

**2009–2014 EPA STRATEGIC PLAN
CHANGE DOCUMENT**

September 30, 2008

For Public Review

U.S. Environmental Protection Agency

Office of the Chief Financial Officer

Washington, DC 20460

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1. INTRODUCTION AND OVERVIEW

EPA'S 2009-2014 STRATEGIC PLAN UPDATE PROCESS

The Government Performance and Results Act of 1993 (GPRA)¹ requires federal departments and agencies to update their strategic plans every three years. Pursuant to this requirement, EPA will deliver a final *2009-2014 Strategic Plan* revision to the Congress and to the Office of Management and Budget by September 30, 2009. As in prior EPA *Strategic Plans*, the 2009-2014 update provides a framework for Agency annual planning, budgeting, and accountability by identifying the measurable environmental and human health outcomes the public can expect over the next five years and describing how we intend to achieve those results.

EPA's 2009-2014 Strategic Plan update is different from the revisions to previous *Plans*. The *2009-2014 Strategic Plan* is due to Congress on September 30, 2009. This deadline necessitates that the Agency begins the *Strategic Plan* update process under the current Administration and completes it under the next administration. As a result, the Agency has revised the process for the *Plan's* development by focusing efforts on a limited number of targeted areas and by developing EPA's *2009-2014 Strategic Plan Change Document* for review and comment at this time.

OVERVIEW OF 2009-2014 STRATEGIC PLAN CHANGE DOCUMENT

In response to recommendations from EPA's partners and stakeholders, the Agency developed this *Change Document* to provide a better context for proposed updates in the strategic performance measurement framework—the Agency's long-term goals, objectives, sub-objectives, and strategic measures.

Section 2 of this *Change Document* highlights proposed new or significantly different strategies identified for relevant targeted areas within EPA's five strategic goals.

Section 3 provides an overview of the most significant proposed changes to EPA's strategic performance measurement framework. Section 3 also presents a side-by-side comparison of the current (2006-2011) and proposed (2009-2014) strategic performance measurement framework.

TARGETED AREAS FOR IMPROVEMENT

In EPA's *2009-2014 Strategic Plan* update, the Agency is focusing on a limited number of targeted areas where we believe new or significant changes in strategies or performance measurement are most critical in helping the Agency to better achieve and measure environmental and human health outcomes. These targeted areas include:

- Reduction of Greenhouse Gas (GHG) Emissions
- Sustainable Agriculture

- Impacts of Global Climate Change
- Contaminants
- Import Safety
- Improving Program Implementation in Indian Country
- Enforcement/Compliance Measurement Approach
- Research Strategic Directions and Targets
- Environmental Indicators, Monitoring, and Related Information

Most of these involve cross-program activities, which will result in outcomes under more than one strategic goal. In developing this set of targeted areas, EPA considered data and analyses from many sources, including program priorities, trend analyses, and scientific data and reports. One important source of information was EPA's *2008 Report on the Environment (RoE)*.² Many of these targeted areas are supported by environmental indicator information in the *RoE*. For example:

- GHG emissions and concentrations are among the few adverse trends in the *RoE*.
- Many indicators point to degraded environmental conditions associated with agriculture and fertilizer use.
- The *RoE* identifies undesirable trends in U.S. and global air temperatures, sea surface temperatures, precipitation, and sea level.
- Indicators of contaminants in lake and coastal fish and coastal sediment quality show that legacy chemicals are still a problem.
- Pesticide residues in food increased from 2003 through 2005.
- The *RoE* identified information gaps and limitations in our understanding of the relationship between contaminants and disease, greenhouse gas emissions, wetland conditions, and the effects of land use on the environment and human health.

In addition to supporting many of the targeted areas, data that support indicators included in the *RoE* also support approximately 33 of the Agency's long-term (strategic) performance measures included in EPA's *2006-2011 Strategic Plan* and that are proposed for inclusion in the *2009-2014 Strategic Plan*.

COMMENTS AND FEEDBACK

This *2009-2014 Strategic Plan Change Document* is accessible through EPA's Internet web site at <http://www.epa.gov/ocfo/plan/plan.htm>. The web site includes a comments link for the public to provide feedback and suggestions to the Agency electronically. Written comments may be provided to:

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NEXT STEPS

Aided by comments the Agency receives on this *Change Document*, and after discussions with members of the new administration, the Agency will develop a full-text draft of the *2009-2014 Strategic Plan*, which will be available for public review and comment in late spring 2009. EPA will then release the final *Plan* by September 30, 2009, as required by GPRA.

EPA's *2009-2014 Strategic Plan* will be much shorter than previous *Plans*. For example, the discussion of EPA's long-term strategies will focus on the most important proposed changes in the Agency's programs and approaches to achieve environmental and human health outcomes. In addition, the strategic performance measurement framework will be consolidated into an appendix, rather than incorporated into the body of the *Plan*. These changes are intended to make the *Plan* more readable and useful.

¹ Government Performance and Results Act of 1993 (PL 103-62). Available from: <http://www.whitehouse.gov/omb/mgmt-gpra/gplaw2m.html>.

² U.S. EPA's 2008 Report on the Environment (Final Report) (EPA/600/R-07/045F), U.S. Environmental Protection Agency, Washington, DC: 366p. Available from: <http://www.epa.gov/roe/>.

2. SUMMARY OF PROPOSED CHANGES IN STRATEGIES

The following summary, organized by the Agency's five goals, highlights our proposed new or significantly different strategies in the areas targeted for change in the 2009-2014 timeframe. Other core programs and strategies would continue and are not included in the discussion below.

GOAL 1 - CLEAN AIR AND GLOBAL CLIMATE CHANGE

Reduction of Greenhouse Gas Emissions

- In FY 2009 and beyond, the Agency is pursuing two new strategies that expand EPA's voluntary programs to reduce greenhouse gas emissions.
 - One strategy will hasten the adoption of emerging climate-friendly technologies that build upon the Agency's ENERGY STAR work. Through ENERGY STAR, consumers save money and protect the environment through purchasing energy efficient products and following designated energy-saving and environmentally friendly practices.¹ With a growing demand for "green" and advanced technologies, EPA is exploring the promotion/recognition of technologies that are not well established in the marketplace but have the potential to significantly reduce greenhouse gas emissions. Early examples of these technologies involve advanced building technologies and residential combined heat and power.
 - The second strategy will promote the adoption of on-site renewable energy technologies such as solar panels for residential use and other technologies. There are a growing number of state and local programs promoting on-site or distributed renewable energy like solar, wind, geothermal, and other resources in which there is a growing consumer interest. EPA is exploring the development of a technical assistance/recognition program with states, local governments, business, and industry to spur investment in on-site renewables. This effort would complement EPA's Green Power Partnership² and Combined Heat and Power Partnership.³
- The Agency is currently soliciting comments to gather information and to determine whether and/or how to proceed on possible greenhouse gas regulations using the Clean Air Act. As circumstances change, the Agency will revisit this issue during the *2009-2014 Strategic Plan* update process.

Impacts of Global Climate Change

- The Agency will complete by 2012 an assessment of the impacts of global change on regional air quality in the U.S., emphasizing the implications of climate change on the Agency's fulfillment of its statutory, regulatory, and programmatic responsibilities.
- The Agency will focus research on the identification of adaptation strategies that yield additional benefits ("co-benefits") in the form of reductions of greenhouse gas emissions. Among these "co-benefits" are smart growth policies that lead to reductions in emissions of

criteria air pollutants and improvements in air quality. The Agency's air program will examine policy and management approaches to adaptation and conduct analyses to estimate the economic implications of climate change and the benefits of adapting to climate change. Research-based decision-support tools will be developed for stakeholders in states and local communities to help implement adaptation strategies and incorporate climate change elements into their day-to-day operations.

GOAL 2 - CLEAN AND SAFE WATER

Impacts of Global Climate Change

- EPA will begin implementing the *National Water Program Strategy: Response to Climate Change*. This strategy provides a foundation for understanding climate change impacts on water programs and defining response actions. The strategy identifies five key goals: (1) use water programs to mitigate greenhouse gas emissions; (2) adapt implementation of core water programs (e.g., the National Estuary Program's "climate ready estuaries" partnership⁴) to maintain and improve program effectiveness in the context of a changing climate; (3) strengthen the link between EPA water programs and climate change research; (4) educate water program professionals and stakeholders on climate change impacts on water resources and programs; and, (5) establish the management capability within the water program to engage on climate change challenges on a sustained basis. The strategy also describes 44 specific response actions that will be initiated by FY 2009. Building on these five goals, the Agency will update the specific implementing actions for the 2010-2011 period and for subsequent years.

Contaminants

- In late 2010 or early 2011, EPA will develop a final rulemaking under the Underground Injection Control Program (UIC) to ensure that geologic sequestration of carbon dioxide is carried out in a manner that protects underground sources of drinking water. In addition, EPA will take the lead, along with states and tribes with delegated programs, to issue permits for geologic sequestration facilities, to review financial mechanisms for the care of these sites, and to develop training and implementation materials on the interpretation and analysis of geologic site characterization information, modeling and monitoring data, and financial assurance for these sites.
- EPA will use a four-pronged approach to address contaminants of emerging concern, such as pharmaceuticals, personal care products, and nanomaterials found in the aquatic environment by: (1) strengthening the science about the health and environmental effects of these emerging contaminants; (2) improving risk communication and public communication about them; (3) preventing their entry into our waterways and promoting good stewardship; and, (4) taking regulatory actions where appropriate.
- EPA will expand and leverage the National Aquatic Resource Surveys, conducted by EPA, states, tribes, and other federal agency partners, to better evaluate the extent of contaminants

of emerging concern in different waterbody types across the U.S. in a cost-efficient and statistically-valid manner.

- EPA launched a significant effort to promote the use of “green infrastructure” in April 2007, designed to bring green infrastructure technologies and approaches into mainstream use for stormwater runoff and sewer overflow management. In January 2008, EPA and five other national organizations published “Managing Wet Weather with Green Infrastructure: Action Strategy 2008.” Green infrastructure techniques work to infiltrate, evapotranspire, and capture and use stormwater to maintain or restore natural hydrology. At the largest scale, the preservation and restoration of natural landscape features (such as forests, flood plains, and wetlands) are critical components of green stormwater infrastructure. On a smaller scale, green infrastructure practices include rain gardens, permeable pavements, green roofs, infiltration planters, trees and tree boxes, and rainwater harvesting for non-potable uses such as toilet flushing and landscape irrigation.
- In the area of water infrastructure security, EPA will focus on these efforts:
 - Publish key guidance materials and develop associated outreach programs to promote the nationwide adoption of contamination warning systems and assist public water systems with detecting and responding to drinking water contamination events.
 - Establish a nationwide network of federal, state, tribal, local, and commercial laboratories capable of analyzing drinking water for standard chemical, biological, and radiological contaminants resulting from terrorist attacks, other intentional acts, natural disasters, and other hazards.
 - Partner with water sector professional associations to encourage local utilities in every state to establish intrastate mutual aid and assistance agreements between drinking water and wastewater utilities, known as Water/Wastewater Agency Response Networks (WARN). WARNs employ a utility-driven model to facilitate an effective and efficient flow of personnel and resources after an emergency.
 - Implement some of the recommendations from a draft decontamination strategy, developed in partnership with the Water Sector Coordinating Council and the Government Coordinating Council, including the development of new guidance for containment and disposal of large amounts of contaminated water.

Environmental Indicators, Monitoring, and Related Information

- EPA will continue to work with states, tribes, and other partners to obtain contaminant occurrence information necessary to support the assessment of drinking water health-based measures. Specifically, the two measures are: (1) a microbial measure based on reductions in endemic cryptosporidiosis cases as a result of the Long-Term 2 Enhanced Surface Water Treatment Rule and (2) a chemical measure based on reductions in bladder cancer cases as a result of the Stage 1 and Stage 2 Disinfection By-product Rules. The focus of the

collaborative efforts will be on helping assess if the Agency has met the estimated health benefits of these two rules by 2014.

