



**National Advisory Council for
Environmental Policy and Technology**

December 30, 2008

The Honorable Stephen L. Johnson
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: NACEPT's Comments on EPA's Draft 2009-2014 Strategic Plan Change Document

Dear Administrator Johnson,

On behalf of the National Advisory Council for Environmental Policy and Technology, I am pleased to forward you our comments on EPA's Draft 2009-2014 Strategic Plan Change Document. The Strategic Plan is among the Agency's most important documents; it articulates where the Agency will direct its resources over the coming half-decade and the progress it seeks to achieve. We commend EPA for undertaking a formal strategic planning process that targets its highest priorities. By stating priority areas up front and including strategic measures from the previous plan alongside proposed new measures, this draft offers greater opportunities for meaningful public input than ever before.

Our advice letter answers three questions: (1) Are the targeted areas that EPA has identified the right ones? (2) Are the proposed strategies and measures sufficient? (3) Is the Change Document appropriately integrated with the other EPA planning initiatives and documents? In addition, it includes answers to several questions OCFO has posed, as well as detailed comments on specific performance measures and examples of possible regulatory innovation initiatives we encourage EPA to consider. We would like to draw your attention to the following main points.

Are the targeted areas that EPA has identified the right ones? EPA now faces a once-in-a-generation opportunity to refocus and take bold steps. This document represents only a partial response to that opportunity. The areas it has targeted are appropriate, but should be integrated within an overarching sustainability framework. Climate change should be elevated as the preeminent environmental concern, and EPA should take the lead among federal agencies working to address this problem. Some other important issues are missing, including water resources sustainability and support for technology development and commercialization. Perhaps most important, the proposed plan should speak more directly to the need for more collaborative problem solving, both within the Agency across media offices and with other federal, state, and tribal entities, in order to achieve environmental progress.

Are the proposed strategies and measures sufficient? In terms of strategies, we notice a positive shift towards more thorough, sustainability-orientated approaches to environmental problems. Still, we would like to see bolder strategies that reflect the urgency of today's environmental problems. We recommend a stronger emphasis on innovative regulatory strategies and more attention to coordination among regulatory agencies, states, and tribes. We urge that pollution prevention will once again become an agency priority.

In terms of the proposed measurement framework, we call on the Agency to consider sustainability measures. While difficult to conceptualize and implement, sustainability is the ultimate measure of EPA's success. Many strategic measures are lacking in ambition and evidence a disturbing willingness to delay achievement of environmental quality goals for decades – in some cases, until the next century.

Is the Change Document appropriately integrated with other EPA planning initiatives? NACEPT has for some time urged EPA to link its strategic plan with its other planning documents, particularly its Report on the Environment, proposed budget, and Performance and Accountability Reports. Such integration would help readers understand the Agency's priorities more clearly. While the proposed plan references the Report on the Environment, it does not tell us which measures will be subject to the Program Assessment Rating Tool (PART) review or the level of resources allocated to different initiatives. We would welcome that explanation.

We look forward to the opportunity to discuss our comments with you and to further engagement to strengthen the proposed plan.

Sincerely,

John L. Howard, Jr.
Chair

cc: Jennifer Nash, Working Group Co-Chair
Dan Watts, Working Group Co-Chair
Marcus Peacock, Deputy Administrator
Charles Ingebretson, Chief of Staff
Ray Spears, Deputy Chief of Staff
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I. Introduction

The Office of the Chief Financial Officer (OCFO) asked NACEPT to review the 2009-2014 Strategic Plan Change Document and provide feedback and suggestions related to the proposed changes and long-term measures. In addition, several specific questions were asked about four of the Agency's goals. The request from EPA is located in Appendix 2 of this NACEPT advice letter. NACEPT established a workgroup to address the details of this Agency request and the entire Council has taken the opportunity to review and approve this response.

This advice letter has five components. NACEPT organized consideration of the overarching questions into three sections—Are the identified target areas the right ones?, Are the proposed strategies and measures sufficient?, Is the Change Document sufficiently integrated with other EPA planning initiatives and documents? The first three components of this NACEPT advice letter provide responses to these questions. The fourth component provides answers to the Specific Follow-up Area questions NACEPT was asked to consider. The fifth component (Appendix I) provides comments and suggestions for modifying some of the proposed performance measures to make them better understood and more clearly related to the targeted areas and goals of the Agency. In addition, Appendix III offers more details about examples of possible regulatory innovation initiatives.

II. Overarching Questions

Question 1: EPA has identified nine targeted areas....Are these areas the right ones?

EPA is now facing a once-in-a-generation opportunity to refocus and take bold steps. NACEPT urges that this opportunity be embraced in the Strategic Plan Change Document and the 2009-2014 EPA Strategic Plan. In this context, we support OCFO's approach of targeting a limited number of important areas for special attention. All should be united by the need for EPA to operate with a new paradigm of sustainability, and should be measured by success in achieving sustainability-related goals.

We recommend that these areas be chosen based on several criteria:

- Areas that urgently require attention,
- Areas that pose the largest problems that need to be solved,
- Areas where significant changes in strategy are critical,
- Areas where new approaches to performance management are needed, and
- Areas where EPA can make the most significant improvements.

By applying all of these criteria, Climate Change stands out as the preeminent issue for focused attention. The targeted areas OCFO has identified in the Change Document include the two key

aspects of the climate challenge: reducing greenhouse gas emissions and mitigating the impacts of climate change. NACEPT strongly endorses OCFO's identification of these areas for priority attention and recommends that they be singled out for special emphasis in the 2009-2014 EPA Strategic Plan. It would be inappropriate today to treat Climate Change as having a similar level of importance as other targeted areas such as Import Safety.

