliminate or effectively manage risks associated with 100 percent of High Production Volume (HPV) chemicals for which unreasonable risks have been identified through EPA risk assessments. (Baseline: EPA screening of data obtained through the HPV Challenge Program is commencing in 2006; actions to obtain additional information needed to assess risks will commence subsequently as chemicals are identified as priority concerns through the screening process.)	*By 2014, initiate risk management actions as needed to effectively manage risk for ChAMP chemicals identified as high priority chemicals of special concern. (Baseline is zero risk management actions through 2008.)*
	By 2014, achieve a 50 percent cumulative reduction of chronic human health risk from environmental releases of High Production Volume chemicals in commerce since 1998. (Baseline: cumulative reduction reported from 1998-2006 is 33 percent.)
Through 2011, ensure that new chemicals introduced into commerce do not pose unreasonable risks to workers, consumers, or the environment. (The FY 2004 and FY 2005 baseline is 100 percent.)	Through 2014, ensure that new chemicals introduced into commerce do not pose unreasonable risks to workers, consumers, or the environment. (Baseline through 2007 is 100 percent.)
By 2011, achieve a 26 percent cumulative reduction of chronic human health risk from environmental releases of industrial chemicals in commerce since 2001. (Baseline: cumulative reduction reported from 2002-2003 is 6.6 percent.)	By 2014, achieve a 55 percent cumulative reduction of chronic human health risk from environmental releases of industrial chemicals in commerce since 2001. (Baseline: cumulative reduction reported from 2002-2006 is 33 percent.)
	By 2014, reduce global demand for mercury by 25 percent by working with international partners to initiate successful mercury policy initiatives and reduction activities affecting at least five countries. (Pilots are deemed successful when they have completed all parts of the pilot program and have begun to reduce mercury.)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
By 2010, eliminate childhood lead poisoning cases as a public health concern by reducing to zero the number of cases of children (aged 1-5 years) with elevated blood lead levels (>10ug/dl). (The 1999-2002 baseline is 310,000 cases.)	By 2014, maintain elimination of childhood lead poisoning as a public health concern by not allowing the percent of children (aged 1-5 years) with elevated blood lead levels (>10ug/dl) to rise above 0.01 percent. (Baseline: pending availability of NHANES data, baseline could extend through 2006. Information should be available through 2004. ~1.5 percent of children with elevated blood lead levels. 300 thousand out of a universe of 20 million children.)
By 2010, reduce to 28 percent the percent difference in the geometric mean blood lead level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old. (The 1991-1994 baseline is 37 percent.)	By 2014, reduce to 25 percent the percent difference in the geometric mean blood lead level in low-income children 1-5 years old as compared to the geometric mean for non-low income children 1-5 years old. (The 1999-2002/4 baseline is 30 percent.)
By 2011, through work with international partners, eliminate the use of lead in gasoline in the remaining 35 countries that still use lead as an additive, affecting more than 700 million people. (Baseline: as of January 2006, 35 countries had not phased lead out of gasoline.)	By 2014, through work with international partners, eliminate the use of lead in gasoline in the remaining 16 countries that still use lead as an additive, affecting more than 700 million people. (Baseline: as of July 2008, 16 countries had not phased lead out of gasoline.)
By 2011, through work with international partners, more than 3 billion people will have access to low-sulfur fuel in 10 countries, including China, India, Mexico and Brazil. (Baseline: as of January 2006, none of the developing countries has access to low-sulfur fuel.)	By 2014, through work with international partners, more than 3 billion people will have access to low-sulfur fuel in 75 countries. (Baseline: as of July 8, 2008, 43 countries had introduced low-sulfur.)
4.1.2 Reduce Chemical Risks at Facilities and in Communities: By 2011, protect human health, communities, and the environment from chemical releases through facility risk-reduction efforts and building community preparedness and response capabilities.	**4.1.2 Reduce Chemical Risks at Facilities and in Communities**
By 2011, continue to maintain the Risk Management Plan (RMP) prevention program and further reduce by 5 percent the number of accidents at RMP facilities. (The baseline is an annual average of 340 accidents, based on RMP program data through 2003.)	*By 2014, conduct 2,400 inspections and audits at RMP facilities. (Baseline: in FY 2007, 750 RMP inspections were conducted.)*
By 2011, reduce by 5 percent the consequences of accidents at RMP facilities, as measured by injuries, fatalities, and property damage. (The baseline is an annual average of 358 injuries, 13 fatalities, and $143.5 million in property damage at RMP from 1995-2003.)	

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
By 2011, vulnerability zones surrounding RMP facilities will be reduced by 5 percent from the 2004 baseline, which will result in the reduction of risk for over 4 million people in the community. (The 2004 baseline is 1,086,428 mi^2 of cumulative area of RMP vulnerability zones.)	
By 2011, improve by 10 percent from the 2007 baseline the capabilities of Local Emergency Planning Committees (LEPCs) to prevent, prepare for, and respond to chemical emergencies (as measured by a survey of those LEPCs), thereby reducing the risk to communities from the potentially devastating effects of chemical accidents.	