- EPA's water program will invest in efforts over the timeframe of the *2009-2014 Strategic Plan* to continually improve measures of environmental success. Several Regions are undertaking pilot efforts with various internal and external partners. Region 3 has held an intensive workshop with its states to discuss suggestions for improving EPA's suite of water quality measures and plans to pilot some new regional measures in conjunction with the affected states. Region 4 is also planning to pilot improved measures of success. The results of these and other efforts will be used to inform the next (2012-2017) *Strategic Plan*.
- EPA is working to improve its ability to measure the effectiveness of protection and restoration efforts in achieving improved environmental outcomes. Specifically, EPA will expand the strategic measure that is tracking the condition of wadeable streams to include two other waterbody types—lakes and rivers. Baselines will be established in 2010 for lakes and 2012 for rivers. National water quality assessment results for these two waterbody types will be reported in 2015 and 2017 respectively. Measures for lakes and rivers will be included in the next (2012-2017) *Strategic Plan*.

GOAL 3 - LAND PRESERVATION AND RESTORATION

Reduction of Greenhouse Gas Emissions

- A large majority of all U.S. greenhouse gas (GHG) emissions is intrinsically related to how we manage land and produce, consume, and dispose of the materials that fuel our economy in order to provide food, shelter, and a high standard of living. EPA can achieve substantial reductions in GHG emissions through its national role in resource conservation and land cleanup and reuse.
 - EPA, in conjunction with state partners, is shifting from waste management to sustainable materials management approaches by taking a quantitative, life-cycle approach to managing materials. This shift emphasizes reducing or eliminating waste throughout the lifecycle of a material or product—from the extraction of a raw material through a product's end-of-life. This approach, which uses less energy-intensive, recycled materials for production, has resulted in significant reductions in GHG emissions in manufacturing.⁵ Strategies used to achieve GHG emission reductions include: (1) efficient production processes that minimize raw material inputs; and (2) product designs that use less material, use recycled feedstocks rather than virgin materials, extend product life spans, and facilitate product disassembly for recycling and/or transformation for further productive use.
 - EPA will work with state, local, and tribal governments, other federal agencies, private sector partners, and non-governmental organizations to strengthen our nation's recycling collection and processing infrastructure, enhance efficient use of materials, articulate and communicate the benefits of sustainable materials management, and foster waste-to-energy as an end-of-life management option when appropriate. These efforts will largely

be conducted through voluntary partnership programs under the Resource Conservation Challenge, such as WasteWise, Coal Combustion Products Partnership, GreenScapes, and Plug-In to e-cycling.

- EPA is exploring approaches to develop green remediation practices that encourage energy efficiency and conservation during the cleanup of contaminated sites. EPA is also working to assess the impacts of biofuels on Underground Storage Tank (UST) cleanup sites and to evaluate the effectiveness of assessment approaches and cleanup technologies at these sites.
- EPA is encouraging the reuse of formerly contaminated lands and mining sites as locations for siting renewable energy production facilities, as well as reusing existing infrastructure on such sites for recreational areas, artists' colonies, markets and restaurants, or other imaginative beneficial uses, and the practical utilization of green building techniques. Reusing contaminated land can reduce the need for developing greenspace, and thereby preserve the critical carbon sink provided by undisturbed, pristine land. Land reuse may also introduce more sustainable and climate-sensitive uses to land.

Contaminants

- EPA is taking a cross-program approach to consider issues associated with the distribution and storage of biofuels. EPA will evaluate issues associated with the compatibility of these fuels when introduced into existing infrastructure and possible complexities should such biofuels leak or otherwise be released into the environment.
- EPA's Superfund Remedial Program will provide information on emerging environmental nanotechnologies to EPA regional remedial project managers. Nanotechnology holds promise in remediating Superfund sites more cost-effectively and in addressing challenging site conditions, such as the presence of dense non-aqueous phase liquids like solvents such as trichloroethene (TCE), a common contaminant at Superfund sites.⁶

Improving Program Implementation in Indian Country

- For solid and hazardous waste, EPA will shift its emphasis from planning to actions that enable tribes to better implement sustainable waste management programs. As tribal integrated solid waste management plans (ISWMPs) are developed and put in place, EPA will increasingly support activities such as targeting or leveraging funding to carry out these programs and technical assistance for compliance, training, and other mechanisms that help tribes transition from planning to implementing sustainable ISWMPs.

Environmental Indicators, Monitoring, and Related Information

- EPA's cleanup programs play an important role in returning formerly contaminated sites to long-term, sustainable, and productive use. In an effort to better measure progress, a suite of measures is being considered. These measures could include formerly contaminated land at which: (1) there is no complete pathway for human exposures to unacceptable levels of contamination based on current site conditions; (2) all cleanup goals have been achieved for

media that may affect current and reasonably anticipated future land uses of the acres so that there are no unacceptable risks; and, (3) all controls identified as part of the response action to help ensure long-term protection have been put in place. EPA anticipates that by 2014 approximately one million acres could be determined as ready for anticipated use (RAU).

GOAL 4 - HEALTHY COMMUNITIES AND ECOSYSTEMS

Impacts of Global Climate Change

- Global change research will be directed toward design and development of decision-support tools to aid EPA, domestic stakeholders (i.e., states, local communities, and other jurisdictions), and international stakeholders coping with the impacts of climate change to implement adaptation strategies and incorporate considerations of climate change into their day-to-day operations.

Sustainable Agriculture

- EPA will work with the American National Standards Institute to develop a new standard defining sustainable agriculture. This new standard will assist EPA in developing a longer-term strategy to guide Agency efforts on sustainable agriculture. EPA will also work with the Agency's Farm, Ranch, and Rural Communities Federal Advisory Committee to develop frameworks for sustainability with respect to specific agricultural production systems.
- EPA will explore new agricultural policies to promote clean and affordable biofuels, while avoiding unintended consequences in the production of safe and abundant food and on the environment and human health. EPA will monitor the use of pesticides and evaluate environmental impacts and trends in pesticide usage on crops grown for biofuel production.

Contaminants

- The endocrine disruptor screening program (EDSP) has been focused on initial test development and validation. Now, under authority granted in the Federal Food, Drug, and Cosmetic Act (FFDCA), as amended by the Food Quality Protection Act of 1996, the EDSP will begin requiring industry to conduct tests of pesticide chemicals to identify substances that may have the potential for endocrine disruption. The resulting test data will be evaluated and considered, as appropriate, as part of EPA's required regulatory determinations under FFDCA and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). EPA will develop subsequent generations of assays for the EDSP while we evaluate the initial EDSP data submitted by manufacturers.
- EPA has fundamentally changed its approach to protecting humans and the environment from chemical risks through the chemical assessment and management program (ChAMP), announced in March 2008. Under ChAMP, chemicals in U.S. commerce in 2005 with production volumes at or above 25,000 pounds will be rapidly assessed and prioritized. Chemicals determined to be of special concern will be the subject of prompt regulatory or

voluntary action, requiring innovative approaches to leverage all applicable EPA tools and resources.⁷

- In response to new uses of nanoscale materials and continued evolution of the technology, EPA initiated an in-house research program to complement on-going competitive grant research. EPA will conduct research on nanotechnology implications and mitigation of potential impacts from nanomaterial exposure, as well as the use of nanotechnology for environmental protection.⁸
- EPA will implement new strategies to maintain progress on eliminating childhood lead poisoning of millions of the nation's children who remain at risk from pre-1978 homes with lead-based paint. EPA has recently promulgated the Renovation, Repair, and Painting (RRP) rule, which requires that the home improvement industry address lead poisoning by complying with specific training, certification, and lead-safe work practices. While the requirements and procedures are similar to the lead abatement program, the RRP program is vastly larger in scale and represents the first time that such a large industry segment will be required to be trained in lead safety. EPA will also launch a new strategic outreach campaign designed to promote public awareness of, and industry compliance with, the RRP rule and will renew public awareness of the consequences of lead poisoning and how to prevent them.
- EPA will explore more aggressive approaches to address legacy risks and phase out the ongoing use of polychlorinated biphenyls (PCBs) to address new concerns about the presence of PCBs in caulks and paints used historically in schools and in gas lines that have leaked into homes. EPA is developing an Advance Notice of Proposed Rulemaking on the continuing uses of PCBs.
- EPA will re-examine current strategies to advance efforts to reduce and where possible eliminate the use of mercury in products and manufacturing processes. EPA will develop and promote innovative approaches in areas such as lighting, education, mining, manufacturing, and healthcare to address domestic and international efforts to reduce the use of mercury and to safely manage existing stockpiles.
- EPA will develop new strategies and renew educational outreach efforts to address increasing public health concerns about the use of asbestos in products and new concerns about unexpectedly high exposure in unusual settings (e.g., on public lands).
- EPA is exploring options to protect against formaldehyde risk from composite wood and other products. Through an Advance Notice of Proposed Rulemaking (ANPR), EPA plans to describe steps it will take to decide what type of regulatory or other action would be appropriate to reduce risk from formaldehyde in pressed wood products. The ANPR will request comments, information, and data related to formaldehyde and will announce four public meetings to be held throughout the country to solicit public input.
- EPA will research the interactive and cumulative effects of chemicals, develop computational tools to understand the complexity of exposure to chemical mixtures, and develop a better

understanding of the underlying mechanisms behind the science to support improved toxicity testing and risk assessment.

- To address contaminants in specific geographic areas, EPA will pursue the following strategies:
 - EPA will advance Great Lakes protection and restoration through: (1) surveillance of emerging chemicals and implementation of a 2008 Mercury in Products Phase-Down Strategy; (2) implementation of a rapid response protocol to stem the invasion of new aquatic species; (3) leading a call to action for improved habitat protection and restoration; (4) pursuing improved beach health management and predictive modeling; and, (5) development of a near-shore monitoring program which will help address re-occurring eutrophication, algal blooms, beach closures, botulism outbreaks, fish and wildlife die offs, and potential drinking water intake issues. These activities will be guided by the Great Lakes Regional Collaboration Strategy.⁹
 - In the Gulf of Mexico, EPA will explore innovative approaches to mitigate hypoxia, the reduction in oxygen concentrations creating “dead zones,” as part of the state and federal Mississippi River/Gulf of Mexico Watershed Nutrient Task Force and the Gulf Hypoxia Action Plan 2008. Innovative approaches include investigating the feasibility of TMDLs (total maximum daily loads of pollutants) for waters throughout the Mississippi-Atchafalaya River Basin. EPA is working with the National Academy of Sciences to develop effective approaches for allocating nutrient load reduction targets that will facilitate the completion of TMDLs, the reduction of nutrient pollution in Basin waterbodies and in the Gulf, and the implementation of market-based approaches such as water quality trading. EPA will also work cooperatively with numerous federal and state agencies to address habitat restoration issues through innovative approaches.
 - EPA will increase its efforts in the Upper Mississippi River Basin. The Agency will partner with multiple federal, state, and tribal agencies and nongovernmental organizations to establish and achieve shared ecosystem health objectives for the river. EPA will reduce nutrient and sediment loadings in the watershed to protect water quality while ensuring continued agricultural viability by promoting sustainable agricultural practices and innovative market-based approaches.
 - EPA and its partners will collaborate to evaluate the U.S.-Mexico border program and update the Border 2012 strategic document to better address environmental and public health issues unique to the border region and emerging issues.
 - State-led efforts culminating in late 2008 will define a new strategy for Delta recovery that may re-frame many of the challenges to the San Francisco Bay Estuary ecosystem. EPA expects to continue to work with multiple state and federal agencies and nongovernmental organizations to address these challenges.¹⁰

Import Safety

- Imported products must meet EPA's human health and environmental standards. EPA is increasing Agency-wide coordination and is working more closely with other federal agencies and departments to implement a more cohesive, consistent, and complementary approach to ensuring import safety using existing statutory authorities, programs, and tools. EPA will build linkages between its trade-related data systems and those operated by U.S. Customs and Border Protection (CBP) to provide real-time information on whether a product can be allowed into the United States. EPA is working internationally to promote the safety of products imported into the U.S. under recently negotiated international agreements and existing cooperative programs. In addition, EPA is applying existing pesticide and chemical regulations as appropriate to prevent risks and to impose risk mitigation and control measures when new information emerges to ensure that product, chemical, and food imports are protective of human health and the environment.