It is urgent and essential that EPA step forward to take a major role among federal agencies in addressing Climate Change. The urgency and complexity of the issue are unprecedented in the environmental field. The Strategic Plan should define a federal leadership and coordinating role for EPA. It should highlight the importance of internal cross-media coordination, regulatory innovation and international cooperation for responding to the climate challenge. It should contribute to the debates about alternative regulatory approaches by providing scientifically and technically credible information to those making legislative decisions. It should anticipate how EPA can support these new regulatory GHG strategies and identify programs across the Agency that need to be coordinated around this new priority.

To reinforce the urgency of the climate challenge, we recommend that EPA redo the Strategic Plan in one year to be more fully in keeping with the new Administration's priorities regarding Climate Change and other environmental issues.

While we believe that climate deserves to be singled out as uniquely important, we favor OCFO's approach of identifying several other priority areas. Whether or not the particular areas OCFO has identified are the best areas is difficult to assess, but we believe they are reasonable choices. We do recommend, however, that in the Strategic Plan itself a fuller rationale for these particular choices be set out. We also urge that two other potential topics be considered for designation as targeted areas:

1. **Water Resource Sustainability.** NACEPT's reports on Sustainable Water Infrastructure make the case that this topic is sufficiently important to merit a separate delineation. It is an area where EPA currently lags and could make significant improvements. At a minimum, EPA will likely be called upon to significantly increase its funding of both the Drinking Water and Clean Water State Revolving Fund programs under an economic stimulus package and should use the opportunity to aggressively promote and provide incentives for sustainable infrastructure projects. Moving water, whether for drinking, municipal, industrial or agriculture supply or for water treatment, expends energy, often a significant percentage. This provides one more major reason for using full natural (green) infrastructure approaches on a watershed/ landscape scale as part of water sustainability.

2. **Support for Technology Development and Commercialization.** The technology initiatives discussed in NACEPT's subcommittee reports on environmental technology and venture capital financing for bringing new technologies to the marketplace also merit inclusion considering the large role such initiatives could play in fostering an environmental revolution in technology.

Adding these two topics leads to the following set of targeted areas:

- Climate Change
 - Reductions in GHG emissions
 - Impacts of Global Climate Change
- *Water Resource Sustainability*
- Sustainable Agriculture
- Contaminants
- Import Safety
- Enforcement/Compliance Measurement Approach
- Improving Program Implementation in Indian Country
- Research Strategic Directions and Targets
- *Support for Technology Development and Commercialization*
- Environmental Indicators, Monitoring, and Related Information

Final decisions about targeted areas should be made in the context of the criteria set out above and the emerging priorities of the incoming administration.

We appreciate the approach taken in the Change Document to identifying indicators of progress within the priority areas, but we do not believe the continuation of the five goal approach will be the best way to track progress over time, primarily because many of the targeted areas will require cross-media efforts and the current five-goal approach largely highlight single media initiatives. Nevertheless, there is rationale for keeping the approach in this time of transition and letting the incoming administration establish its own goals.

The Change Document does indicate that working with such indicator-based initiatives will necessitate cross-program activities resulting in outcomes under more than one goal. However, it does not speak strongly enough to perhaps the most important challenge facing the agency, that further major steps of environmental progress require a new level of collaborative problem solving. Many of the challenges ahead for the EPA and for the nation's environment are multi-media or not even directly connected to the Agency's traditional environmental media approaches. In order to address them successfully, EPA must achieve better integration and active collaboration between its programs and improve its ability to work in partnership with

other federal agencies and with states, tribes and other external stakeholders to understand the problems and to develop and implement solutions.

During the planning, therefore, it will be important to devise a cross-program tracking system to be able to report on progress on larger cross-program activities. In fact, success in demonstrating progress toward larger environmental goals (e.g. reduction of GHG emissions) involving actions by two or more program offices could be one of the more valuable procedural outcomes of this entire planning and implementation process.

Question 2: Are the strategies and measures EPA has identified sufficient for addressing the areas EPA has targeted for change?

A. Strategies

By and large we notice a positive shift towards strategies that approach environmental issues on a more thorough, sustainability-oriented basis. We note, for example, a greater emphasis on smart growth policies, sustainable materials management, green site remediation practices, and sustainable agriculture. Several strategies appear to emphasize collaboration with external partners, for example EPA's proposed effort to promote "green infrastructure." Recognizing that EPA cannot achieve environmental quality working on its own, NACEPT called for collaborative approaches in its report, *Everyone's Business: Working toward Sustainability through Environmental Stewardship and Collaboration*.

We recommend that the Strategic Plan emphasize innovative regulatory strategies more strongly. For example, the issues related to global impacts of Climate Change can be expected to require new views about the content and pace of change of regulatory approaches that must be coordinated with other agencies, states, and tribes. Implementation of new energy-related technology on a timely basis will require continued coordination of technology development and regulatory responses with other federal agencies including the Department of Energy. Other examples of regulatory innovation that could help EPA move more quickly to achieve the expectations of this Strategic Plan include changes in permitting and inspection patterns in the National Pollutant Discharge Elimination System (NPDES) program in order to improve the effectiveness of the program. Similarly, adoption of the Environmental Results Program that EPA has helped develop in several states could help reduce the need for some enforcement resources while achieving improved compliance. A move by EPA toward differential oversight of states and tribes depending on the level of environmental performance would be expected to achieve more beneficial environmental results without requiring additional resources. These examples of environmental innovation are described in more detail in Appendix III.

With regard to the Agency's newly revised pollution prevention program strategy, we hope that pollution prevention will once again become a front-line initiative within the Agency. While there may still be debate about whether the exact areas of the current initiative are the most critical, the importance of pollution prevention should be strongly emphasized.

We find that many of the strategies EPA is proposing lack boldness and urgency. With respect to boldness, the strategies to reduce greenhouse gases, in particular, seem to be placeholders for much more dramatic action. Preparing for, preventing, and mitigating the impacts of Climate Change demand more than just the same strategies (voluntary programs). We recommend that EPA take steps now to plan for a regulatory greenhouse gas reduction program by identifying programs across the agency that need to be coordinated around this new priority and reinstated national debate (e.g. review of scientific capabilities, assessment of regulatory and compliance options, preparedness to respond to congressional requests as well as programs aimed at adaptation to flooding, droughts, sea level rise, higher intensity storms, disrupted weather patterns, changes in species distribution, and other expected consequences of rapidly changing global temperatures).