4.1.3 Protect Human Health from Pesticide Risk: Through 2011, protect human health by implementing our statutes and taking regulatory actions to ensure pesticides continue to be safe and available when used in accordance with the label.	**4.1.3 Protect Human Health from Pesticide Risk**
By 2011, reduce the concentration of pesticides detected in the general population by 50 percent. (Baselines are determined from 1999-2002 Centers for Disease Control-National Health and Nutrition Examination Survey (NHANES) data.)	By 2014, reduce the concentration of pesticides detected in the general population by XX percent. (Baselines are determined from 1999-2002 Centers for Disease Control-National Health and Nutrition Examination Survey (NHANES) data. According to NHANES data for FY 1999-2002 the concentration of pesticides residues detected in blood samples from the general population are: Dimethylphosphaste = 0.41 ug/L Dimethylthiophosphate = 1.06 ug/L Dimethyldithiophosphate = 0.07 ug/L Diethylphosphate = 0.78 ug/L Diethylthiophosphate = 0.5 ug/L Diethyldthiophosogate = 0.07 ug/L 3,5,6-Trichloro-2pyridnol = 1.9 ug/L.)
Through 2011, protect those occupationally exposed to pesticides by improving upon or maintaining a rate of 3.5 incidents per 100,000 potential risk events. (Baseline: there were 1,385 occupational pesticide incidents in 2003 out of 39,850,000 potential pesticide risk events/year.)	By 2014, protect those occupationally exposed to pesticides by improving upon or maintaining a rate of 3.5 incidents per 100,000 potential risk events. (Baseline: there were 1,388 incidents out of 39,850,000 potential risk events for those occupationally exposed to pesticides in FY 2003.)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
By 2011, improve the health of those who work in or around pesticides by reaching a 50 percent targeted reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate: chlorpyrifos, diazinon, malathion, pyrethrins, 2,4-dichlorophenoxy acetic acid (2,4-D), and carbofuran. (Baselines will be determined from the Poison Control Center (PCC) Toxics Exposure Surveillance System (TESS) database for 1999-2003.)	By 2014, improve the health of those who work in or around pesticides by reaching a XX percent targeted reduction in moderate to severe incidents for six acutely toxic agricultural pesticides with the highest incident rate: chlorpyrifos, diazinon, malathion, pyrethrins, 2,4-dichlorophenoxy acetic acid (2,4-D), and carbofuran. (Baselines will be determined from the Poison Control Center (PCC) Toxics Exposure Surveillance System (TESS) database for 1999-2003. The rates for moderate to severe incidents for exposure to agricultural pesticides with the highest incident rates base on FY 1999 -2003 data were: chlorpyrifos, 67 incidents; diazinon, 51 incidents; malathion, 36 incidents; pyrethrins, 29 incidents; 2, 4-D, 27; carbofuran, 24.)
	By 2014, complete 100 percent Tier 1 screening to determine whether any of the first group of pesticide chemicals have the potential to interact with estrogen, androgen, or thyroid hormone systems; complete validation of Tier 2 tests, which are designed to assess whether substances cause endocrine effects and provide data to support hazard identification and risk assessment; and based on review of Tier 1 screening results, initiate Tier 2 testing for pesticide chemicals, as appropriate. (Baseline: one of five Tier 2 tests were validated in FY 2008.)
4.1.4 Protect the Environment from Pesticide Risk: Through 2011, protect the environment by implementing our statutes and taking regulatory actions to ensure pesticides continue to be safe and available when used in accordance with the label.	**4.1.4 Protect the Environment from Pesticide Risk**
By 2011, reduce the percentage of urban watersheds that exceed the National Pesticide Program aquatic life benchmarks for three key pesticides of concern (diazinon, chlorpyrifos, malathion). (The 1992-2001 baselines as a percentage of urban watersheds sampled that exceeded benchmarks are diazinon: 40 percent; chlorpyrifos: 37 percent; and Malathion: 30 percent.)	By 2014, reduce the percentage of urban watersheds that exceed the National Pesticide Program aquatic life benchmarks for three key pesticides of concern (diazinon, chlorpyrifos, malathion). (The 1992-2001 baselines as a percentage of urban watersheds sampled that exceeded benchmarks are diazinon: 40 percent; chlorpyrifos: 37 percent; and malathion: 30 percent.)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
By 2011, reduce the percentage that exceeds EPA aquatic life benchmarks for two key pesticides (azinphos-methyl and chlorpyrifos). (Based on 1992-2001 data, 18 percent of agricultural watersheds sampled exceeded benchmarks for azinphos-methyl and chlorpyrifos.)	By 2014, reduce the percentage that exceedc EPA aquatic life benchmarks for two key pesticides (azinphos-methyl and chlorpyrifos). (Baseline: based on FY 1992-2001 data, 18 percent of agricultural watersheds exceeded aquatic life benchmarks for azinphos-methyl and 18 percent of agricultural watersheds exceeded aquatic life benchmarks for chlorpyrifos.)
4.1.5 Realize the Benefits from Pesticide Use: Through 2011, ensure the public health and economic benefits of pesticide availability and use are achieved.	**4.1.5 Realize the Benefits from Pesticide Use**
By 2011, annually continue to avoid $1.5 billion in crop loss by ensuring that safe and effective pesticides are available to address emergency pest infestations.	By 2014, annually continue to avoid $1.5 billion in crop loss by ensuring that safe and effective pesticides are available to address emergency pest infestations. (According to EPA and USDA data for the years FY 2000-2005, emergency exemptions issued by EPA resulted in $1.5 billion in avoided crop loss.)