Improving Program Implementation in Indian Country

- In order to expand our ability to protect human health and the environment in Indian country, the pesticide program will emphasize approaches that can benefit multiple tribes (e.g., circuit-riders and multi-tribal training) and develop pesticide use assessments to help identify and address the greatest needs and priorities.
- EPA will develop strategies to help tribes integrate programmatic elements for their brownfields, solid waste, hazardous waste, emergency response, underground and aboveground storage tank, and Superfund programs. This would potentially enable tribes to take fuller advantage of response-related opportunities provided through statutory authorities, further support efforts to establish and enhance tribal response programs, and leverage funding to address their specific site needs. These strategies would help tribes streamline response program activities and achieve efficiencies similar to those achieved under the "one-cleanup program."

Research Strategic Directions and Targets

- EPA will transition from assessment of ecological conditions and development of indicators to improving characterization of ecosystem goods and services, including their benefits to human well-being, and understanding how these are affected by policy and management choices.

GOAL 5 - COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP

Reduction of Greenhouse Gas Emissions/Contaminants

- The newly revised pollution prevention (P2) program strategy will focus on six areas during 2009-2014 in order to reduce GHG emissions, conserve natural resources, and improve program efficiency. These areas are: advancing green building design and construction; developing environmentally preferable electronics products; developing safer chemicals and

manufacturing processes; advancing sustainable production agriculture; reducing the environmental footprint of municipalities and institutions; and, greening the hospitality sector. The Agency will also measure reductions in the use and production of priority chemicals of concern that are identified through the Chemical Assessment and Management Program (ChAMP).

Import Safety

- Recent high-visibility import safety issues have raised public and regulatory concerns. EPA is working internationally to promote environmental law development, environmental compliance assistance, and the use of safer chemical ingredients and safer chemical manufacturing processes in foreign countries that produce products for U.S. markets. Concurrently, EPA is also increasing enforcement against illegal imports heading for or already in the U.S. marketplace that pose significant hazards to help protect consumers and the environment.

Improving Program Implementation in Indian Country

- The Agency will work to strengthen compliance and enforcement in Indian country where EPA maintains direct implementation authority. EPA's enforcement and compliance program is focusing national attention on three areas in Indian country: (1) improving compliance of drinking water systems; (2) improving multimedia compliance at schools; and, (3) improving solid waste management and investigating illegal dumping sites to identify and pursue responsible parties.

Enforcement/Compliance Measurement Approach

- EPA's enforcement and compliance program is restructuring its measurement system from a tool-based approach to a problem-based approach, discussed in more detail under "Proposed Changes in the Strategic Measurement Framework." Problem-based performance reporting will move progressively toward characterizing pollutant loadings with the ultimate goal of providing data on ecological and human health benefits. EPA will continue to develop further enhancements of the system.

Research Strategic Directions and Targets

- Sustainability research will emphasize biofuel production to demonstrate development of sustainability metrics and indicator system-based solutions that lead to sustainable environmental outcomes.

¹ For additional information, see <http://www.energystar.gov>.

² For additional information, see <http://www.epa.gov/greenpower>.

³ For additional information, see <http://www.epa.gov/chp>.

⁴ The objective of the climate ready estuaries program is to build capacity in the National Estuary Programs (NEPs) for local leadership and expertise to adapt to the effects of climate change through a joint effort with the NEPs and EPA. The national partnership includes two levels of support: (1) a toolkit of information and technical assistance available to all NEPs and other coastal managers, and (2) targeted support to several NEP pilots (six in 2008, with

more added in following years) to develop and demonstrate ways to identify vulnerabilities, develop adaptation strategies, and implement those strategies. Upon completion of these adaptation strategies, EPA will recognize individual NEPs and other coastal communities as “climate ready,” encouraging the coastal leaders to implement climate adaptation and gain local, national, public, and private partners to support their prescribed actions. More information is available at: <http://www.epa.gov/owow/estuaries/cre.html>.

⁵ For example, in 2006, the U.S. recycled 32.5% of municipal solid waste, reducing energy demand by 1.3 quadrillion British Thermal Units (BTUs), and avoiding the emission of 182 million metric tons of carbon dioxide equivalents because those recycled materials displaced virgin materials in production processes.

⁶ Due to the significantly greater surface area of nanoscale iron particles compared to larger-sized granular iron, and a more powerful ability of nanoscale iron to degrade targeted contaminants, injecting nanoscale zero-valent iron particles into areas within aquifers that are sources of chlorinated hydrocarbon contamination may result in faster, more effective cleanups than traditional pump-and-treat methods. Nanoscale zero-valent iron is in use in full-scale projects, with an encouraging degree of success. It has been selected as a final remedy for areas within the Superfund sites at Naval Air Engineering Station in Lakehurst, New Jersey, and at the Naval Air Station in Jacksonville, Florida. It has been tested at other Superfund sites, including Nease Chemical in Ohio, Parris Island in South Carolina, and Phoenix Goodyear in Arizona, and at a BP Resource Conservation and Recovery Act (RCRA) site in Alaska.

⁷ Previous efforts were focused primarily on High Production Volume chemicals—those produced at 1 million pounds per year based on 1990/1994 production volume reporting (<http://www.epa.gov/chemrtk/hpvis/aboutrbd.htm>). See ChAMP program website and link to background presentation: <http://www.epa.gov/champ/>; <http://www.epa.gov/champ/pubs/champbriefing050808.pdf>.

⁸ Examples include how specific nanomaterial properties influence hazard, how to detect nanomaterials in environmental media, and how nanomaterials move and transform in the environment (<http://es.epa.gov/ncer/nano/>). EPA’s Nanoscale Materials Stewardship Program, initiated in January 2008, is developing crucial new information (<http://epa.gov/oppt/nano/stewardship.htm>). Increased inter-agency and international coordination is also needed. Examples include the National Nanotechnology Initiative and the Organization for Economic Cooperation and Development’s (OECD) public website on the Working Party for Manufactured Nanomaterials (http://www.oecd.org/department/0,3355,en_2649_37015404_1_1_1_1_1,00.html).

⁹ For additional information on the Great Lakes Regional Collaboration Strategy, please see: <http://www.epa.gov/grtlakes/collaboration/strategy.html>.

¹⁰ For additional information on the San Francisco Bay Estuary, please see: <http://www.epa.gov/region09/water/watershed/index.html>.

3. PROPOSED CHANGES IN THE STRATEGIC MEASUREMENT FRAMEWORK

HIGHLIGHTS OF SIGNIFICANT PROPOSED CHANGES

EPA's strategic measurement framework (i.e., strategic architecture) of goals, objectives, sub-objectives, and strategic measures describes the human health and environmental results the Agency is working to achieve. Reviewers should note that the overarching framework of goals and objectives remains unchanged from the current *Plan*. However, in the proposed framework, all the statements of measurable results are included at only one level in the framework—the strategic measures—for consistency purposes. Sub-objectives will serve as organizing headers for strategic measures supporting the objective. This means that any sub-objectives that were measurable in the past have been converted into strategic measures for the 2009-2014 framework.

The proposed updated strategic measurement framework for 2009-2014 is presented in a side-by-side format with the current (2006-2011) framework to facilitate review. Throughout all the strategic goals, the proposed strategic measurement framework includes updates to targets and baselines to reflect the new 2009-2014 timeframe. In addition, the narrative below highlights the more significant changes proposed in the new strategic measurement framework. These proposed changes are highlighted in *italics* in the side-by-side presentation of the framework

Across all goals in the proposed architecture, EPA's research and development program is proposing to adopt new strategic measures consistent with the long-term measures in the Office of Management and Budget's (OMB) Program Assessment Rating Tool (PART) evaluation process. These measures are based on the Board of Scientific Counselors (BOSC) performance ratings, which measure the success of each research program in achieving its long-term goals according to the appraisal of independent expert panels.

Goal 1 – Clean Air and Global Climate Change

- **Sub-objective 1.1.1 Reduce Criteria Pollutants and Regional Haze:** The draft 2009-2014 strategic measures for this sub-objective are currently based on the assumption that the Clean Air Interstate Rule (CAIR) is implemented as promulgated.¹ As circumstances change, the Agency will revisit this issue and related assumptions during the Strategic Plan update process.
- **Sub-objective 1.4.1 Monitor the Environment for Radiation:** The strategic measure pertaining to the RadNet radiation monitoring program has changed from being a measure of land area covered by monitoring to a measure of people covered, an improved measure of human exposure during radiological emergencies. This language is consistent with the recently completed PART assessment of the radiation program.
- **Sub-objective 1.6.1 Clean Air Research:** A new sub-objective and strategic measure have been added on research supporting the air program.

Goal 2 – Clean and Safe Water

- **Sub-objective 2.1.2 Fish and Shellfish Safe to Eat:** EPA is eliminating the strategic measure tracking water quality improvements in shellfish-growing areas because data are not routinely available to report on this measure. The Interstate Shellfish Sanitation Conference (ISSC) centralized database was not developed, and EPA has no authority to require reporting of the data. EPA is seeking suggestions on a potential replacement measure.
- **Sub-objective 2.2.2 Improve Coastal and Ocean Water:** EPA is adding two strategic measures to track aquatic ecosystem health for Hawaii and South Central Alaska using the National Coastal Condition Report, prepared as a coordinated effort among EPA, states, the National Oceanic and Atmospheric Administration, the U.S Geological Survey, and the U.S. Fish and Wildlife Service. This change reflects new data that has recently become available.
- **Sub-objective 2.3.1 Drinking Water and Sub-objective 2.3.2 Water Quality Research:** EPA is adding two sub-objectives and strategic measures for drinking water and water quality research.

Goal 3 – Land Preservation and Restoration

- **Sub-objective 3.1.1 Waste Generation and Recycling:**
 - Construction and Demolition Debris—EPA performed an extensive search concerning the availability of construction and demolition (C&D) materials recycling data. Due to a lack of annually-available data on the percentage of C&D materials recycled, the strategic measure is being deleted in this *Strategic Plan* revision.
 - Municipal Solid Waste—The new strategic measure reflects EPA’s efforts to support the formation and growth of recycling programs through education and outreach and the development of partnerships. This new measure focuses on EPA activities and resulting outcomes rather than relying on a national source generation volume over which the Agency has limited control.
- **Sub-objective 3.2.1 Chemical Release Preparedness and Response:**
 - Homeland Security—As part of our homeland security strategy, EPA has introduced a National Approach to Response (NAR) designed to bring together and ensure efficient utilization of all emergency response assets Agency-wide to respond to nationally significant incidents. EPA has revised the strategic measure to reflect this change in approach, including preparedness to address multiple simultaneous nationally significant incidents.
 - Voluntary Removals—A new combined measure for potentially responsible party (PRP) removals is being introduced. Instead of only counting "voluntary removals," EPA will include all “PRP-lead” removal completions in this measure to ensure a full accounting of these actions.

- Oil Program—As agreed upon with OMB under the oil spill control PART evaluation, EPA is replacing two measures in the *2009-2014 Strategic Plan* to focus on bringing regulated facilities into compliance.
- **Sub-objective 3.3.1 Land Protection Research:** EPA has added a new sub-objective and strategic measure for research on protecting and restoring land.

Goal 4 – Healthy Communities and Ecosystems

- **Sub-objective 4.1.1 Reduce Chemical Risks:**
 - ChAMP—The newly announced Chemical Assessment and Management Program (ChAMP) is now tracking risk management actions for chemicals of special concern.² Chemicals determined to be of special concern will be subject to risk management follow-up actions.
 - HPV Chemicals—EPA is adding a new strategic measure on reducing chronic human health risks from environmental releases of high production volume (HPV) chemicals in commerce.
 - Mercury—EPA is adding a new strategic measure for international mercury reduction efforts.
- **Sub-objective 4.1.2 Reduce Chemical Risks at Facilities and in Communities:**
 - EPA is moving forward with only one of its three current Risk Management Plan (RMP) strategic measures. The retained measure is revised but will continue to focus on inspections and audits of regulated facilities to reduce accidents and community “vulnerable zones.”
 - EPA will eliminate the Local Emergency Planning Committee (LEPC) strategic measure for this revision since this is a local activity and responsibility.
- **Sub-objective 4.1.3 Protect Human Health from Pesticide Risk:** EPA has a new strategic measure for screening and testing pesticide chemicals for potential endocrine disrupting effects.
- **Sub-objective 4.2.4 Sustain and Restore the United States-Mexico Border Environmental Health:** A new strategic measure is under development in fall/winter 2008 to replace the existing measure on improving water quality along the Border. The new measure may use reductions in biochemical oxygen demand or another parameter to assess improved water quality.
- **Sub-objective 4.3.1 Increase Wetlands:** EPA is proposing to change the way it calculates the measurement for “no net loss” of wetlands from “wetland acreage” to “wetland acreage

and stream miles” to capture more EPA accomplishments in administering the Clean Water Act Section 404 regulatory program. Reporting on acreage and linear feet of stream protected, restored, and mitigated as a result of wetland regional activities will be a positive step forward in documenting program effectiveness. In addition, the strategic measure for "no net loss" will be expressed as a ratio of gains to losses for wetland acreage and stream miles.