With respect to urgency, the section on Impacts of Global Climate Change indicates that a report will be available on such impacts at the national level in 2012, some four years away. We recommend that some initial assessment should be a priority. In the area of contaminants, waiting until 2010 or 2011 for rulemaking regarding underground injection of carbon dioxide is not acceptable if EPA considers this approach to be very important for controlling the release of greenhouse gases. Again, we recommend that accelerating this strategy should be a priority.

While EPA is working to address issues of Import Safety, a companion program of some type addressing issues of Export Safety and Compliance would be very useful in the area of encouraging technology development. The manufacturing, material content, and take-back regulations of the EU and other jurisdictions present barriers for technology development for many US manufacturers. Assistance by EPA and other federal agencies such as the Department of Commerce in addressing these concerns could be helpful from both an environmental protection perspective and with regard to economic development.

Apparently missing from the Draft Plan is a strategy to address environmental challenges posed by the current state of the economy. We recommend that EPA consider approaches that will allow it to make continued progress toward its goals in the likelihood that it does not receive all the resources it needs. One such adaptive strategy EPA might consider is differential oversight of delegated state programs. While current credit problems and bonding challenges are hopefully temporary, if prolonged they may threaten the availability of funding for municipalities and the private sector utilities to continue the maintenance and upgrade of water infrastructure. We recommend that EPA address that possibility in the Strategic Plan.

B. Measurement framework

It is time for EPA to revisit the question of appropriate *sustainability* measures. This would require, as a theoretical example, that hypoxia not be the only goal in looking at setting nutrient limits in TMDLs, but that the balance of the food web, including native phytoplankton, be the goal. Another example would be that life-cycle assessments of energy alternatives be performed to establish carbon reduction goals, rather than set goals based on a superficial measurement that may, in fact, lead to unintended consequences.

We find the side-by-side comparison of the 2006-2011 and 2009-2014 strategic management framework very helpful. However, many strategic measures are still very difficult to interpret. Echoing our comments on the 2006-2011 Strategic Plan, we recommended that each strategic measure include the following: (1) a baseline of environmental quality when EPA initiated a given program, (2) current condition, (3) how much further environmental quality must improve to achieve EPA goals, (4) what increment of progress EPA hopes to achieve over the next five years, stated as both a percentage improvement as well as what that percentage represents in pounds of pollution reduced or numbers of people served, and (5) some indication of how that increment will be accomplished. The proposed plan seems to have lost sight of such a common sense approach. We recommend that OCFO step back and try to consider the plan from an outsider's perspective. All measures should be stated in terms the public can understand and should compare the proposed measure to the overall goal.

We note that EPA is proposing to eliminate several strategic measures: for construction and demolition materials recycling, Local Emergency Planning Committee activity, and two of three risk management planning measures. EPA proposes to limit its measure for municipal solid waste recycling to its own activities. While we recognize that finding ways to measure the effectiveness of these programs and activities poses challenges, we cannot support eliminating a measure from the strategic plan for that reason alone. We recommend that EPA should first determine whether these activities are desirable on their merits.

Consistent with our comments regarding strategies, we find that many sub-objectives and strategic measures are lacking in ambition. For example, the strategic measure for sub-objective 1.3.3 "Reduce Exposure to Excess UV Radiation," includes the target date of 2165 for a reduction of skin cancers by 50 percent. That is roughly seven generations. Are there no actions that EPA might consider or encourage to achieve that target in a shorter period? According to the plan EPA has proposed, goals of safe drinking water and attainment of water quality standards will not be fully achieved until the 22nd century. We call for bolder action.

Question 3: Is the Change Document Sufficiently Integrated with EPA's Other Planning Activities and Documents?

The Change Document does discuss relationships with other EPA planning activities with a particular emphasis on the Report on the Environment (ROE) as a key component of the process of determination of new areas of focus for the Agency. NACEPT agrees that connections with the conditions and challenges raised in the ROE process are valid approaches to setting priorities for the Agency. However, in a larger sense, this question is difficult to answer, because the relationships between the goals and the measurement framework to the objectives and to other EPA planning initiatives including the budget are unclear.

All of the goals and components of the measurement framework may be important—clearly each is important to some component of EPA. However, it is not possible in this document to determine the relationship of each goal and each measurement factor to the overall plan and particularly to the critical targeted areas. These relationships should be more clearly stated in the writing of the plan. For example, the Strategic Plan will have an important role in setting budget priorities and should be closely related to the Agency's future Performance and Accountability Reports (PAR).

It appears unlikely that all components of the performance measurement framework will have equal standing in budget discussions or in the overall Agency performance assessment. The Strategic Plan would be more helpful with some discussion about the priorities that have been established or will be established among the performance measures. Specifically, the ability to recognize which performance measures are related to the Report on the Environment findings and which measures are important components of PART would clarify many questions. Such information would assist a reader in understanding what EPA considers to be the most critical activities and tasks for this planning period and could also lead to productive discourse about necessary resources and participation by other federal agencies and the private sector.

A number of topical areas such as agriculture, fertilizer use, and sea surface temperatures that are mentioned in the Introduction of the Change Document as problems do not seem to appear in the performance measures section of the document. This appears to reflect a lack of connection between some of the issues identified as emerging from the Report on the Environment and the details of the planned activities of the Agency. More discussion of this apparent disconnect would help readers of the Strategic Plan to understand how EPA anticipates addressing these important issues. Alternatively, the appearance of performance measures for these issues would complete the process.