By 2011, annually continue to avoid $900M in termite structural damage by ensuring that safe and effective pesticides are registered/re-registered and available for termite treatment.	By 2014, annually continue to avoid $900M in termite structural damage by ensuring that safe and effective pesticides are registered/re-registered and available for termite treatment. (Baseline: based on U.S. Census housing data, industry data, and academic studies on damage valuation, EPA calculates that in FY 2003 there were $900 million in annual savings from structural damage avoided due to availability of registered termiticides.)
4.2 Communities: Sustain, clean up, and restore communities and the ecological systems that support them.	**4.2 Communities:** Sustain, clean up, and restore communities and the ecological systems that support them.
4.2.1 Sustain Community Health: By 2011, reduce the air, water, and land impacts of new growth and development through use of smart growth strategies in 30 communities that will achieve significant measurable environmental and/or public health improvements. (Baselines for criteria air pollutants, land consumption, and storm water run-off prior to EPA assistance will be established for each community.)	**4.2.1 Sustain Community Health**

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
	By 2014, reduce the air, water, and land impacts of new growth and development through the use of smart growth strategies in XX communities (plus selected states, local governments, and standard-setting organizations) that will achieve significant measurable environmental and/or public health improvements. (Baselines for criteria air pollutants, land consumption, and storm water run-off prior to EPA assistance will be established for each community.)
4.2.2 Restore Community Health through Collaborative Problem-Solving: By 2011, 30 communities with potential environmental justice concerns will achieve significant measurable environmental or public health improvement through collaborative problem-solving strategies. (Baseline: in 2006, 20 communities with potential environmental justice concerns are in the process of using collaborative problem-solving strategies in efforts to achieve environmental or public health improvement. Community-specific baselines will be developed by 2008 for assessing improvement.)	**4.2.2 Restore Community Health through Collaborative Problem-Solving**
	By 2014, 45 communities with potential environmental justice concerns will achieve significant measurable environmental or public health improvement through collaborative problem-solving strategies. (Baseline: in 2006, 30 communities with potential environmental justice concerns are in the process of using collaborative problem-solving strategies in efforts to achieve environmental or public health improvement. Community-specific baselines will be developed by 2008 for assessing improvement.)
4.2.3 Assess and Clean Up Brownfields: Working with state, tribal, and local partners, promote the assessment, cleanup, and sustainable reuse of brownfields properties.	**4.2.3 Assess and Clean Up Brownfields**
By 2011, conduct environmental assessments at 13,900 (cumulative) properties. (As of the end of FY 2005, EPA assessed 7,900 properties.)	By 2014, conduct environmental assessments at 18,800 (cumulative) properties. (Baseline: as of the end of FY 2007, EPA assessed 11,800 properties.)
By 2011, make an additional 1,125 acres of brownfields ready for reuse from the 2006 baseline. (The 2006 baseline will be available in 2007.)	By 2014, make an additional 11,700 acres of brownfields ready for reuse from the 2007 baseline. (Baseline: as of the end of FY 2007, EPA made 4,700 acres ready for reuse.)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	Proposed (2009-2014) Strategic Plan **Objective** **Sub-objective** **Strategic Measure**
By 2011, leverage $12.9 billion (cumulative) in assessment, cleanup, and redevelopment funding at brownfields properties (FY 2005 baseline is $7.5 billion.)	By 2014, leverage $17.7 billion (cumulative) in assessment, cleanup, and redevelopment funding at brownfields properties. (Baseline: as of the end of FY 2007, EPA leveraged $11.4 billion.)
4.2.4 Sustain and Restore the United States - Mexico Border Environmental Health: By 2012, sustain and restore the environmental health along the United States-Mexico border through implementation of the "Border 2012" plan.	**4.2.4 Sustain and Restore the United States - Mexico Border Environmental Health**
By 2012, achieve a majority of currently exceeded water quality standards in impaired trans-boundary segments of surface waters. (2002 baseline: 17 currently exceeded water quality standards were identified for 10 transboundary segments of U.S. surface waters.)	*A new measure is being developed and planned to align with the Fall PART update. Proposed measure will better focus on environmental outcomes and may assess biological oxygen demand (BOD) or another parameter as a measure for improved water quality (e.g., pounds of pollutant removed). (Baseline: TBD.)*
By 2012, provide safe drinking water to 25 percent of homes in the U.S.-Mexico border area that lacked access to safe drinking water in 2003. (2003 baseline: 98,515 homes lacked access to safe drinking water.)	By 2014, provide safe drinking water to 50 percent of homes in the U.S.-Mexico border area that lacked access to safe drinking water in 2003. (2003 baseline: 98,515 homes lacked access to safe drinking water.)
By 2012, provide adequate wastewater sanitation to 25 percent of homes in the U.S.-Mexico border area that lacked access to wastewater sanitation in 2003. (2003 baseline: 690,723 homes lacked access to wastewater sanitation.)	By 2014, provide adequate wastewater sanitation to 50 percent of homes in the U.S.-Mexico border area that lacked access to wastewater sanitation in 2003. (2003 baseline: 690,723 homes lacked access to wastewater sanitation.)
By 2012, clean up five waste sites (two abandoned waste tires sites and three abandoned hazardous waste sites) in the U.S.-Mexico border region.	By 2012, clean up five waste sites (two abandoned waste tires sites and three abandoned hazardous waste sites) in the U.S.-Mexico border region.