- **Sub-objective 4.3.3 Improve the Health of the Great Lakes:** A new strategic measure is being added on removing beneficial use impairments in the Great Lakes, consistent with OMB’s PART evaluation.
- **Objective 4.4 Enhance Science and Research:** Seven sub-objectives and strategic measures have been added under this objective for research on human health, ecosystems, human health risk assessment, global climate change, endocrine disrupting chemicals, pesticides and products, and homeland security.

Goal 5 – Compliance and Environmental Stewardship

- **Objective 5.1 Achieve Environmental Protection through Improved Compliance:** EPA’s enforcement and compliance program is restructuring its measurement system from a tool-based approach to a problem-based approach. It will focus on the environmental problems EPA addresses with its enforcement and compliance tools. The proposed new sub-objectives and strategic measures reflect this change in approach by including separate measures for air, water, and waste/pesticides/toxics. There is also a new sub-objective for criminal enforcement, with supporting strategic measures. EPA will continue to refine the strategic measures and establish baselines and targets throughout the *Strategic Plan* update process. Further refinements are discussed in “Summaries of Proposed Changes in Strategies” under the “Enforcement/Compliance Measurement Approach” heading for Goal 5.
- **Sub-objective 5.2.1 Prevent Pollution and Promote Environmental Stewardship:** Two new strategic measures have been added for tracking progress in reducing ChAMP priority chemicals of special concern through pollution prevention and other approaches.
- **Sub-objective 5.4.1 Enhance Science and Technology for Sustainability:** A new sub-objective and strategic measure have been added for sustainability research.

¹ The CAIR rule was recently vacated by the U.S. Court of Appeals for the D.C. Circuit. No decisions have been made in response to this action.

² More information on the ChAMP program can be found at <http://www.epa.gov/champ/>.

PROPOSED 2009-2014 STRATEGIC MEASUREMENT FRAMEWORK

Goal 1: Clean Air and Global Climate Change

<p><u>Current (2006-2011) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Target</p>	<p><u>Proposed (2009-2014) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Measure</p>
GOAL 1: CLEAN AIR AND GLOBAL CLIMATE CHANGE	
<p>Protect and improve the air so it is healthy to breathe and risks to human health and the environment are reduced. Reduce greenhouse gas intensity by enhancing partnerships with businesses and other sectors.</p>	
<p>1.1 Healthier Outdoor Air: Through 2011, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.</p>	<p>1.1 Healthier Outdoor Air: Through 2014, working with partners, protect human health and the environment by attaining and maintaining health-based air-quality standards and reducing the risk from toxic air pollutants.</p>
<p>1.1.1 Ozone and PM2.5: By 2015, working with partners, improve air quality for ozone and PM2.5.</p>	<p>1.1.1 Reduce Criteria Pollutants and Regional Haze</p>
<p>By 2015, reduce the population-weighted ambient concentration of ozone in all monitored counties by 14 percent from the 2003 baseline.</p>	<p>By 2015, reduce the population-weighted ambient concentration of ozone in all monitored counties by 14 percent from the 2003 baseline, compared to the eight percent cumulative reduction expected by 2008.</p>
<p>By 2015, reduce the population-weighted ambient concentration of PM2.5 in all monitored counties by 6 percent from the 2003 baseline.</p>	<p>By 2015, reduce the population-weighted ambient concentration of PM2.5 in all monitored counties by 6 percent from the 2003 baseline, compared to the 4 percent cumulative reduction expected by 2008.</p>
<p>By 2011, reduce emissions of fine particles from mobile sources by 134,700 tons from the 2000 level of 510,550 tons.</p>	<p>By 2014, reduce emissions of fine particles from mobile sources by 51,000 tons from a 2009 baseline level of 417,000 tons.</p>
<p>By 2011, reduce emissions of nitrogen oxides (NO_x) from mobile sources by 3.7 million tons from the 2000 level of 11.8 million tons.</p>	<p>By 2014, reduce emissions of nitrogen oxides (NO_x) from mobile sources by 2.1 million tons from a 2009 baseline level of 9.3 million tons.</p>
<p>By 2011, reduce emissions of volatile organic compounds from mobile sources by 1.9 million tons from the 2000 level of 7.7 million tons.</p>	<p>By 2014, reduce emissions of volatile organic compounds from mobile sources by 1.1 million tons from a 2009 baseline level of 5.9 million tons.</p>
<p>By 2018, visibility in eastern Class I areas will improve by 15 percent on the 20 percent worst visibility days, as compared to visibility on the 20 percent worst days during the 2000-2004 baseline period.</p>	<p>By 2018, visibility in eastern Class I areas will improve by 15 percent on the 20 percent worst visibility days, as compared to visibility on the 20 percent worst days during the 2000-2004 baseline period.</p>
<p>By 2018, visibility in western Class I areas will improve by 5 percent on the 20 percent worst visibility days, as compared to visibility on the 20 percent worst days during the 2000-2004 baseline period.</p>	<p>By 2018, visibility in western Class I areas will improve by 5 percent on the 20 percent worst visibility days, as compared to visibility on the 20 percent worst days during the 2000-2004 baseline period.</p>

Strategic Measurement Framework
Goal 1: Clean Air and Global Climate Change

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
By 2011, with EPA support, 30 additional tribes (6 per year) will have completed air quality emission inventories. (FY 2005 baseline: 28 tribal emission inventories.)	By 2014, with EPA support, 47 additional tribal air quality emission inventories will be completed. (FY 2007 baseline: 37 tribal emission inventories.)
By 2011, 18 additional tribes will possess the expertise and capability to implement the Clean Air Act in Indian country (as demonstrated by successful completion of an eligibility determination under the Tribal Authority Rule). (FY 2005 baseline: 8 tribes.)	By 2014, with EPA support, 12 additional tribes will possess the expertise and capability to implement the Clean Air Act in Indian country (as demonstrated by successful completion of an eligibility determination under the Tribal Authority Rule). (FY 2007 baseline: 10 tribes.)
1.1.2 Air Toxics: By 2011, reduce the risk to public health and the environment from toxic air pollutants by working with partners to reduce air toxics emissions and implement area-specific approaches.	1.1.2 Reduce Air Toxics
By 2010, reduce toxicity-weighted (for cancer risk) emissions of air toxics to a cumulative reduction of 19 percent from the 1993 non-weighted baseline of 7.24 million tons.	By 2014, reduce toxicity-weighted (for cancer risk) emissions of air toxics to a cumulative reduction of 34 percent from the 1993 non-weighted baseline of 7.24 million tons, maintaining the 34 percent cumulative reduction expected by 2006.
By 2010, reduce toxicity-weighted (for non-cancer risk) emissions of air toxics to a cumulative reduction of 55 percent from the 1993 non-weighted baseline of 7.24 million tons.	By 2014, reduce toxicity-weighted (for non-cancer risk) emissions of air toxics to a cumulative reduction of 59 percent from the 1993 non-weighted baseline of 7.24 million tons, compared to the 58 percent cumulative reduction expected by 2006.
1.1.3 Chronically Acidic Water Bodies: By 2011, due to progress in reducing acid deposition, the number of chronically-acidic water bodies in acid-sensitive regions of the northern and eastern United States should be maintained at or below the 2001 baseline of approximately 500 lakes and 5,000 kilometers of stream-length in the population covered by the Temporally Integrated Monitoring of Ecosystems/Long-Term Monitoring Survey. The long-term target is a 30 percent reduction in the number of chronically-acidic water bodies in acid-sensitive regions by 2030.	1.1.3 Reduce the Adverse Effects of Acid Deposition

Strategic Measurement Framework
Goal 1: Clean Air and Global Climate Change

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
	By 2014, due to progress in reducing acid deposition, the number of chronically-acidic water bodies in acid-sensitive regions of the northern and eastern United States should be maintained at or below the 2001 baseline of approximately 500 lakes and 5,000 kilometers of stream-length in the population covered by the Temporally Integrated Monitoring of Ecosystems/Long-Term Monitoring Survey. The long-term target is a 30 percent reduction in the number of chronically-acidic water bodies in acid-sensitive regions by 2030.
By 2011, reduce national annual emissions of sulfur dioxide (SO ₂) from utility electrical power generation sources by approximately 8.45 million tons from the 1980 level of 17.4 million tons, achieving and maintaining the Acid Rain statutory SO ₂ emissions cap of 8.95 million tons.	Through 2015, maintain the national annual emissions of sulfur dioxide (SO ₂) from utility electric power generation sources at a level below 8.95 million annual tons, compared to the 1980 level of 17.4 million tons per year.
By 2011, reduce total annual average sulfur deposition and mean ambient sulfate concentration by 30 percent from 1990 monitored levels of up to 25 kilograms per hectare for total sulfur deposition and 6.4 micrograms per cubic meter for mean ambient sulfate concentration.	By 2014, reduce total annual average sulfur deposition by 20 percent from 2001 monitored levels of up to 15 kilograms per hectare for total sulfur deposition.
By 2011, reduce total annual average nitrogen deposition and mean total ambient nitrate concentration by 15 percent from 1990 monitored levels of up to 11 kilograms per hectare for total nitrogen deposition and 4.0 micrograms per cubic meter for mean total ambient nitrate concentration.	By 2014, reduce total annual average nitrogen deposition by 30 percent from 2001 monitored levels of up to 5 kilograms per hectare for total nitrogen deposition.
1.2 Healthier Indoor Air: Through 2012, working with partners, reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public.	1.2 Healthier Indoor Air: Through 2014, working with partners, reduce human health risks by reducing exposure to indoor air contaminants through the promotion of voluntary actions by the public.
1.2.1 Radon: By 2012, the number of future premature lung cancer deaths prevented annually through lowered radon exposure will increase to 1,250 from the 1997 baseline of 285 future premature lung cancer deaths prevented.	1.2.1 Reduce Exposure to Radon
	By 2014, the number of future premature lung cancer deaths prevented annually through lowered radon exposure will increase to 1,250 from the 2006 baseline of 644 future premature lung cancer deaths prevented.