III. Answers to Specific OFCO Questions

Goal 1: Clean Air and Global Climate Change

Organizations for possible collaboration with EPA research program to leverage local government efforts in identifying and developing global climate change strategies include:

Western States Governors Association
National Tribal Environmental Council
National Congress of American Indians
National Association of Counties
International Council for Environmental and Local Initiatives
United States Conference of Mayors

Goal 2: Clean and Safe Water

EPA is requesting a replacement shellfish measure:

NACEPT suggests that EPA measure the percentage of shellfish beds that are monitored as well as the percentage that are closed to harvesting due to pollution. Through their experience with 305(b) reporting, states may have helpful experience to inform EPA's development of this measure.

Another approach could be to report the total area of known, safe shellfish beds versus the total area of known, closed shellfish beds.

Response to request for suggestions and reactions related to improving the suite of water quality measures:

NACEPT was not able to provide a meaningful response to this request in the time available.

Goal 4: Healthy Communities and Ecosystems

Organizations for collaboration with EPA's research program to leverage local government efforts in identifying and developing global climate change strategies include:

Western States Governors Association
National Tribal Environmental Council
National Congress of American Indians
National Association of Counties

International Council for Environmental and Local Initiatives
United States Conference of Mayors

Organizations for providing feedback on partnerships for developing ecological science indicators that have been useful to local government decision-makers:

Western States Governors Association
National Tribal Environmental Council
National Congress of American Indians
National Association of Counties
International Council for Environmental and Local Initiatives
United States Conference of Mayors

Goal 5: Compliance and Environmental Stewardship

EPA's enforcement program is moving to a new problem-based performance measurement structure and is interested in feedback on this approach overall.

NACEPT acknowledges that effective strategies for measuring compliance and enforcement are difficult to develop and implement. While NACEPT appreciates EPA's effort to move away from activity-based measures (e.g. "How many facilities did EPA inspect?") and instead focus on environmental outcomes (e.g. "Is the air and water getting cleaner?"), the outcomes that the Office of Enforcement and Compliance Assurance (OECA) has proposed lack context and relevance. Measures that the public might better understand include:

- What percent of all regulated facilities are in compliance (compliance rate)? If the goal is 100%, where are we now relative to that goal and what are the major problems preventing us from achieving it? NACEPT acknowledges that such an approach is complicated, for example the concept of "total regulated facilities" likely would be at best an estimate. Further, what would "in compliance" be based upon? This may not be workable or meaningful goal if a minor record-keeping offense can potentially equal a major toxic release. This would not be a desirable or meaningful result in communicating progress to the public. One strategy OECA might consider as a model for addressing these concerns is the National Pretreatment Program in the Office of Water.
- With respect to the number of pounds of pollutants reduced, a denominator is needed so as to answer the question, "Pounds reduced compared to what?" To know if the number is meaningful, EPA would need to back it up by an analysis such as:
 - To meet water quality standards, x pounds of pollutant y needs to be reduced. We can reach this goal in z years if, every year, q percent is reduced.

Reactions and ideas regarding the suggested EPA approach of defining “environmentally significant” pollutants as nutrients, pathogens, mercury, other metals, sediment/turbidity, toxic organics, pH, temperature, and salinity.

While NACEPT agrees that focusing attention upon significant pollutants may be helpful and that using the 303(d) list of impairments makes a great deal of sense, this focus should not come at the expense of addressing the problem of "non-significant " pollutants. Both should be discussed. NACEPT urges EPA to make explicit its rationale for limiting its reporting to pollutants of “significance” rather than all pollutants. Making significance distinctions is not without problems, and showing significant pollutants only might raise suspicions that other problems are not important, or are being masked.

APPENDIX I: SPECIFIC NACEPT COMMENTS ON PROPOSED 2009-2014 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	Objective
Sub-objective	Sub-objective
Strategic Target	Strategic Measure

GOAL 1: CLEAN AIR AND GLOBAL CLIMATE CHANGE

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.

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.	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.
1.1.1 Ozone and PM2.5: By 2015, working with partners, improve air quality for ozone and PM2.5.	1.1.1 Reduce Criteria Pollutants and Regional Haze
By 2015, reduce the population-weighted ambient concentration of ozone in all monitored counties by 14 percent from the 2003 baseline.	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.
By 2015, reduce the population-weighted ambient concentration of PM2.5 in all monitored counties by 6 percent from the 2003 baseline.	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.
By 2011, reduce emissions of fine particles from mobile sources by 134,700 tons from the 2000 level of 510,550 tons.	By 2014, reduce emissions of fine particles from mobile sources by 51,000 tons from a 2009 baseline level of 417,000 tons.

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.	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.
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.	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.
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.	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.
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.	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.
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.)

Comment: What is the baseline number of total tribes in the customer universe? If it is very small, then this could represent significant progress. If it is very large, the progress could be insignificant to meaningless.

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
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	<p>Rule).</p> <p>(FY 2007 baseline: 10 tribes.)</p>
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Comment: What is the baseline number of total tribes in the customer universe? If it is very small, then this could represent significant progress. If it is very large, the progress could be insignificant to meaningless.

<p>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.</p>	<p>1.1.2 Reduce Air Toxics</p>
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<p>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.</p>	<p>By 2014, reduce toxicity-weighted (for cancer risk) emissions</p> <p>of air toxics to a cumulative reduction of 34 percent from the 1993 non-weighted baseline of 7.24 million tons, maintaining</p> <p>the 34 percent cumulative reduction expected by 2006.</p>
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Comment: This sub-objective states that the desired reduction of 34 percent from the 1993 baseline was achieved in 2006. Is it really the EPA’s position that no further progress can be made in this regard, and that the program is in static “maintenance mode?”

<p>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.</p>	<p>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.</p>
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Comment: This sub-objective states that a 58 percent reduction was achieved between 1993 and 2006 (average annual reduction of 4.5 percent), yet the anticipated further reduction through 2014 will be an additional 1 percent (average annual reduction of 0.125 percent). What is the logical basis for the dramatic change in expectation?