4.2.5 Sustain and Restore Pacific Island Territories: By 2011, sustain and restore the environmental health of the U.S. Pacific Island Territories of American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands (CNMI).	**4.2.5 Sustain and Restore Pacific Island Territories**

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	Proposed (2009-2014) Strategic Plan **Objective** **Sub-objective** **Strategic Measure**
By 2011, 95 percent of the population in each of the U.S. Pacific Island Territories served by community drinking water systems will receive drinking water that meets all applicable health-based drinking water standards throughout the year. (2005 baseline: 95 percent of the population in American Samoa, 10 percent in the Commonwealth of the Northern Mariana Islands, and 80 percent of Guam served by community water systems received drinking water that meets all applicable health-based drinking water standards throughout the year.)	By 2014, 95 percent of the population in each of the U.S. Pacific Island Territories served by community drinking water systems will receive drinking water that is available 24 hours per day and meets all applicable health-based drinking water standards throughout the year. (2005 baseline: 95 percent of the population in American Samoa, 10 percent in the Commonwealth of the Northern Mariana Islands, and 80 percent of Guam served by community water systems received drinking water that meets all applicable health-based drinking water standards throughout the year.)
By 2011, the sewage treatment plants in the U.S. Pacific Island Territories will comply 90 percent of the time with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS). (2005 baseline: the sewage treatment plants in the Pacific Island Territories complied 59 percent of the time with the BOD and TSS permit limits.)	By 2014, the sewage treatment plants in the U.S. Pacific Island Territories will comply 90 percent of the time with permit limits for biochemical oxygen demand (BOD) and total suspended solids (TSS). (2005 baseline: the sewage treatment plants in the Pacific Island Territories complied 59 percent of the time with the BOD and TSS permit limits.)
By 2011, beaches in each of the U.S. Pacific Island Territories monitored under the beach safety program will be open and safe for swimming 96 percent of days of the beach season. (2005 baseline: beaches were open and safe 64 percent of the 365-day beach season in American Samoa, 97 percent in the Commonwealth of the Northern Mariana Islands, and 76 percent in Guam.)	By 2014, beaches in each of the U.S. Pacific Island Territories monitored under the beach safety program will be open and safe for swimming 96 percent of days of the beach season. (2005 baseline: beaches were open and safe 64 percent of the 365-day beach season in American Samoa, 97 percent in the Commonwealth of the Northern Mariana Islands, and 76 percent in Guam.)
4.2.6 Reduce Persistent Organic Pollutants (POPs) Exposure: By 2011, reduce the mean maternal serum blood levels of persistent organic pollutant (POP) contaminants in indigenous populations in the Arctic.	**4.2.6 Reduce Persistent Organic Pollutants (POPs) Exposure**
By 2011, reduce mean maternal blood levels of polychlorinated biphenyls (PCBs) (measured as Aroclor 1260) in indigenous populations in the Arctic to 5.6 µg/l. (The 2006 calculated baseline mean maternal serum level for PCBs was 6.3 ug/l.)	By 2014, reduce mean maternal blood levels of polychlorinated biphenyls (PCBs) (measured as Aroclor 1260) in indigenous populations in the Arctic to 5.1 µg/l. (The 2006 calculated baseline mean maternal serum level for PCBs was 6.3 ug/l.)
By 2011, reduce mean maternal blood levels of chlordane (measured as the metabolites oxychlordane and trans-nonachlor) in indigenous populations in the Arctic to 1.1 µg/l. (The 2006 calculated baseline mean matenal serum level for total chlordane was 1.3 ug/l.)	By 2014, reduce mean maternal blood levels of chlordane (measured as the metabolites oxychlordane and trans-nonachlor) in indigenous populations in the Arctic to 1.0 µg/l. (The 2006 calculated baseline mean maternal serum level for total chlordane was 1.3 ug/l.)
4.3 Restore and Protect Critical Ecosystems: Protect, sustain, and restore the health of critical natural habitats and ecosystems.	**4.3 Restore and Protect Critical Ecosystems:** Protect, sustain, and restore the health of critical natural habitats and ecosystems.

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
4.3.1 Increase Wetlands: By 2011, working with partners, achieve a net increase in wetlands acres with additional focus on assessment of wetland condition.	**4.3.1 Increase Wetlands**
By 2011, working with partners, achieve a net increase of 100,000 acres of wetlands per year with additional focus on biological and functional measures and assessment of wetland condition. (2004 baseline: 32,000 acres annual net wetland gain.)	By 2014, working with partners, achieve a net increase of 100,000 acres of wetlands per year with additional focus on biological and functional measures and assessment of wetland condition. (2004 baseline: 32,000 acres annual net wetland gain.)