Strategic Measurement Framework
Goal 1: Clean Air and Global Climate Change

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>1.2.2 Asthma: By 2012, the number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers will increase to 6.5 million from the 2003 baseline of 3 million. EPA will place special emphasis on children and other disproportionately impacted populations.</p>	<p>1.2.2 Reduce Exposure to Asthma Triggers</p>
	<p>By 2014, the number of people taking all essential actions to reduce exposure to indoor environmental asthma triggers will increase to 6.5 million from the 2003 baseline of 3 million. EPA will place special emphasis on children and other disproportionately impacted populations.</p>
<p>1.2.3 Schools: By 2012, the number of schools implementing an effective indoor air quality management plan will increase to 40,000 from the 2002 baseline of 25,000.</p>	<p>1.2.3 Reduce Exposure to Indoor Air Contaminants in Schools</p>
	<p>By 2014, the number of schools implementing an effective indoor air quality management plan will increase to 48,000 from the 2002 baseline of 25,000.</p>
<p>1.3 Protect the Ozone Layer: By 2011, total effective equivalent stratospheric chlorine will have reached its peak and begun its gradual decline to a value less than 3.4 parts per billion of air by volume.</p>	<p>1.3 Protect the Ozone Layer: Through 2014, continue efforts to restore the earth's stratospheric ozone layer and protect the public from the harmful effects of UV radiation.</p>
	<p>1.3.1 Heal the Ozone Layer</p>
	<p>By 2014, total effective equivalent stratospheric chlorine will have reached its peak and begun its gradual decline to a value less than 3.4 parts per billion of air by volume. (1980 baseline = 1.8 ppb.)</p>
	<p>1.3.2 Reduce Emissions of Ozone-Depleting Substances</p>
<p>By 2015, reduce U.S. consumption of Class II ozone-depleting substances to less than 1,520 tons per year of ozone depleting potential from the 2003 baseline of 9,900 tons per year.</p>	<p>By 2015, reduce U.S. consumption of Class II ozone-depleting substances to less than 1,520 tons per year of ozone depleting potential from the 2009 baseline of 9,900 tons per year.</p>
	<p>1.3.3 Reduce Exposure to Excess UV Radiation</p>
<p>By 2165, reduce the incidence of melanoma skin cancer to 14 new skin cancer cases avoided per 100,000 people from the 1990 baseline of 13.8 cases avoided per 100,000 people.</p>	<p>By 2165, reduce the incidence of melanoma skin cancer to 14 new skin cancer cases per 100,000 people from the 2005 baseline of 21.5 cases per 100,000 people.</p>
<p>1.4 Radiation: Through 2011, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.</p>	<p>1.4 Radiation: Through 2014, working with partners, minimize unnecessary releases of radiation and be prepared to minimize impacts to human health and the environment should unwanted releases occur.</p>
	<p>1.4.1 Monitor the Environment for Radiation</p>

Strategic Measurement Framework
Goal 1: Clean Air and Global Climate Change

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<i>By 2011, 77 percent of the U.S. land area will be covered by the RadNet ambient radiation air monitoring system. (2001 baseline is 35 percent of the U.S. land area.)</i>	<i>By 2014, 51 percent of the U.S. population will be in proximity to an ambient radiation monitoring system that provides scientifically sound data for assessing public exposure resulting from radiological emergencies. (2001 baseline is 22 percent of U.S. population.)</i>
By 2011, the radiation program will maintain a 90 percent level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations. (2005 baseline is a 50 percent level of readiness.)	1.4.2 Prepare for and Respond to Radiological Emergencies By 2014, the radiation program will maintain a 90 percent level of readiness of radiation program personnel and assets to support federal radiological emergency response and recovery operations. (2007 baseline is an 83 percent level of readiness.)
1.5 Reduce Greenhouse Gas Intensity: By 2012, 160 million metric tons of carbon equivalent (MMTCE) of emissions will be reduced through EPA's voluntary climate protection programs.	1.5 Reduce Greenhouse Gas Emissions: Through 2014, continue to reduce greenhouse gas emissions through voluntary climate protection programs that accelerate the adoption of cost-effective greenhouse gas reducing technologies and practices.
1.5.1 Buildings Sector: By 2012, 46 MMTCE will be reduced in the buildings sector (compared to the 2002 level.)	1.5.1 Reduce Greenhouse Gas Emissions By 2014, 53 MMTCE will be reduced in the buildings sector (compared to 31 MMTCE reduced in 2006) through EPA's voluntary climate protection programs.
1.5.2 Industrial Sector: By 2012, 99 MMTCE will be reduced in the industry sector (compared to the 2002 level).	By 2014, 112 MMTCE will be reduced in the industry sector (compared to 69 MMTCE reduced in 2006) through EPA's voluntary climate protection programs.
1.5.3 Transportation Sector: By 2012, 15 MMTCE will be reduced in the transportation sector (compared to the 2002 level).	By 2014, 20 MMTCE will be reduced in the transportation sector (compared to 0.6 MMTCE reduced in 2006) through EPA's voluntary climate protection programs.
1.6 Enhance Science and Research: Through 2012, provide sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of human health and environmental outcomes.	1.6 Enhance Science and Research: Through 2012, provide sound science to support EPA's goal of clean air by conducting leading-edge research and developing a better understanding and characterization of human health and environmental outcomes.
	1.6.1 Clean Air Research <i>By 2013, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for protecting the air and reducing risks to human health.</i>

Goal 2: Clean and Safe Water

<p><u>Current (2006-2011) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Target</p>	<p><u>Proposed (2009-2014) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Measure</p>
<p>GOAL 2: CLEAN AND SAFE WATER</p>	
<p>Ensure drinking water is safe. Restore and maintain oceans, watersheds, and their aquatic ecosystems to protect human health, support economic and recreational activities, and provide healthy habitat for fish, plants, and wildlife.</p>	
<p>2.1 Protect Human Health: Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.</p>	<p>2.1 Protect Human Health: Protect human health by reducing exposure to contaminants in drinking water (including protecting source waters), in fish and shellfish, and in recreational waters.</p>
<p>2.1.1 Water Safe To Drink: By 2011, 91 percent of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection. (2005 baseline: 89 percent.)</p>	<p>2.1.1 Water Safe To Drink</p>
	<p>By 2014, 93 percent of the population served by community water systems will receive drinking water that meets all applicable health-based drinking water standards through effective treatment and source water protection. (2005 baseline: 89 percent.)</p>
<p>By 2011, 90 percent of community water systems will provide drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection. (2005 baseline: 89 percent.)</p>	<p>By 2014, 90 percent of community water systems will provide drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection. (2005 baseline: 89 percent.)</p>
<p>By 2011, community water systems will provide drinking water that meets all applicable health-based drinking water standards during 96 percent of person months (i.e., all persons served by community water systems times 12 months). (2005 baseline: 95.2 percent.)</p>	<p>By 2014, community water systems will provide drinking water that meets all applicable health-based drinking water standards during 97 percent of person months (i.e., all persons served by community water systems times 12 months). (2005 baseline: 95.2 percent.)</p>
<p>By 2011, 86 percent of the population in Indian country served by community water systems will receive drinking water that meets all applicable health-based drinking water standards. (2005 baseline: 86 percent.)</p>	<p>By 2014, 88 percent of the population in Indian country served by community water systems will receive drinking water that meets all applicable health-based drinking water standards. (2005 baseline: 86 percent.)</p>
<p>By 2011, minimize risk to public health through source water protection for 50 percent of community water systems and for the associated 62 percent of the population served by community water systems (i.e., "minimized risk" achieved by substantial implementation, as determined by the state, of actions in a source water protection strategy). (2005 baseline: 20 percent of community water systems; 28 percent of population.)</p>	<p>By 2014, minimize risk to public health through source water protection for 50 percent of community water systems and for the associated 62 percent of the population served by community water systems (i.e., "minimized risk" achieved by substantial implementation, as determined by the state, of actions in a source water protection strategy). (2005 baseline: 20 percent of community water systems; 28 percent of population.)</p>

Strategic Measurement Framework
Goal 2: Clean and Safe Water

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
By 2015, in coordination with other federal agencies, reduce by 50 percent the number of homes on tribal lands lacking access to safe drinking water. (2003 baseline: Indian Health Service data indicate that 12 percent of homes on tribal lands lack access to safe drinking water (38,637 homes lack access).)	By 2015, in coordination with other federal agencies, reduce by 50 percent the number of homes on tribal lands lacking access to safe drinking water. (2003 baseline: Indian Health Service data indicate that 12 percent of homes on tribal lands lack access to safe drinking water (38,637 homes lack access).) (FY 07 end-of-year result is 36,575 homes; 11.5 percent of homes on tribal lands lacking access to safe drinking water.)
2.1.2 Fish and Shellfish Safe to Eat: By 2011, reduce public health risk and allow increased consumption of fish and shellfish, as measured by the following strategic targets	2.1.2 Fish and Shellfish Safe to Eat
By 2011, reduce the percentage of women of childbearing age having mercury levels in blood above the level of concern to 4.6 percent. (2002 baseline: 5.7 percent of women of childbearing age have mercury blood levels above levels of concern identified by the National Health and Nutrition Examination Survey (NHANES).)	By 2014, reduce the percentage of women of childbearing age having mercury levels in blood above the level of concern to 4.6 percent. (2002 baseline: 5.7 percent of women of childbearing age have mercury blood levels above levels of concern identified by the National Health and Nutrition Examination Survey (NHANES).)
<i>By 2011, maintain or improve the percentage of state-monitored shellfish-growing acres impacted by anthropogenic sources that are approved or conditionally approved for use. (2003 baseline: 65 to 85 percent of 16.3 million acres of state-monitored shellfish-growing acres estimated to be impacted by anthropogenic sources are approved or conditionally approved for use.)</i>	<i>Exploring replacement measure</i>
2.1.3 Water Safe for Swimming: By 2011, improve the quality of recreational waters as measured by the following strategic targets:	2.1.3 Water Safe for Swimming
By 2011, the number of waterborne disease outbreaks attributable to swimming in or other recreational contact with coastal and Great Lakes waters will be maintained at two, measured as a five-year average. (2005 baseline: an annual average of two recreational contact waterborne disease outbreaks reported per year by the Centers for Disease Control over the years 1998 to 2002; adjusted to remove outbreaks associated with waters other than coastal and Great Lakes waters and other than natural surface waters (pools and water parks).)	By 2014, the number of waterborne disease outbreaks attributable to swimming in or other recreational contact with coastal and Great Lakes waters will be maintained at two, measured as a five-year average. (2005 baseline: an annual average of two recreational contact waterborne disease outbreaks reported per year by the Centers for Disease Control over the years 1998 to 2002; adjusted to remove outbreaks associated with waters other than coastal and Great Lakes waters and other than natural surface waters (pools and water parks).)

Strategic Measurement Framework
Goal 2: Clean and Safe Water

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
By 2011, maintain the percentage of days of the beach season that coastal and Great Lakes beaches monitored by state beach safety programs are open and safe for swimming at 96 percent. (2005 baseline: beaches open 96 percent of the 743,036 days of the beach season (beach season days are equal to 4,025 beaches multiplied by variable number of days of beach season at each beach).)	By 2014, maintain the percentage of days of the beach season that coastal and Great Lakes beaches monitored by state beach safety programs are open and safe for swimming at 96 percent. (2007 baseline: beaches open 95 percent of the 679,589 days of the beach season (beach season days are equal to 3,647 beaches multiplied by variable number of days of beach season at each beach).)
2.2 Protect Water Quality: Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.	2.2 Protect Water Quality: Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.
2.2.1 Improve Water Quality on a Watershed Basis: By 2012, use pollution prevention and restoration approaches to protect the quality of rivers, lakes, and streams on a watershed basis.	2.2.1 Improve Water Quality on a Watershed Basis
By 2012, attain water quality standards for all pollutants and impairments in more than 2,250 water bodies identified in 2002 as not attaining standards (cumulative). (2002 baseline: 39,798 water bodies identified by states and tribes as not meeting water quality standards. Water bodies where mercury is among multiple pollutants causing impairment may be counted toward this target when all pollutants but mercury attain standards, but must be identified as still needing restoration for mercury; 1,703 impaired water bodies are impaired by multiple pollutants including mercury, and 6,501 are impaired by mercury alone.)	By 2014, attain water quality standards for all pollutants and impairments in more than 2,360 water bodies identified in 2002 as not attaining standards (cumulative). (2002 baseline: 39,798 water bodies identified by states and tribes as not meeting water quality standards. Water bodies where mercury is among multiple pollutants causing impairment may be counted toward this target when all pollutants but mercury attain standards, but must be identified as still needing restoration for mercury; 1,703 impaired water bodies are impaired by multiple pollutants including mercury, and 6,501 are impaired by mercury alone. 2008 baseline TBD.)
By 2012, remove at least 5,600 of the specific causes of water body impairments identified by states in 2002 (cumulative). (2002 baseline: estimate of 69,677 specific causes of water body impairments identified by states.)	By 2014, remove at least 5,920 of the specific causes of water body impairments identified by states in 2002 (cumulative). (2002 baseline: estimate of 69,677 specific causes of water body impairments identified by states. 2008 baseline TBD.)