<p>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.</p>	<p>1.1.3 Reduce the Adverse Effects of Acid Deposition</p>
	<p>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.</p>
<p>Comment: This sub-objective states the 2014 goal is to achieve the 2001 baseline, and the 2030 goal is a 30 percent reduction in impacted water bodies, but does not identify the baseline from which the long-term target is set.</p>	
<p>By 2011, reduce national annual emissions of sulfur dioxide (SO₂) 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 SO₂ emissions cap of 8.95 million tons.</p>	<p>Through 2015, maintain the national annual emissions of sulfur dioxide (SO₂) 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.</p>

<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>1.2.1 Reduce Exposure to Radon</p>
	<p>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.</p>
<p>Comment: This sub-objective delays attainment of the 1,250 deaths prevented level for two full years. EPA should identify the cause for this delay. EPA should also identify the number of future premature cancer deaths projected to result from radon exposure (full target universe) to determine the impact of Agency activities on the overall number of projected premature deaths.</p>	
<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</p>	<p>1.2.2 Reduce Exposure to Asthma Triggers</p>

populations.	
	<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.</p> <p>EPA will place special emphasis on children and other disproportionately impacted populations.</p>
<p>Comment: This sub-objective delays attainment of the 6.5 million actions level for two full years. EPA should identify the cause for this delay. The Agency should also identify the size of the full action universe needed to fully eliminate indoor asthma triggers. Is 6.5 million the entire universe, a substantial majority or just a small portion of the necessary actions?</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>Comment: EPA should identify the total universe of schools that might be required (or at least expected) to implement an indoor air quality management plan. Is 48,000 the entire universe, a substantial majority or just a small portion of the regulated universe?</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</p>

	baseline = 1.8 ppb.)
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Comment: What is the expected peak total effective equivalent stratospheric chlorine level expected in 2014? Over what timeline will a reduction to 3.4 parts per billion be attained? What actions related to this projected reduction will EPA measure and hold itself accountable for? Is there scientific justification for a final reduction target that is twice the 1980 baseline level?

	1.3.2 Reduce Emissions of Ozone-Depleting Substances
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.	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.

	1.3.3 Reduce Exposure to Excess UV Radiation
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.	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.

Comment: The target date for an effective 50 percent reduction in skin cancers is 156 years out (roughly 7 generations). Are there no actions that EPA might consider or encourage to achieve this target in a shorter time period?

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.	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.
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	1.4.1 Monitor the Environment for Radiation
<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>

Comment: The baselines and targets reported in the 2011 sub-objective and the 2014 sub-objective appear to suggest that the RadNet is actually being deployed more for protecting land than people. By 2001, 22 percent of the population lived on the first 35 percent of land area in which the RadNet was

deployed. EPA projects that land coverage will reach 77 percent by 2011 and population coverage will reach 51 percent by 2014, leaving the remaining 49 percent of the population (on the remaining 23 percent land area) unmonitored. The 2014 coverage target could be substantially bettered if the RadNet were deployed where the people are.

	<p>1.4.2 Prepare for and Respond to Radiological Emergencies</p>
<p>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.)</p>	<p>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.)</p>

Comments: EPA is reporting a 33 percent increase in personnel and asset readiness between 2005 and 2007, but now planning it will take 5 additional years to achieve the next 7 percent improvement in readiness. The Agency should justify both the reasons for the steep drop-off in increased readiness and the 2-year delay in achieving the 90 percent readiness level. Given the critical nature of radiological emergencies, when might 100 percent readiness be achieved?

<p>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.</p>	<p>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.</p>
<p>1.5.1 Buildings Sector: By 2012, 46 MMTCE will be reduced in the buildings sector (compared to the 2002 level.)</p>	<p>1.5.1 Reduce Greenhouse Gas Emissions</p>
	<p>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.</p>
<p>1.5.2 Industrial Sector: By 2012, 99 MMTCE will be reduced in the industry sector (compared to the 2002 level).</p>	<p>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.</p>

<p>1.5.3 Transportation Sector: By 2012, 15 MMTCE will be reduced in the transportation sector (compared to the 2002 level).</p>	<p>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.</p>
<p>Comment: For the three sub-objectives listed above (1.5.1 through 1.5.3), EPA needs to identify the total greenhouse gas emissions from all sectors/activities, to demonstrate the significance of the target reductions.</p>	
<p>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.</p>	<p>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.</p>
	<p>1.6.1 Clean Air Research</p>
	<p><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></p>

Goal 2: Clean and Safe Water

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

GOAL 2: CLEAN AND SAFE WATER

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>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>Comment: EPA should justify why it is delaying attainment of the 90 percent target for 3 addition years. Assuming the now-projected performance gain of 1 percent over 9 years, this goal will not be fully achieved until the 22nd century.</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>

Comment: As discussed in previous NACEPT comments, EPA continues to project lower attainment rates in Indian Country versus community water systems generally (88 percent vs. 93 percent). EPA should justify why it continues to establish lower systems expectations in Indian Country and whether improved direct assistance efforts can eliminate this differential.

<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>
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Comment: EPA should justify the 3-year delay in attaining this sub-objective.