By 2011, in partnership with the U.S. Army Corps of Engineers (the Corps), states and tribes achieve "no net loss" of wetlands each year under the Clean Water Act, Section 404 regulatory program, beginning in 2007. (Baseline: new baseline to be determined in 2008.)	*By 2014, in partnership with the U.S. Army Corps of Engineers (the Corps), state, and tribes achieve "no net loss" of wetlands each year under the Clean Water Act, Section 404 regulatory program, beginning in 2007. (Baseline: new baseline to be determined in 2008.) (Proposed change in calculating measurement of "no net loss" of wetlands from "wetland acreage" to "wetland acreage and stream miles." "No net loss" also would be expressed as a ratio of gains to losses.)*
4.3.2 Facilitate the Ecosystem-Scale Restoration of Estuaries of National Significance: By 2011, working with partners, protect or restore an additional (i.e., measuring from 2007 forward) 250,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program. (2005 Baseline: 449,242 acres of habitat protected or restored; cumulative from 2002.)	**4.3.2 Increase Habitat Protected or Restored in Estuaries of National Significance**
	By 2014, working with partners, protect or restore an additional (i.e., measuring from 2010 forward) 500,000 acres of habitat within the study areas for the 28 estuaries that are part of the National Estuary Program. (2008 baseline: XXXX acres of habitat protected or restored; cumulative from 2002. Baseline will be updated with 2008 data.)
4.3.3 Improve the Health of the Great Lakes: By 2011, prevent water pollution and protect aquatic systems so that the overall ecosystem health of the Great Lakes is at least 23 points on a 40-point scale. (2005 baseline: Great Lakes rating of 21.5 on the 40-point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators based on a 1 to 5 rating system for each indicator, where 1 is poor and 5 is good.)	**4.3.3 Improve the Health of the Great Lakes**

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
	By 2014, prevent water pollution and protect aquatic systems so that the overall ecosystem health of the Great Lakes is at least 23.5 points on a 40-point scale. (2009 Baseline: Great Lakes rating of 22.5 (expected) on the 40-point scale where the rating uses select Great Lakes State of the Lakes Ecosystem indicators based on a 1 to 5 rating system for each indicator, where 1 is poor and 5 is good.)
Through 2011, maintain or improve an average annual 5 percent decline for the long-term trend in average concentrations of PCBs in whole lake trout and walleye samples. (1990 baseline: concentration levels at stations in Lakes Superior [0.45 ppm], Michigan [2.72 ppm], Huron [1.5 ppm], Erie [1.35 ppm] and Ontario [2.18 ppm].)	Through 2014, maintain or improve an average annual 5 percent decline for the short-term trend (year 2000 and on) in average concentrations of PCBs in whole lake trout and walleye samples. (2000 baseline: concentration levels at stations in Lakes Superior [0.71 ppm], Michigan [1.5 ppm], Huron [.78 ppm], Erie [1.2 ppm] and Ontario [1.2 ppm].)
Through 2011, maintain or improve an average 7 percent annual decline for the long-term trend in average concentrations of toxic chemicals (PCBs) in the air in the Great Lakes basin. (1992 baseline: concentration levels for U.S. stations: Lake Superior [110 pg/m3], Lake Michigan [289 pg/m3], and Lake Erie [431 pg/m3].)	Through 2014, maintain or improve an average 7 percent annual decline for the long-term trend in average concentrations of toxic chemicals (PCBs) in the air in the Great Lakes basin. (1992 baseline: concentration levels for U.S. stations: Lake Superior [110 pg/m3], Lake Michigan [289 pg/m3], and Lake Erie [431 pg/m3].)
By 2010, restore and delist a cumulative total of at least 8 Areas of Concern within the Great Lakes basin (2005 Baseline: 0 areas of concern de-listed as of 2005 of the 31 total areas of concern.)	By 2014, restore and delist a cumulative total of at least 7 Areas of Concern within the Great Lakes basin (2008 Baseline: one area of concern de-listed of the 31 previously identified areas of concern.)
By 2011, remediate a cumulative total of 7 million cubic yards of contaminated sediment in the Great Lakes. (2005 Baseline: of the 75 million yards estimated to need remediation, 3.7 million yards of contaminated sediments from the Great Lakes have been remediated from 1997 through 2004.)	By 2014, remediate a cumulative total of 8 million cubic yards of contaminated sediment in the Great Lakes. (2009 Baseline: Of the 46.5 million cubic yards once estimated to need remediation in the Great Lakes, EPA expects to report in 2009 that 5.5 million cubic yards of contaminated sediments are expected to have been remediated from 1997 through 2008.)
	By 2014, remove 46 beneficial use impairments within areas of concern within the Great Lakes. (2008 Baseline: 11 BUIs removed from Areas of Concern.)
4.3.4 Improve the Health of the Chesapeake Bay Ecosystem: By 2011, prevent water pollution and protect aquatic systems so that the overall aquatic system health of the Chesapeake Bay is improved.	**4.3.4 Improve the Health of the Chesapeake Bay Ecosystem**

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
By 2011, achieve 45 percent (83,250 acres) of the 185,000 acres of submerged aquatic vegetation necessary to achieve Chesapeake Bay water quality standards. (2005 baseline: 39 percent (72,935 acres) of submerged aquatic vegetation necessary to achieve Chesapeake Bay water quality standards.)	By 2014, achieve 45 percent (83,250 acres) of the 185,000 acres of submerged aquatic vegetation necessary to achieve Chesapeake Bay water quality standards. (2008 baseline: 35 percent (64,912 acres) of submerged aquatic vegetation necessary to achieve Chesapeake Bay water quality standards.)
By 2011, achieve 40 percent (29.92 cubic km) of the long-term restoration goal of 100 percent attainment of the dissolved oxygen water quality standards in all tidal waters of the Bay. (2005 baseline: 34 percent (25.40 cubic km) of dissolved oxygen goal achieved.)	By 2014, achieve 40 percent (29.92 cubic km) of the long-term restoration goal of 100 percent attainment of the dissolved oxygen water quality standards in all tidal waters of the Bay. (2008 baseline: 12 percent (8.98 cubic km) of dissolved oxygen goal achieved.)