Strategic Measurement Framework
Goal 2: Clean and Safe Water

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>By 2012, improve water quality conditions in 250 impaired watersheds nationwide using the watershed approach (cumulative). (2002 baseline: zero watersheds improved of an estimated 4,800 impaired watersheds of focus having one or more water bodies impaired. The watershed boundaries for this measure are those established at the "12-digit" scale by the U.S. Geological Survey (USGS). Watersheds at this scale average 22 square miles in size. "Improved" means that one or more of the impairment causes identified in 2002 are removed for at least 40 percent of the impaired water bodies or impaired miles/acres, or there is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters associated with the impairments.)</p>	<p>By 2014, improve water quality conditions in 300 impaired watersheds nationwide using the watershed approach (cumulative). (2002 baseline: zero watersheds improved of an estimated 4,800 impaired watersheds of focus having one or more water bodies impaired. The watershed boundaries for this measure are those established at the "12-digit" scale by the U.S. Geological Survey (USGS). Watersheds at this scale average 22 square miles in size. "Improved" means that one or more of the impairment causes identified in 2002 are removed for at least 40 percent of the impaired water bodies or impaired miles/acres, or there is significant watershed-wide improvement, as demonstrated by valid scientific information, in one or more water quality parameters associated with the impairments. 2008 baseline TBD.)</p>
<p>Through 2012, the condition of the nation's Wadeable streams does not degrade (i.e., there is no statistically significant increase in the percent of streams rated "poor" and no statistically significant decrease in streams rated "good"). (2006 baseline: Wadeable Stream Survey identifies 28 percent of streams in good condition; 25 percent in fair condition; 42 percent in poor condition.)</p>	<p>Through 2014, ensure that the condition of the Nation's Wadeable streams does not degrade (i.e., there is no statistically significant increase in the percent of streams rated "poor" and no statistically significant decrease in streams rated "good"). (2006 baseline for streams: 28 percent in good condition; 25 percent in fair condition; 42 percent in poor condition. States/EPA will establish baseline conditions for lakes and rivers in 2010 and 2012 respectively.)</p>
<p>By 2012, improve water quality in Indian country at not fewer than 50 baseline monitoring stations in tribal waters (cumulative) (i.e., show improvement in one or more of seven key parameters: dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, and turbidity). (2006 baseline: 185 monitoring stations on tribal waters located where water quality has been depressed and activities are underway or planned to improve water quality, out of an estimated 1,661 stations operated by tribes.)</p>	<p>By 2014, improve water quality in Indian country at 75 or more baseline monitoring stations in tribal waters (cumulative) (i.e., show improvement in one or more of seven key parameters: dissolved oxygen, pH, water temperature, total nitrogen, total phosphorus, pathogen indicators, and turbidity). (2006 baseline: 185 monitoring stations on tribal waters located where water quality has been depressed and activities are underway or planned to improve water quality, out of an estimated 1,661 stations operated by tribes.)</p>
<p>By 2015, in coordination with other federal partners, reduce by 50 percent the number of homes on tribal lands lacking access to basic sanitation (cumulative). (2003 baseline: Indian Health Service data indicate that 8.4 percent of homes on tribal lands lack access to basic sanitation (26,777 homes of an estimated 319,070 homes).)</p>	<p>By 2015, in coordination with other federal partners, reduce by 50 percent the number of homes on tribal lands lacking access to basic sanitation (cumulative). (2003 baseline: Indian Health Service data indicate that 8.4 percent of homes on tribal lands lack access to basic sanitation (26,777 homes of an estimated 319,070 homes).)</p>

Strategic Measurement Framework
Goal 2: Clean and Safe Water

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>2.2.2 Improve Coastal and Ocean Water: By 2011, prevent water pollution and protect coastal and ocean systems to improve national coastal aquatic ecosystem health by at least 0.2 points on the "good/fair/poor" scale of the National Coastal Condition Report. (2004 baseline: national rating of "fair/poor," or 2.3, where the rating is based on a 4-point system ranging from 1.0 to 5.0 in which 1 is poor and 5 is good using the National Coastal Condition Report indicators for water and sediment, coastal habitat, benthic index, and fish contamination.)</p>	<p>2.2.2 Improve Coastal and Ocean Water</p>
	<p>By 2014, prevent water pollution and protect coastal and ocean systems to at least maintain national coastal aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report. (2009 baseline: national rating of "fair" or 2.8 where the rating is based on a 4-point system ranging from 1.0 to 5.0 in which 1 is poor and 5 is good using the National Coastal Condition Report indicators for water and sediment, coastal habitat, benthic index, and fish contamination.)</p>
<p>By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Northeast Region. (2004 baseline: Northeast rating of 1.8.)</p>	<p>By 2014, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Northeast Region. (2009 baseline: Northeast rating of 2.4.)</p>
<p>By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Southeast Region. (2004 baseline: Southeast rating of 3.8.)</p>	<p>By 2014, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Southeast Region. (2009 baseline: Southeast rating of 3.6.)</p>
<p>By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the West Coast Region. (2004 baseline: West Coast rating of 2.0.)</p>	<p>By 2014, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the West Coast Region. (2009 baseline: West Coast rating of 2.4.)</p>
<p>By 2011, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Puerto Rico Region. (2004 baseline: Puerto Rico rating of 1.7.)</p>	<p>By 2014, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Puerto Rico Region. (2009 baseline: Puerto Rico rating of 1.7.)</p>
	<p><i>By 2014, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the Hawaii Region. (2009 baseline: Hawaii rating of 4.5.)</i></p>

Strategic Measurement Framework
Goal 2: Clean and Safe Water

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
	<i>By 2014, at least maintain aquatic ecosystem health on the "good/fair/poor" scale of the National Coastal Condition Report in the South Central Alaska Region (2009 baseline: South Central Alaska rating of 5.0.)</i>
By 2011, 95 percent of active dredged material ocean dumping sites will have achieved environmentally acceptable conditions (as reflected in each site's management plan and measured through onsite monitoring programs). (2005 baseline: 94 percent.)	By 2014, 95 percent of active dredged material ocean dumping sites will have achieved environmentally acceptable conditions (as reflected in each site's management plan and measured through onsite monitoring programs). (2005 baseline: 94 percent.)
2.3 Enhance Science and Research: By 2011, conduct leading-edge, sound scientific research to support the protection of human health through the reduction of human exposure to contaminants in drinking water, fish and shellfish, and recreational waters and to support the protection of aquatic ecosystems—specifically, the quality of rivers, lakes, and streams, and coastal and ocean waters.	2.3 Enhance Science and Research: By 2014, conduct leading-edge, sound scientific research to support the protection of human health through the reduction of human exposure to contaminants in drinking water, fish and shellfish, and recreational waters and to support the protection of aquatic ecosystems—specifically, the quality of rivers, lakes, and streams, and coastal and ocean waters.
	<i>2.3.1 Drinking Water Research</i>
	<i>By 2013, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for reducing human exposure to contaminants in drinking water and protecting human health.</i>
	<i>2.3.2 Water Quality Research</i>
	<i>By 2014, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for protecting aquatic ecosystems and reducing human exposure to contaminants in recreational waters.</i>

Goal 3: Land Preservation and Restoration

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
GOAL 3: LAND PRESERVATION AND RESTORATION	
Preserve and restore the land by using innovative waste management practices and cleaning up contaminated properties to reduce risks posed by releases of harmful substances.	
3.1 Preserve Land: By 2011, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.	3.1 Preserve Land: By 2014, reduce adverse effects to land by reducing waste generation, increasing recycling, and ensuring proper management of waste and petroleum products at facilities in ways that prevent releases.
3.1.1 Reduce Waste Generation and Increase Recycling: By 2011, reduce materials use through product and process design, and increase materials and energy recovery from wastes otherwise requiring disposal.	3.1.1 Waste Generation and Recycling
<i>By 2011, increase reuse and recycling of construction and demolition debris by 6 percent from a baseline of 59 percent in 2003.</i>	
	<i>By 2014, increase the amount of municipal solid waste reduced, reused, or recycled by 130 billion pounds.</i>
By 2011, increase the use of coal combustion ash to 50 percent from 32 percent in 2001.	By 2014, increase the use of coal combustion ash to 56 percent from 40 percent in 2007.
By 2011, increase by 118 the number of tribes covered by an integrated waste management plan compared to FY 2006.	By 2014, increase by 118 the number of tribes covered by an integrated waste management plan compared to FY 2008.
By 2011, close, clean up, or upgrade 138 open dumps in Indian country and on other tribal lands compared to FY 2006.	By 2014, close, clean up, or upgrade 138 open dumps in Indian country and on other tribal lands compared to FY 2008.
3.1.2 Manage Hazardous Waste and Petroleum Products Properly: By 2011, reduce releases to the environment by managing hazardous wastes and petroleum products properly.	3.1.2 Hazardous Waste and Petroleum Products
By 2011, prevent releases at 500 RCRA hazardous waste management facilities by implementing initial approved controls or updated controls. (The universe of facilities will be reassessed in FY 2009. However, we currently estimate that there will be about 820 facilities that will require these controls. The goal of 500 represents about 60 percent of the universe of 820 facilities.)	By 2014, issue XX initial approved controls or updated controls.
By 2011, increase the percentage of UST facilities that are in significant operational compliance with both release and detection and release prevention requirements to 71 percent from 66 percent in 2006 (an increase of 5 percent) out of a total estimated universe of approximately 245,000 facilities.	Each year through 2014, increase the percentage of UST facilities that are in significant operational compliance (SOC) with both release detection and release prevention requirements by 0.5 percent over the previous year's target. This means an increase of facilities in SOC from 65 percent in 2009 to 67.5 percent in 2014.

Strategic Measurement Framework
Goal 3: Land Preservation and Restoration

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
Each year through 2011, minimize the number of confirmed releases at UST facilities to 10,000 or fewer from a universe of approximately 650,000 UST tanks.	Each year through 2014, minimize the number of confirmed releases at UST facilities to 9,000 or fewer.
3.2 Restore Land: By 2011, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.	3.2 Restore Land: By 2014, control the risks to human health and the environment by mitigating the impact of accidental or intentional releases and by cleaning up and restoring contaminated sites or properties to appropriate levels.
3.2.1 Prepare for and Respond to Accidental and Intentional Releases: By 2011, reduce and control the risks posed by accidental and intentional releases of harmful substances by improving our nation's capability to prevent, prepare for, and respond more effectively to these emergencies.	3.2.1 Chemical Release Preparedness and Response
<i>By 2011, achieve and maintain at least 95 percent of the maximum score on readiness evaluation criteria in each region.</i>	<i>By 2014, achieve and maintain at least 75 percent of the maximum score on the Core National Approach to Response (NAR) evaluation criteria.</i>
By 2011, complete an additional 975 "Superfund-lead" hazardous substance removal actions. (In FY 2005, 175 of these actions were completed.)	By 2014, complete an additional 850 "Superfund-lead" hazardous substance removal actions.
<i>By 2011, oversee and complete 650 voluntary removal actions. (In FY 2005, 137 of these actions were completed.)</i>	<i>By 2014, oversee and complete an additional 850 potential responsible party (PRP) removal actions, which include voluntary, administrative orders on consent (AOC), and unilateral administrative order (UAO) actions.</i>
<i>By 2011, reduce by 25 percent the gallons of oil spilled by facilities subject to Facility Response Plan regulations relative to the 601,000 gallons of oil spilled in 2003.</i>	<i>By 2014, 60 percent of all SPCC facilities found to be non-compliant between FY 2010-2014 will be brought into compliance.</i>
<i>By 2011, inspect (and ensure compliance at) 90 percent of the estimated 4,200 facilities subject to Facility Response Plan regulations, up from 50 percent in 2004.</i>	<i>By 2014, 60 percent of all FRP facilities found to be non-compliant between FY 2010-2014 will be brought into compliance.</i>
3.2.2 Clean Up and Revitalize Contaminated Land: By 2011, control the risks to human health and the environment at contaminated properties or sites through cleanup, stabilization, or other action, and make land available for reuse.	3.2.2 Contaminated Land