<p>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).)</p>	<p>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.)</p>
<p>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</p>	<p>2.1.2 Fish and Shellfish Safe to Eat</p>
<p>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).)</p>	<p>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).)</p>
<p><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></p>	<p><i>Exploring replacement measure</i></p>

<p>2.1.3 Water Safe for Swimming: By 2011, improve the quality of recreational waters as measured by the following strategic targets:</p>	<p>2.1.3 Water Safe for Swimming</p>
<p>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).)</p>	<p>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).)</p>
<p>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).)</p>	<p>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).)</p>

<p>2.2 Protect Water Quality: Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.</p>	<p>2.2 Protect Water Quality: Protect the quality of rivers, lakes, and streams on a watershed basis and protect coastal and ocean waters.</p>
<p>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.</p>	<p>2.2.1 Improve Water Quality on a Watershed Basis</p>
<p>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.)</p>	<p>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.)</p>
<p>Comment: EPA’s target of attaining water quality standards in 2,360 water bodies by 2014 is far less than 10 percent of the 2002 baseline 39,798 water bodies in non-attainment. At the projected rate, full attainment will not occur until well into the 22nd century.</p>	
<p>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</p>	<p>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</p>

69,677 specific causes of water body impairments identified by states.)	69,677 specific causes of water body impairments identified by states. 2008 baseline TBD.)
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Comment: EPA’s target of removing 5,920 specific causes from a universe of 69,677 causes (2002 baseline) is less than 10 percent over a 12-year period. At the projected rate, full attainment will not occur until well into the 22nd century. Additionally, since this sub-objective addresses specific causes, EPA should be able to bring enforcement action against these sources in far less time, with greater results.

<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>
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Comment: EPA’s success measure of “one or more” improvements is problematic here. Success should be declared when all impairments are eliminated and the watershed is impairment free, not when just one or more impairments are addressed, but the watershed remains impaired.

<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>
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Comment: The target of "no degradation" would be acceptable if all (or nearly all) wadeable streams were in in "good" condition. However, a target of "no degradation" when 25 percent of streams are in "fair" condition and 42 percent of streams are in "poor" condition is not protective of public health.

<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>
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<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>
<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>

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.)	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.)
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.)	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.)

Comment: The Southeast rating declined from 3.8 to 3.6 between 2004 and 2009. Is it really EPA's objective to maintain the declined state of ecosystem health?

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.)	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.)
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.)	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.)
	<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>
	<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>

<p>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.)</p>	<p>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.)</p>
<p>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.</p>	<p>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.</p>
<p>Comment: The objective indicates that EPA has delayed by 3 years any expectation to conduct leading-edge, sound scientific research. This implies that the Agency is free to conduct trailing-edge, unsound research in the interim.</p>	
	<p>2.3.1 Drinking Water Research</p>
	<p><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></p>
	<p>2.3.2 Water Quality Research</p>
	<p><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></p>

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

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

By 2011, increase reuse and recycling of construction and demolition debris by 6 percent from a baseline of 59 percent in 2003.

Comment: This sub-objective has been eliminated due to a reported lack of annually-available data. However, it appears that data was available in the baseline year (2003). Therefore, data likely continues to be collected, but may not be readily available. EPA should further investigate opportunities to access this data (or a suitable surrogate) before deleting this sub-objective.

By 2014, increase the amount of municipal solid waste reduced, reused, or recycled by 130 billion pounds.

Comment: EPA should identify baseline data to qualify whether this target is meaningful.	
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.
Comment: EPA should identify the universe of tribes. What is the FY 2008 baseline to which the 2014 target is being compared?	
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.
Comment: EPA should identify the universe of open dumps in Indian country. What is the FY 2008 baseline to which the 2014 target is being compared?	
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.
Comment: While the universe of facilities is being reassessed in 2009, EPA should give some deference to the current estimate of 820 facilities, and should specify some expected level of activity/progress for public review purposes.	

<p>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.</p>	<p>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.</p>
<p>Comment: The 2014 target of 67.5 percent SOC is a substantive retreat from the 2011 target of 71 percent. EPA should provide justification for the decreased expectation.</p>	
<p>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.</p>	<p>Each year through 2014, minimize the number of confirmed releases at UST facilities to 9,000 or fewer.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>3.2.1 Chemical Release Preparedness and Response</p>
<p><i>By 2011, achieve and maintain at least 95 percent of the maximum score on readiness evaluation criteria in each region.</i></p>	<p><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></p>

Comment: The 2014 target of 75 percent of maximum score on the NAR criteria is a substantial retreat from the 2011 target of 95 percent of maximum score on readiness criteria. Are the two criteria so substantially different that EPA’s previous progress did not meet the NAR criteria?

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.
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Comment: EPA should identify the backlog of Superfund-lead removal actions to demonstrate the significance of the target.

<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>
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Comment: EPA should identify the backlog of PRP removal actions to demonstrate the significance of the target.

<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>
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Comment: In delegated programs such as the National Pretreatment Program, sustained 40 percent non-compliance is considered an indicator of unacceptable program management. EPA should hold itself to the same program management criteria as its delegates.

<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>
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Comment: In delegated programs such as the National Pretreatment Program, sustained 40 percent non-compliance is considered an indicator of unacceptable program management. EPA should hold itself to the same program management criteria as its delegates.

<p>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.</p>	<p>3.2.2 Contaminated Land</p>
<p>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.)</p>	<p>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.</p>
<p>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.)</p>	<p>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.)</p>

<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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</p>	<p>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.)</p>

<p>construction.)</p>	
<p>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.)</p>	<p>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.)</p>
<p>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.</p>	<p>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.</p>
<p>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.)</p>	<p>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.)</p>

Comment: Since EPA has now gone through several iterations of its Strategic Plan, the Agency's offices have had much more than sufficient time to plan for the 2014 Strategic Plan. The omission of numeric performance targets this late in the game could be interpreted as symptomatic of a lack of respect for the planning process, or at minimum, the public input component represented by this document.

<p>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.</p>	<p>3.2.3 Potentially Responsible Party Participation at Superfund Sites</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
	<p><i>3.3.1 Land Protection Research</i></p>
	<p><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></p>

Goal 4: Healthy Communities and Ecosystems

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

GOAL 4: HEALTHY COMMUNITIES AND ECOSYSTEMS

Protect, sustain, or restore the health of people, communities, and ecosystems using integrated and comprehensive approaches and partnerships.