By 2011, achieve 59 percent (95.88 million pounds) of the implementation goal for nitrogen reduction practices necessary to achieve Chesapeake Bay water quality standards, expressed as nitrogen reduction in relation to achieving a 162.5 million pound reduction from 1985 levels (based on long-term average hydrology simulations). (2005 baseline: 41 percent of nitrogen goal achieved.)	By 2014, achieve 60 percent (97.43 million pounds) of the implementation goal for nitrogen reduction practices necessary to achieve Chesapeake Bay water quality standards, expressed as nitrogen reduction in relation to achieving a 162.5 million pound reduction from 1985 levels (based on long-term average hydrology simulations). (2008 baseline: 47 percent of nitrogen goal achieved.)
By 2011, achieve 74 percent (10.63 million pounds) of the implementation goal for phosphorus reduction in practices necessary to achieve Chesapeake Bay water quality standards, expressed as phosphorus reduction in relation to achieving a 14.36 million pound reduction from 1985 levels (based on long-term average hydrology simulations). (2005 baseline: 58 percent of phosphorus goal achieved.)	By 2014, achieve 74 percent (10.62 million pounds) of the implementation goal for phosphorus reduction practices necessary to achieve Chesapeake Bay water quality standards, expressed as phosphorus reduction in relation to achieving a 14.36 million pound reduction from 1985 levels (based on long-term average hydrology simulations). (2008 baseline: 62 percent of phosphorus goal achieved.)
By 2011, achieve 74 percent (1.25 million tons) of the implementation goal for sediment reduction practices necessary to achieve Chesapeake Bay water quality standards, expressed as sediment reduction in relation to achieving a 1.69 million ton reduction from 1985 levels (based on long-term average hydrology simulations). (2005 baseline: 54 percent of sediment goal achieved.)	By 2014, achieve 83 percent (1.4 million tons) of the implementation goal for sediment reduction practices necessary to achieve Chesapeake Bay water quality standards, expressed as sediment reduction in relation to achieving a 1.69 million ton reduction from 1985 levels (based on long-term average hydrology simulations). (2008 baseline: 64 percent of sediment goal achieved.)
4.3.5 Improve the Health of the Gulf of Mexico: By 2011, the overall health of coastal waters of the Gulf of Mexico will be improved from 2.4 to 2.6 on the "good/fair/poor" scale of the National Coastal Condition Report. (2004 Baseline: Gulf Coast rating of fair or 2.4 is based on a scale where 1 is poor and 5 is good.)	**4.3.5 Improve the Health of the Gulf of Mexico**

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
	By 2014, the overall health of coastal waters of the Gulf of Mexico will be improved from 2.4 to 2.6 on the "good/fair/poor" scale of the National Coastal Condition Report. (2004 Baseline: Gulf Coast rating of fair or 2.4 is based on a scale where 1 is poor and 5 is good.)
By 2011, restore water and habitat quality to meet water quality standards in 162 impaired segments (cumulative) in 13 priority coastal areas (2002 baseline: 812 impaired segments identified in Section 303(d) listings.)	By 2014, restore water and habitat quality to meet water quality standards in 160 impaired segments (cumulative) in 13 priority coastal areas. (2006 baseline: 0 segments restored. Baseline was reset to 0 in FY 2006 and measure is cumulative from FY 2007.)
By 2011, restore, enhance, or protect a cumulative 20,000 acres of important coastal and marine habitats. (2005 baseline: 16,000 acres restored, enhanced, or protected; Gulf of Mexico coastal wetland habitats include 3,769,370 acres.)	By 2014, restore, enhance, or protect a cumulative 32,600 acres of important coastal and marine habitats. (2007 baseline: 18,660 acres restored, enhanced, or protected; Gulf of Mexico coastal wetland habitats include 3,769,370 acres.)
By 2015, reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico to less than 5,000 km^2, as measured by the 5-year running average of the size of the zone. (Baseline: 2002-2006 running average size = 14,944 km^2.)	By 2015, reduce releases of nutrients throughout the Mississippi River Basin to reduce the size of the hypoxic zone in the Gulf of Mexico to less than 5,000 km^2, as measured by the 5-year running average of the size of the zone. (Baseline: 2003-2007 running average size = 14,644 km^2.)
4.3.6 Restore and Protect Long Island Sound: By 2011, prevent water pollution, improve water quality, protect aquatic systems, and restore the habitat of Long Island Sound by working through the Long Island Sound Management Study Conference partnership.	**4.3.6 Restore and Protect Long Island Sound**
By 2014, reduce point source nitrogen discharges to Long Island Sound by 58.5 percent as measured by the Long Island Sound Nitrogen Total Maximum Daily Load. (TMDL). (TMDL 2000 baseline: 213,151 lbs/day; 2014 target: 85,238 lbs/day.)	By 2014, reduce point source nitrogen discharges to Long Island Sound by 58.3 percent as measured by the Long Island Sound Nitrogen Total Maximum Daily Load. (TMDL). (TMDL 2000 baseline: 59,146 trade equalized (TE) lbs/day; 2014 target: 24,646 TE lbs/day.)