Strategic Measurement Framework
Goal 3: Land Preservation and Restoration

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective	Objective
Sub-objective	Sub-objective
Strategic Target	Strategic Measure
By 2011, make final assessment decisions at 40,491 of 44,700 potentially hazardous waste sites evaluated by EPA to help resolve community concerns on whether these sites require long-term cleanup to protect public health and the environment and to help determine if they can be cleared for possible redevelopment. (By the end of FY 2005, a total of 38,770 final site assessment decisions had been made.)	By 2014, make final assessment decisions at XX of XX potentially hazardous waste sites evaluated by EPA to help resolve community concerns on whether these sites require long-term cleanup to protect public health and the environment and to help determine if they can be cleared for possible redevelopment.
By 2011, control all identified unacceptable human exposures from site contamination for current land and/or groundwater use conditions at approximately 85 percent (1,316) of 1,543 Superfund human exposure sites. (The universe of 1,543 is the number of NPL sites with potential human exposure pathways as of FY 2005 and includes 172 Superfund federal facility sites. Baseline: by the end of FY 2006, approximately 82 percent (1,266) of sites had human exposures under control.)	By 2014, control all identified unacceptable human exposures from site contamination for current land and/or groundwater use conditions at approximately XX percent (XX) of XX Superfund human exposure sites. (The universe of XX is the number of National Priority List (NPL) human exposure sites as of the end of FY 2008.)
By 2011, increase to 95 percent the high National Corrective Action Prioritization System (NCAPS)-ranked RCRA facilities with human exposures to toxins controlled. (The universe of all facilities that need RCRA Corrective Action will be final by the end of FY 2007 and will include high, medium, and low ranked facilities.)	By 2014, increase to XX percent the number of Resource Conservation and Recovery Act (RCRA) facilities with human exposures to toxins controlled. (At the end of FY 2008, potential human exposures to toxins were controlled at XX percent (XXX) of all 3,746 facilities needing corrective action.)
By 2011, control the migration of contaminated groundwater through engineered remedies, natural processes, or other appropriate actions at 74 percent (1,017) of 1,381 Superfund groundwater sites. (The universe of 1,381 sites is the number of NPL sites with groundwater contamination as of FY 2005 and includes 166 Superfund federal facility sites. Baseline: by the end of FY 2005, 68 percent (937) of sites had groundwater migration under control.)	By 2014, control the migration of contaminated groundwater through engineered remedies, natural processes, or other appropriate actions at XX percent (XX of XX Superfund groundwater sites. (The universe of XX sites is the number of NPL sites with groundwater contamination as of the end of FY 2008.)
By 2011, increase to 80 percent the high NCAPS-ranked RCRA facilities with migration of groundwater under control. (The universe of all facilities that need RCRA corrective action will be final by the end of FY 2007 and will include high, medium, and low ranked facilities.)	By 2014, increase to XX percent the number of Resource Conservation and Recovery Act (RCRA) facilities with migration of contaminated groundwater under control. (At the end of FY 2008, the migration of contaminated groundwater was controlled at XX percent (XXX) of all 3,746 facilities needing corrective action.)

Strategic Measurement Framework
Goal 3: Land Preservation and Restoration

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
By 2011, complete construction of remedies at approximately 76 percent (1,171) of 1,547 Superfund sites. (The universe of 1,547 sites is the total number of sites on the NPL as of FY 2005 and includes 172 Superfund federal facilities. Baseline: by the end of FY 2005, 62 percent or 966 sites had completed construction.)	By 2014, complete construction of remedies at more than XX percent (XX) of XX Superfund sites. (The universe of XX sites is the total number of sites on the NPL as of the end of FY 2008.)
By 2011, increase to 22 percent the RCRA facilities with final remedies constructed. (The universe of all facilities that need RCRA corrective action will be final by the end of FY 2007 and will include high, medium, and low ranked facilities.)	By 2014, increase to XX percent the number of RCRA facilities with final remedies constructed. (At the end of FY 2008, all cleanup remedies had been constructed at XX percent (XXX) of all 3,746 facilities needing corrective action.)
By 2011, reduce the backlog of LUST cleanups (confirmed releases that have yet to be cleaned up) that do not meet state risk-based standards for human exposure and groundwater migration from 26 percent to 21 percent.	Each year through 2014, reduce the backlog of LUST cleanups (confirmed releases that have yet to be cleaned up) that do not meet state risk-based standards for human exposure and groundwater migration by 1 percent. This means a decrease from 23 percent in 2007 to 16 percent in 2014.
By 2011, ensure that 36 percent (345) of 966 final and deleted construction complete NPL sites are ready for reuse site-wide. (As of July 2006, 20 percent (195) of the 966 final and deleted construction complete NPL sites, including 14 Superfund federal facility sites, met EPA's definition for ready for reuse site-wide.)	By 2014, ensure that XX percent (XX) of XX final and deleted construction complete NPL sites are ready for anticipated use site-wide. (The site-wide universe of XX is the number of final and deleted NPL sites, excluding sites with groundwater contamination only, as of the end of FY 2008.)
3.2.3 Maximize Potentially Responsible Party Participation at Superfund Sites: Through 2011, conserve federal resources by ensuring that potentially responsible parties conduct or pay for Superfund cleanups whenever possible.	3.2.3 Potentially Responsible Party Participation at Superfund Sites
Each year through 2011, reach a settlement or take an enforcement action before the start of a remedial action at 95 percent of Superfund sites having viable, liable responsible parties other than the federal government.	Each year through 2014, reach a settlement or take an enforcement action before the start of a remedial action at 95 percent of Superfund sites having viable, liable responsible parties other than the federal government.
Each year through 2011, address all unaddressed costs in statute of limitations cases for sites with unaddressed total past Superfund costs equal to or greater than \$200,000.	Each year through 2014, address all unaddressed costs in statute of limitations cases for sites with unaddressed total past Superfund costs equal to or greater than \$200,000.
3.3 Enhance Science and Research: Through 2011, provide and apply sound science for protecting and restoring land by conducting leading-edge research, which, through collaboration, leads to preferred environmental outcomes.	3.3 Enhance Science and Research: Provide and apply sound science for protecting and restoring land by conducting leading-edge research, which, through collaboration, leads to preferred environmental outcomes.
	3.3.1 Land Protection Research

Strategic Measurement Framework
 Goal 3: Land Preservation and Restoration

<u>Current (2006-2011) Strategic Plan</u> Objective Sub-objective Strategic Target	<u>Proposed (2009-2014) Strategic Plan</u> Objective Sub-objective Strategic Measure
	<i>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 land.</i>

Goal 4: Healthy Communities and Ecosystems

<p><u>Current (2006-2011) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Target</p>	<p><u>Proposed (2009-2014) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Measure</p>
<p>GOAL 4: HEALTHY COMMUNITIES AND ECOSYSTEMS</p>	
<p>Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.</p>	
<p>4.1 Chemical and Pesticide Risks: By 2011, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.</p>	<p>4.1 Chemical and Pesticide Risks: By 2014, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.</p>
<p>4.1.1 Reduce Chemical Risks: By 2011, prevent and reduce chemical risks to humans, communities, and ecosystems.</p>	<p>4.1.1 Reduce Chemical Risks</p>
<p><i>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.)</i></p>	<p><i>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.)</i></p>
	<p><i>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.)</i></p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
	<p><i>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.)</i></p>

Strategic Measurement Framework
Goal 4: Healthy Communities and Ecosystems

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	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
<i>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.)</i>	<i>By 2014, conduct 2,400 inspections and audits at RMP facilities. (Baseline: in FY 2007, 750 RMP inspections were conducted.)</i>
<i>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.)</i>	

Strategic Measurement Framework
Goal 4: Healthy Communities and Ecosystems

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<i>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 mi² of cumulative area of RMP vulnerability zones.)</i>	
<i>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.</i>	
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.)

Strategic Measurement Framework
Goal 4: Healthy Communities and Ecosystems

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>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.)</p>	<p>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.)</p>
	<p><i>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.)</i></p>
<p>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.</p>	<p>4.1.4 Protect the Environment from Pesticide Risk</p>
<p>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.)</p>	<p>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.)</p>

Strategic Measurement Framework
Goal 4: Healthy Communities and Ecosystems

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	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 exceeded 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

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	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.)

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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
<i>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.)</i>	<i>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.)</i>
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

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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 maternal 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.

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<p>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.</p> <p>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.)</p> <p><i>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.)</i></p>	<p>4.3.1 Increase Wetlands</p> <p>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.)</p> <p><i>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.)</i></p>
<p>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.)</p>	<p>4.3.2 Increase Habitat Protected or Restored in Estuaries of National Significance</p> <p>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.)</p>
<p>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.)</p>	<p>4.3.3 Improve the Health of the Great Lakes</p>

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	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.)
	<i>By 2014, remove 46 beneficial use impairments within areas of concern within the Great Lakes. (2008 Baseline: 11 BUIs removed from Areas of Concern.)</i>
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

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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

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	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.)

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Objective	Objective
Sub-objective	Sub-objective
Strategic Target	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).)

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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.)

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Objective	Objective
Sub-objective	Sub-objective
Strategic Target	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
	<i>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.</i>
	4.4.2 Ecosystem Research
	<i>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.</i>
	4.4.3 Human Health Risk Assessment Research
	<i>By 2011, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA health hazard information.</i>
	4.4.4 Global Climate Change Research

Strategic Measurement Framework
Goal 4: Healthy Communities and Ecosystems

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
	<i>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.</i>
	4.4.5 Endocrine Disrupting Chemicals Research
	<i>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.</i>
	4.4.6 Safe Pesticides and Products Research
	<i>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.</i>
	4.4.7 Homeland Security Research
	<i>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.</i>

Goal 5: Compliance and Environmental Stewardship

<p><u>Current (2006-2011) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Target</p>	<p><u>Proposed (2009-2014) Strategic Plan</u></p> <p>Objective Sub-objective Strategic Measure</p>
<p align="center">GOAL 5: COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP</p>	
<p>Protect human health and the environment through ensuring compliance with environmental requirements by enforcing environmental statutes, preventing pollution, and promoting environmental stewardship. Encourage innovation and provide incentives for governments, tribes, businesses, and the public that promote environmental stewardship and long-term sustainable outcomes.</p>	
<p>5.1 Achieve Environmental Protection through Improved Compliance: By 2011, maximize compliance to protect human health and the environment through enforcement and other compliance assurance activities by achieving a 5 percent increase in the pounds of pollution reduced, treated, or eliminated by regulated entities, including those in Indian country. (Baseline: 3-year rolling average FYs 2003-2005: 900,000,000 pounds.)</p>	<p>5.1 Achieve Environmental Protection through Improved Compliance: Address environmental problems, promote compliance and deter violations, by achieving goals for national priorities and programs including those with potential environmental justice concerns and those in Indian country.</p>
<p>5.1.1 Compliance Assistance: By 2011, prevent noncompliance or reduce environmental risks, with an emphasis on achieving results in all areas including those with potential environmental justice concerns, through EPA compliance assistance by maintaining or improving on the following percentages for direct assistance provided to regulated entities, including those in Indian country: 50 percent of the regulated entities receiving direct assistance improve environmental management practices; and 12 percent of the regulated entities receiving direct assistance reduce, treat, or eliminate pollution. (Baselines are determined each year based on prior year results.)</p>	<p>5.1.1 Address Environmental Problems from Air Pollution</p>
	<p><i>By 2014, reduce, treat, or eliminate XXX estimated pounds of air pollutants. Note: When reporting out the results for the pounds of pollutants estimated to be reduced, treated or eliminated measure, EPA will break out the "environmentally significant" pollutants for air. For this measure, OECA is defining "environmentally significant" as criteria air pollutants and air toxics. (Baseline TBD.)</i></p>
	<p><i>By 2014, achieve an investment of \$XX in pollution control equipment or practices for air. (Baseline TBD.)</i></p>
	<p><i>By 2014, increase the percentage of EPA activities resulting in implementation of improved environmental practices for air. Note: EPA is exploring a range of activities to be included in this measure's environmental results. Possible activities include cases, incentive initiatives, compliance assistance, and compliance monitoring. (Baseline TBD.)</i></p>

Strategic Measurement Framework
Goal 5: Compliance and Environmental Stewardship

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>5.1.2 Compliance Incentives: By 2011, identify and correct noncompliance and reduce environmental risks, with an emphasis on achieving results in all areas including those with potential environmental justice concerns. Use of compliance incentives will result in a 5 percentage point increase in the number of facilities that use EPA incentive policies to conduct environmental audits or other actions that reduce, treat, or eliminate pollution or improve environmental practices at their facilities, including those in Indian country. (Baseline: 3-year rolling average FYs 2003-2005: 940 facilities.)</p>	<p>5.1.2 Address Environmental Problems from Water Pollution</p>
	<p><i>By 2014, reduce, treat, or eliminate XXX estimated pounds of water pollutants. (Baseline TBD.) Note: when reporting results for the pounds of pollutants estimated to be reduced, treated, or eliminated measure, EPA will break out the "environmentally significant" water pollutants that affect the top 5 to 10 causes of impairment to waters. For this measure, these "environmentally significant" pollutants are nutrients (with related environmental effects), pathogens, mercury, other metals, sediment/turbidity, toxic organics, pH, temperature, and salinity.</i></p>
	<p><i>By 2014, achieve an investment of \$XX in pollution control equipment or practices for water. (Baseline TBD.)</i></p>
	<p><i>By 2014, increase by X percent EPA activities resulting in implementation of improved environmental practices for water. Note: EPA is exploring a range of activities to be included in this measure's environmental results. Possible activities include cases, incentive initiatives, compliance assistance, and compliance monitoring. (Baseline TBD.)</i></p>