4.1 Chemical and Pesticide Risks: By 2011, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.	4.1 Chemical and Pesticide Risks: By 2014, prevent and reduce pesticide and industrial chemical risks to humans, communities, and ecosystems.
4.1.1 Reduce Chemical Risks: By 2011, prevent and reduce chemical risks to humans, communities, and ecosystems.	4.1.1 Reduce Chemical Risks
<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>	<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>

Comment: EPA should identify the universe of potential risk management actions to demonstrate the extent to which reported actions reach the regulated community.

	<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>

<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>

<p>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.</p>	<p>4.1.2 Reduce Chemical Risks at Facilities and in Communities</p>
<p><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></p>	<p><i>By 2014, conduct 2,400 inspections and audits at RMP facilities. (Baseline: in FY 2007, 750 RMP inspections were conducted.)</i></p>
<p>Comment: EPA should identify the universe of RMP facilities to demonstrate the significance of the target activity level in relation to the regulated community.</p>	
<p><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></p>	
<p><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></p>	

<p><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></p>	
<p>Comment: EPA should not delete the four performance-based targets under sub-objective 4.1.2 as these remain valid indicators of chemical risk reduction and enhanced public protection.</p>	
<p>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.</p>	<p>4.1.3 Protect Human Health from Pesticide Risk</p>
<p>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.)</p>	<p>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:</p> <p>Dimethylphosphaste = 0.41 ug/L</p> <p>Dimethylthiophosphate = 1.06 ug/L</p> <p>Dimethyldithiophosphate = 0.07 ug/L</p> <p>Diethylphosphate = 0.78 ug/L</p> <p>Diethylthiophosphate = 0.5 ug/L</p>

	<p>Diethylthiophosphogate = 0.07 ug/L</p> <p>3,5,6-Trichloro-2pyridinol = 1.9 ug/L.)</p>
<p>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.)</p>	<p>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.)</p>
<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>
<p>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-</p>	<p>By 2014, reduce the percentage that exceed 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</p>

methyl and chlorpyrifos.)	agricultural watersheds exceeded aquatic life benchmarks for chlorpyrifos.)
Comment: EPA needs to specify the percentage targets in the above two measures to demonstrate their significance.	
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.

<p>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.)</p>	<p>4.2.1 Sustain Community Health</p>
	<p>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.)</p>
<p>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</p>	<p>4.2.2 Restore Community Health through Collaborative Problem-Solving</p>

<p>assessing improvement.)</p>	
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	<p>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.)</p>
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Comment: EPA needs to identify the universe of communities with potential environmental concerns to demonstrate the significance of this target.

Also, the 2006 baseline value is different in the 2011 and 2014 sub-objectives. This discrepancy needs to be resolved.

<p>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.</p>	<p>4.2.3 Assess and Clean Up Brownfields</p>
<p>By 2011, conduct environmental assessments at 13,900 (cumulative) properties. (As of the end of FY 2005, EPA assessed 7,900 properties.)</p>	<p>By 2014, conduct environmental assessments at 18,800 (cumulative) properties. (Baseline: as of the end of FY 2007, EPA assessed 11,800 properties.)</p>

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.)
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	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.)

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.

Comment: EPA should identify the universe of waste sites in the U.S. – Mexico border region to demonstrate the significance of this target.

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
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.)

<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.</p>	<p>4.2.6 Reduce Persistent Organic Pollutants (POPs) Exposure</p>
<p>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.)</p>	<p>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.)</p>

<p>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.)</p>	<p>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.)</p>
<p>4.3 Restore and Protect Critical Ecosystems: Protect, sustain, and restore the health of critical natural habitats and ecosystems.</p>	<p>4.3 Restore and Protect Critical Ecosystems: Protect, sustain, and restore the health of critical natural habitats and ecosystems.</p>
<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>4.3.1 Increase Wetlands</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>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 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><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>
	<p>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</p>

	<p>indicators based on a 1 to 5 rating system for each indicator, where 1 is poor and 5 is good.)</p>
<p>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].)</p>	<p>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].)</p>
<p>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].)</p>	<p>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].)</p>
<p>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.)</p>	<p>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.)</p>
<p>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</p>	<p>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</p>

<p>contaminated sediments from the Great Lakes have been remediated from 1997 through 2004.)</p>	<p>million cubic yards of contaminated sediments are expected to have been remediated from 1997 through 2008.)</p>
	<p><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></p>

Comment: EPA should identify the universe of beneficial use impairments to demonstrate the significance of this target.

<p>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.</p>	<p>4.3.4 Improve the Health of the Chesapeake Bay Ecosystem</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>

<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>

<p>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.)</p>	<p>4.3.5 Improve the Health of the Gulf of Mexico</p>
	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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 km², as measured by the 5-year running average of the size of the zone. (Baseline: 2002-</p>	<p>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 km², as measured by the 5-year running average of the size of the zone. (Baseline: 2003-2007 running average size = 14,644 km².)</p>

<p>2006 running average size = 14,944 km².)</p>	
<p>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.</p>	<p>4.3.6 Restore and Protect Long Island Sound</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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 (mi²); duration: 57.3 days.)</p>
<p>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</p>	<p>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.)</p>

protected.)	
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	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.)

<p>will be available in December 2006.)</p>	
<p>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.)</p>	<p>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).)</p>
<p>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</p>	<p>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.)</p>

<p>water treatment areas ranged from 13 ppb for area 3/4 and 98 ppb for area 1W.)</p>	
<p>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.</p>	<p>4.3.8 Restore and Protect the Puget Sound Basin</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>

<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>
<p>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.</p>	<p>4.3.9 Restore and Protect the Columbia River Basin</p>
<p>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.)</p>	<p>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.)</p>
<p>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.)</p>	<p>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.)</p>

<p>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.)</p>	<p>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.)</p>
<p>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.</p>	<p>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.</p>
	<p><i>4.4.1 Human Health Research</i></p>
	<p><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></p>
	<p><i>4.4.2 Ecosystem Research</i></p>
	<p><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></p>
	<p><i>4.4.3 Human Health Risk Assessment Research</i></p>
	<p><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></p>

	4.4.4 Global Climate Change Research
	<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

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

GOAL 5: COMPLIANCE AND ENVIRONMENTAL STEWARDSHIP

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.