By 2011, reduce the size of hypoxic area in Long Island Sound (defined as the area in which the average maximum July-September <3mg/l DO) by 25 percent; reduce average duration of maximum hypoxic event by 25 percent. (2005 baseline derived from 19-year averages as of December 2005. Size: 203 sq/mi.; duration: 58 days.)	By 2014, reduce by 25 percent the size of the hypoxic area in Long Island Sound (i.e., defined as the area in which the average maximum July-September dissolved oxygen level is <3mg/l in bottom waters <1m); and reduce the duration of hypoxia (number of consecutive days) by 25 percent. (Baseline: 1987-1999 pre-TMDL averages: area: 208 square miles (mi^2); duration: 57.3 days.)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
By 2011, restore or protect an additional 300 acres of coastal habitat, including tidal wetlands, dunes, riparian buffers, and freshwater wetlands from the 2005 baseline. (2005 cumulative baseline: 562 acres restored and 150 acres protected.)	By 2014, restore, protect, or enhance 300 acres of important coastal habitat, including tidal wetlands, dunes, and riparian buffers in Long Island Sound watershed. (2009 baseline: 0 acres.)
By 2011, reopen an additional 50 miles of river and stream corridor to anadromous fish passage from the 2005 baseline through removal of dams and barriers or installation of by-pass structures such as fishways. (2005 cumulative baseline: 81 miles reopened.)	By 2014, reopen 150 miles of river and stream corridor to anadromous fish passage in Long Island Sound watershed through removal of dams and barriers or installation of by-pass structures such as fishways. (2009 baseline: 0 miles.)
4.3.7 Restore and Protect the South Florida Ecosystem: Protect and maintain the South Florida Ecosystem, including the Everglades and coral reef ecosystems.	**4.3.7 Restore and Protect the South Florida Ecosystem**
By 2011, achieve "no net loss" of stony coral cover (mean percent stony coral cover) in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida, working with all stakeholders (federal, state, regional, and local). (2005 baseline: Mean percent stony coral cover 6.7 percent in FKNMS and 5.9 percent in southeast Florida.)	Through 2014, maintain "no net loss" of stony coral cover (mean percent stony coral cover) in the Florida Keys National Marine Sanctuary (FKNMS) and in the coastal waters of Dade, Broward, and Palm Beach Counties, Florida, working with all stakeholders (federal, state, and local). (2005 baseline: mean percent stony coral cover 6.8 percent in FKNMS and 5.9 percent in southeast Florida.)
Through 2011, beginning in 2008, annually maintain the overall health and functionality of sea grass beds in the FKNMS as measured by the long-term sea grass monitoring project that addresses composition and abundance, productivity, and nutrient availability. (The 2005 baseline index of sea grass health will be available in December 2006.)	Through 2014, annually maintain the overall health and functionality of sea grass beds in the FKNMS as measured by the long-term sea grass monitoring project that addresses composition and abundance, productivity, and nutrient availability. (2005 baseline: Elemental Indicator (EI) - 8.3; Species Composition Index (SCI) -0.48.)
Through 2011, beginning in 2008, annually maintain the overall water quality of the near shore and coastal waters for the FKNMS (2005 baseline: for reef sites, chlorophyll less than or equal to 0.2 ug/l and vertical attenuation coefficient for downward irradiance (kd, i.e., light attenuation) less than or equal to 0.13 per meter; for all sites in FKNMS, dissolved inorganic nitrogen less than or equal to 0.75 micromolar and total phosphorus less than or equal to 0.2 micromolar.)	Through 2014, annually maintain the overall water quality of the near shore and coastal waters for the FKNMS. (2005 baseline: for reef sites, chlorophyll less than or equal to 0.2 ug/l (43 sites) and vertical attenuation coefficient for downward irradiance (kd measures light attenuation) less than or equal to 0.13 per meter (23 sites); for all sites in FKNMS, dissolved inorganic nitrogen less than or equal to 0.75 micromolar (54 sites) and total phosphorus less than or equal to 0.2 micromolar (63 sites).)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
Through 2011, beginning in 2008, improve the water quality of the Everglades ecosystem as measured by total phosphorus, including meeting the 10 parts per billion (ppb) total phosphorus criterion throughout the Everglades Protection Area marsh and the effluent limits to be established for discharges from storm water treatment areas. (2005 baseline: average annual geometric mean phosphorus concentrations were 5 ppb in the Everglades National Park, 10 ppb in Water Conservation 3A, 13 ppb in the Loxahatchee National Wildlife Refuge, and 18 ppb in Water Conservation Area 2A; annual average flow-weighted total phosphorus discharges from storm water treatment areas ranged from 13 ppb for area 3/4 and 98 ppb for area 1W.)	Through 2016, improve the water quality of the Everglades ecosystem as measured by Total Phosphorus (TP), including meeting the 10 parts per billion (ppb) TP criterion throughout the Everglades Protection Area marsh and the effluent limits to be established for discharges from storm water treatment areas. (2005 baseline: average annual geometric mean phosphorus concentrations were 5 ppb in the Everglades National Park, 10 ppb in Water Conservation 3A, 13 ppb in the Loxahatchee National Wildlife Refuge, and 18 ppb in Water Conservation Area 2A; annual average flow-weighted TP discharges from stormwater treatment areas ranged from 13 ppb for area 3/4 and 98 ppb for area 1W.)