Strategic Measurement Framework
Goal 5: Compliance and Environmental Stewardship

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>5.1.3 Monitoring and Enforcement: By 2011, identify, correct, and deter noncompliance and reduce environmental risks, with an emphasis on achieving results in all areas including those with potential environmental justice concerns, through monitoring and enforcement of regulated entities' compliance, including those in Indian country, by achieving: a 5 percent increase in the number of facilities taking complying actions during EPA inspections and evaluations after deficiencies have been identified (baseline to be determined based on FY 2006 results); a 5 percentage point increase in the percent of enforcement actions requiring that pollutants be reduced, treated, or eliminated (FY 2005 baseline: 28.8 percent); and a 5 percentage point increase in the percent of enforcement actions requiring improvement of environmental management practices (FY 2005 baseline: 72.5 percent).</p>	<p>5.1.3 Address Environmental Problems from Waste, Toxics, and Pesticides Pollution</p>
	<p><i>By 2014, reduce, treat, or eliminate XXX estimated pounds of waste, toxics, and pesticides pollutants. Note: EPA is analyzing methods for reporting out "environmentally significant" pollutants for the pounds of pollutants estimated to be reduced, treated, or eliminated measure but has not yet selected the methodology. EPA is currently exploring a toxicity equivalent approach to this measure. (Baseline TBD.)</i></p>
	<p><i>By 2014, achieve an investment of \$XX in pollution control equipment, practices, and future response actions for waste, toxics, and pesticides. (Baseline TBD.)</i></p>
	<p><i>By 2014, increase the percentage of EPA activities resulting in implementation of improved waste, toxics, and pesticide practices. Note: EPA is exploring a range of activities to be included in this measure's environmental results. Possible activities include cases, incentive initiatives, compliance assistance, and compliance monitoring. (Baseline TBD.)</i></p>
	<p>5.1.4 Criminal Enforcement</p>
	<p><i>By 2014, increase the severity of the crimes investigated (as measured by the percent of open high impact cases). (Baseline TBD.)</i></p>
	<p><i>By 2014, there will be an annual recidivism rate of X percent. (Baseline TBD.)</i></p>
	<p><i>By 2014, X percent of closed cases will have a criminal enforcement consequence (indictment, conviction, fine, or penalty). (Baseline TBD.)</i></p>

Strategic Measurement Framework
Goal 5: Compliance and Environmental Stewardship

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
	<i>By 2014, X percent of charged cases will have an individual that was charged. (Baseline TBD.)</i>
5.2 Improve Environmental Performance through Pollution Prevention and Other Stewardship Practices: By 2011, enhance public health and environmental protection and increase conservation of natural resources by promoting pollution prevention and the adoption of other stewardship practices by companies, communities, governmental organizations, and individuals.	5.2 Improve Environmental Performance through Pollution Prevention and Other Stewardship Practices: By 2014, enhance public health and environmental protection and increase conservation of natural resources by promoting pollution prevention and the adoption of other stewardship practices by companies, communities, governmental organizations, and individuals.
5.2.1 Prevent Pollution and Promote Environmental Stewardship: By 2011, reduce pollution, conserve natural resources, and improve other environmental stewardship practices while reducing costs through implementation of EPA's pollution prevention programs.	5.2.1 Prevent Pollution and Promote Environmental Stewardship
By 2011, reduce 4.5 billion pounds of hazardous materials cumulatively compared to the 2000 baseline of 44 million pounds reduced.	By 2014, reduce 6.5 billion pounds of hazardous materials cumulatively compared to the 2007 baseline of 2.5 billion pounds.
	<i>By 2014, pollution prevention program participants will reduce xx million pounds of Chemical Assessment and Management Program (ChAMP) high priority chemicals of special concern cumulatively compared to the 2007 baseline of xx million pounds reduced.</i>
	<i>By 2014, reduce xx million pounds of ChAMP high priority chemicals of special concern across all participating Agency programs.</i>
By 2011, reduce, conserve, or offset 31.5 trillion British Thermal Units (BTUs) cumulatively compared to the 2002 baseline amount of 0 BTUs reduced, conserved, or offset.	By 2014, reduce, conserve, or offset 10 million metric tons of carbon equivalent (MMTCE) compared to the 2008 baseline amount of 2.5 MMTCE reduced, conserved, or offset.
By 2011, reduce water use by 19 billion gallons cumulatively compared to the 2000 baseline amount of 220 million gallons reduced.	By 2014, reduce water use by 50 billion gallons cumulatively compared to the 2007 baseline amount of 11 billion gallons reduced.
By 2011, save \$791.9 million through pollution prevention improvements in business, institutional, and governmental costs cumulatively compared to the 2002 baseline of \$0.0 saved.	By 2014, save \$2.0 billion through pollution prevention improvements in business, institutional, and government costs cumulatively compared to the 2007 baseline of \$300 million dollars saved.
By 2011, reduce 4 million pounds of priority chemicals from waste streams as measured by National Partnership for Environmental Priorities (NPEP) contributions, Supplemental Environmental Projects (SEPs), and other tools used by EPA to achieve priority chemical reductions.	By 2014, reduce 4 million pounds of priority chemicals as measured by the National Partnership for Environmental Priorities program, Supplemental Environmental Projects, and contributions from other tools used by EPA to achieve chemical reductions throughout the lifecycle of products.

Strategic Measurement Framework
Goal 5: Compliance and Environmental Stewardship

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>5.2.2 Promote Improved Environmental Performance through Business and Community Innovation: Promote Improved Environmental Performance Through Business and Community Innovation. Through 2011, improve environmental performance with sustainable outcomes through sector-based approaches, performance-based programs, and assistance to small business.</p>	<p>5.2.2 Business and Community Innovation</p>
<p>By FY 2011, the reported results of Performance Track member facilities collectively will show the following normalized annual reductions: 5.1 billion gallons in water use; 13,000 tons of hazardous materials use; 230,000 megatons of carbon dioxide equivalent (MTCO₂E) of greenhouse gases; 300 tons of toxic discharges to water; and 5,500 tons of combined NO_x, SO_x, VOC, and PM emissions. (Performance Track member facilities make commitments to, and report yearly progress on, performance improvements in up to four environmental areas. In FY 2005, Performance Track members achieved normalized annual reductions of 3.4 billion gallons in water use; 8,794 tons of hazardous materials use; 151,129 MTCO₂E of greenhouse gases; 186 tons of toxic discharges to water; and 3,533 tons of combined NO_x, SO_x, VOC, and PM emissions.)</p>	<p>By FY 2014, the reported results of Performance Track member facilities collectively will show the following normalized cumulative reductions: XX billion gallons in water use; XX tons of hazardous materials use; XX megatons of carbon dioxide equivalent (MTCO₂E) of greenhouse gases; XX tons of toxic discharges to water; and XX tons of combined NO_x, SO_x, VOC, and PM emissions. (Performance Track member facilities set goals and report yearly progress on, performance improvements in up to four environmental areas. In FY 2007, Performance Track members achieved normalized cumulative reductions of 18.6 billion gallons in water use; 89,200 tons of hazardous materials use; 1.2 million MTCO₂E of greenhouse gases; 3,900 tons of toxic discharges to water; and 57,700 tons of combined NO_x, SO_x, VOC, and PM emissions.)</p>
<p>By 2011, the participating manufacturing and service sectors in the Sector Strategies Program will achieve an aggregate 10 percent reduction in environmental releases to air, water, and land, working from a 2004 baseline and normalized to reflect economic growth. (Baseline and normalization factors to be developed by December 2006.)</p>	<p>By 2014, the participating manufacturing and service sectors in the Sector Strategies Program will achieve an aggregate XX percent reduction in environmental releases to air, water, and land, working from a 2004 baseline and normalized to reflect economic growth.</p>

Strategic Measurement Framework
Goal 5: Compliance and Environmental Stewardship

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
<p>5.2.3 Promote Environmental Policy Innovation: Through 2011, achieve measurably improved environmental results, promote stewardship behavior, and advance sustainable outcomes by testing, evaluating, and applying alternative approaches to environmental protection in states, companies, and communities. This work also will seek to improve the organizational cost effectiveness and efficiency for regulatory agencies as well as regulated entities.</p> <p>By 2011, innovation projects under the State Innovation Grant Program and other piloting mechanisms will achieve, on average, an 8 percent or greater improvement in environmental results (such as reductions in air or water discharges, improvements in ambient water or air quality, or improvements in compliance rates), or a 5 percent or greater improvement in cost effectiveness and efficiency. (Each project's achievement will be measured by the goals established in the grantee's proposal. Baselines for ambient conditions or pollutant discharges or costs of compliance will be developed at the beginning of each project, and improvements for each project will be measured after full implementation of the innovative practice.)</p>	<p>5.2.3 Promote Environmental Policy Innovation</p> <p>By 2014, innovation projects under the State Innovation Grant Program and other piloting mechanisms will achieve, on average, an 8 percent or greater improvement in environmental results (such as reductions in air or water discharges, improvements in ambient water or air quality, or improvements in compliance rates), or a 5 percent or greater improvement in cost effectiveness and efficiency. (Each project's achievement will be measured by the goals established in the grantee's proposal. Baselines for ambient conditions or pollutant discharges or costs of compliance will be developed at the beginning of each project, and improvements for each project will be measured after full implementation of the innovative practice.)</p>
<p>5.3 Improve Human Health and the Environment in Indian Country: Protect human health and the environment on tribal lands by assisting federally-recognized tribes to build environmental management capacity, assess environmental conditions and measure results, and implement environmental programs in Indian country.</p>	<p>5.3 Improve Human Health and the Environment in Indian Country: Protect human health and the environment on tribal lands by assisting federally-recognized tribes to build environmental management capacity, assess environmental conditions and measure results, and implement environmental programs in Indian country.</p>

Strategic Measurement Framework
Goal 5: Compliance and Environmental Stewardship

<u>Current (2006-2011) Strategic Plan</u>	<u>Proposed (2009-2014) Strategic Plan</u>
Objective Sub-objective Strategic Target	Objective Sub-objective Strategic Measure
	5.3.1 Improve Human Health and the Environment in Indian Country
By 2011, increase the percent of tribes implementing federal environmental programs in Indian country to 9 percent. (FY 2005 baseline: 5 percent of 572 tribes.)	By 2014, increase the percent of tribes implementing federal regulatory environmental programs in Indian country by X percent. (FY 2008 baseline: 6 percent of 572 tribes.)
By 2011, increase the percent of tribes conducting EPA-approved environmental monitoring and assessment activities in Indian country to 26 percent. (FY 2005 baseline: 20 percent of 572 tribes.)	By 2014, increase the percent of tribes conducting EPA-approved environmental monitoring and assessment activities in Indian country by X percent. (FY 2008 baseline: 21 percent of 572 tribes.)
By 2011, increase the percent of tribes with an environmental program to 67 percent. (FY 2005 baseline: 54 percent of 572 tribes.)	By 2014, increase the percent of tribes with an environmental program by X percent. (FY 2008 baseline: 57 percent of 572 tribes.)
5.4 Enhance Society's Capacity for Sustainability Through Science and Research: Conduct leading-edge, sound scientific research on pollution prevention, new technology development, socioeconomics, sustainable systems, and decision-making tools. By 2011, the products of this research will be independently recognized as providing critical and key evidence in informing Agency policies and decisions and solving problems for the Agency and its partners and stakeholders.	5.4 Enhance Society's Capacity for Sustainability Through Science and Research: Conduct leading-edge, sound scientific research on pollution prevention, new technology development, and sustainable systems. The products of this research will provide critical and key evidence in informing Agency policies and decisions and solving complex multimedia problems for the Agency and its partners and stakeholders.
	5.4.1 Science and Technology for Sustainability
	<i>By 2011, achieve a rating of "meets expectations" or higher in independent expert review assessment of the utility of EPA research for preventing pollution, promoting environmental stewardship, and encouraging innovation.</i>