4.3.8 Restore and Protect the Puget Sound Basin: By 2011, improve water quality, air quality, and minimize the adverse impacts of rapid development in the Puget Sound Basin.	**4.3.8 Restore and Protect the Puget Sound Basin**
By 2011, improve water quality and enable the lifting of harvest restrictions in 1,000 acres of shellfish bed growing areas impacted by degraded or declining water quality. (Baseline: as of January 2006, approximately 30,000 shellfish bed growing areas had harvest restrictions due to water quality impairments in Puget Sound.)	By 2014, improve water quality and enable the lifting of harvest restrictions in 1,600 acres of shellfish bed growing areas impacted by degraded or declining water quality in the Puget Sound. (2007 baseline: 322 acres of shellfish beds with harvest restrictions in 2006 had their restrictions lifted.)
By 2011, remediate 200 acres of prioritized contaminated sediments. (Baseline: as of January 2006, approximately 5,000 acres of remaining contaminated sediments required some level of remediation.)	By 2014, remediate 200 acres of prioritized contaminated sediments in the Puget Sound. (2008 baseline: zero acres remediated relative to the 2008 universe of approximately 500 acres of remaining contaminated sediments in EPA superfund/RCRA sites.)
By 2011, restore 3,500 acres of tidally- and seasonally-influenced estuarine wetlands. (Baseline: a total of approximately 45,000 acres of intertidal and near shore habitat were identified by state, tribal, and local groups as potential restoration sites in the 2006 Puget Sound Near Shore Restoration Site Inventory Database.)	By 2014, restore 9,500 acres of tidally- and seasonally-influenced estuarine wetlands in the Puget Sound. (2007 baseline: 4,152 acres had been restored or protected starting in FY 2006 and FY 2007.)
By 2011, reduce total diesel emissions in the Puget Sound airshed by 8 percent through coordinated diesel emission mitigation efforts. (Baseline will be available in December 2006.)	By 2014, reduce total diesel emissions in the Puget Sound airshed by 12 percent through coordinated diesel emission mitigation efforts. (Baseline: 2005-2006 Washington State Emissions Inventory for the counties within the Puget Sound basin.)

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
4.3.9 Restore and Protect the Columbia River Basin: By 2011, prevent water pollution, and improve and protect water quality and ecosystems in the Columbia River Basin to reduce risks to human health and the environment.	**4.3.9 Restore and Protect the Columbia River Basin**
By 2011, protect, enhance or restore 13,000 acres of wetland habitat and 3,000 acres of upland habitat in the Lower Columbia River watershed. (2005 baseline: 96,770 acres of wetland and upland habitat available for protection, enhancement, or restoration.)	By 2014, protect, enhance or restore 19,000 acres of wetland and upland habitat in the Lower Columbia River watershed. (2005 baseline: 0 acres of wetland and upland habitat, with 96,770 acres available for protection, enhancement, or restoration.)
By 2011, clean up 150 acres of known highly contaminated sediments. (Baseline: 400 acres of known highly contaminated sediments in the main stem of the Columbia River and Lower Willamette River as of 2006.)	By 2014, clean up 85 acres of known highly contaminated sediments in the Columbia River basin. (2006 baseline: 0 acres, with 400 acres of known highly contaminated sediment.)
By 2011, demonstrate a 10 percent reduction in mean concentration of contaminants of concern found in water and fish tissue. (Chemical-specific baseline will be available in 2006.)	By 2014, demonstrate a 10 percent reduction in mean concentration of certain contaminants of concern found in water and fish tissue in the Columbia River basin. (Chemical-specific baseline will be available at end FY 2009.)
4.4 Enhance Science and Research: Through 2011, identify and synthesize the best available scientific information, models, methods, and analyses to support Agency guidance and policy decisions related to the health of people, communities, and ecosystems. Focus research on pesticides and chemical toxicology; global change; and, comprehensive, cross-cutting studies of human, community, and ecosystem health.	**4.4 Enhance Science and Research:** Identify and synthesize the best available scientific information, models, methods, and analyses to support Agency guidance and policy decisions related to the health of people, communities, and ecosystems. Focus research on pesticides and chemical toxicology; global change; and comprehensive, cross-cutting studies of human, community, and ecosystem health.
	4.4.1 Human Health Research
	By 2012, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for assessing human health risk and protecting human health.
	4.4.2 Ecosystem Research
	By 2014, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for protecting and restoring ecosystems.
	4.4.3 Human Health Risk Assessment Research
	By 2011, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA health hazard information.
	4.4.4 Global Climate Change Research

Current (2006-2011) Strategic Plan **Objective** **Sub-objective** **Strategic Target**	**Proposed (2009-2014) Strategic Plan** **Objective** **Sub-objective** **Strategic Measure**
	By 2013, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for assessing the consequences of global change on air quality, water quality, ecosystems, and human health.
	4.4.5 Endocrine Disrupting Chemicals Research
	By 2012, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for decision-making related to effects, exposure, assessment, and management of endocrine disruptors.
	4.4.6 Safe Pesticides and Products Research
	By 2011, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for decision-making related to pesticides and toxics.
	4.4.7 Homeland Security Research
	By 2012, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for protecting the public, emergency responders, and the environment in the event of chemical, biological, or radiological attack.