Comment: The interactions between EPA and the regulated communities are reported under Goal 5. Pursuant to implementation provisions of the major environmental statutes, compliance, assistance and enforcement activities can be delegated to the states, and in the case of the National Pretreatment Program, to individual municipalities. Thus, the vast majority of regulated entities do not interact directly with EPA, but with their state or local regulatory agencies. Because EPA has traditionally reported and measure only its direct activities in these areas, EPA should: (i) clarify if data reported for the Goal 5 objectives and sub-objectives will be universal or limited to direct EPA efforts, and (ii) identify the universe of activities undertaken by delegated state and local regulatory partners to demonstrate the significance of its own efforts. Finally, EPA should report on its activities undertaken in support of delegated state and local regulatory partners.

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.)

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>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><i>5.1.1 Address Environmental Problems from Air Pollution</i></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>
<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><i>5.1.2 Address Environmental Problems from Water Pollution</i></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"</i></p>

	<p><i>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>
<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</p>	<p>5.1.3 Address Environmental Problems from Waste, Toxics, and Pesticides Pollution</p>

<p>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><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</i></p>

	<i>compliance monitoring. (Baseline TBD.)</i>
	5.1.4 Criminal Enforcement
	<i>By 2014, increase the severity of the crimes investigated (as measured by the percent of open high impact cases). (Baseline TBD.)</i>

Comment: This sub-objective is unclear. Does EPA mean to suggest that increasing the percentage of high impact cases left unresolved would be deemed an improvement of some sort? Perhaps better targets/measures might be: (i) an X increase in the percentage of investigations involving high impact activities, and (ii) a X decrease in the percentage of unresolved high impact cases.

	<i>By 2014, there will be an annual recidivism rate of X percent. (Baseline TBD.)</i>
	<i>By 2014, X percent of closed cases will have a criminal enforcement consequence (indictment, conviction, fine, or penalty). (Baseline TBD.)</i>
	<i>By 2014, X percent of charged cases will have an individual that was charged. (Baseline TBD.)</i>

Comment: This sub-objective is unclear. Perhaps a better target measure might be an X increase in the percentage of cases in which an individual(s) was charged as well the corporation. Otherwise the simplest way to demonstrate improvement with regard to this measure would be to focus on cases involving individuals while ignoring cases involving corporations.

<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>5.2.1 Prevent Pollution and Promote Environmental Stewardship</p>
<p>By 2011, reduce 4.5 billion pounds of hazardous materials cumulatively compared to the 2000 baseline of 44 million pounds reduced.</p>	<p>By 2014, reduce 6.5 billion pounds of hazardous materials cumulatively compared to the 2007 baseline of 2.5 billion pounds.</p>
<p>Comment: The measured activity “hazardous materials reduction” is not well-defined. EPA should identify the universe of hazardous materials produced annually to demonstrate the significance of this target.</p>	
	<p><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></p>
	<p><i>By 2014, reduce xx million pounds of ChAMP high priority chemicals of special concern across all participating Agency programs.</i></p>

<p>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.</p>	<p>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.</p>
<p>By 2011, reduce water use by 19 billion gallons cumulatively compared to the 2000 baseline amount of 220 million gallons reduced.</p>	<p>By 2014, reduce water use by 50 billion gallons cumulatively compared to the 2007 baseline amount of 11 billion gallons reduced.</p>
<p>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.</p>	<p>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.</p>
<p>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.</p>	<p>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.</p>
<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>

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.

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.)

**5.2.3 Promote Environmental Policy
Innovation**

	<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>
	<p>5.3.1 Improve Human Health and the Environment in Indian Country</p>
<p>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.)</p> <p>By 2011, increase the percent of tribes conducting EPA-approved environmental monitoring and assessment activities in Indian country</p>	<p>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.)</p> <p>By 2014, increase the percent of tribes conducting EPA-approved environmental monitoring and assessment activities in Indian country by X percent. (FY 2008</p>

to 26 percent. (FY 2005 baseline: 20 percent of 572 tribes.)	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.)

Comment: What is the difference between the first and third sub-objectives listed above, and why is the progress for these significantly different?

The 2005 – 2008 baseline changes reported for the three sub-objectives above indicated progress of 1 percent, 1 percent and 3 percent respectively, over three years. At these rates of progress, it will take well into the 22nd century to achieve 100 percent.

<p>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.</p>	<p>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.</p>
	<p>5.4.1 Science and Technology for Sustainability</p>
	<p><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></p>

<http://www.epa.gov/greenpower><http://www.epa.gov/chp><http://www.epa.gov/owow/estuaries/cre.html><http://www.epa.gov/chemrtk/hpvis/aboutrbd.htm><http://www.epa.gov/champ><http://www.epa.gov/champ/pubs/champbriefing050808.pdf><http://es.epa.gov/ncer/nano><http://epa.gov>

<http://www.oppt/nano/stewardship.htm>
<http://www.oecd.org/department/0,3355>
<http://www.epa.gov/grtlakes/collaboration/strategy.html>
<http://www.epa.gov/region09/water/watershed/index.html>
<http://www.epa.gov/champ>

Appendix II

2009-2014 Strategic Plan Change Document

Questions for Advisory Group Feedback

Overarching Questions:

The 2009-2014 Strategic Plan update is focusing on a small number of targeted areas where EPA believes it can make the most significant improvements in strategies and performance measurement that will advance the Agency's mission of protecting human health and the environment.

- Do the proposed changes in Agency strategies and long-term strategic measures accomplish this?
- Within the targeted areas, are there any additional new or significantly different strategies that EPA should consider to improve environmental and human health outcomes?
- Are there other areas that you believe should be targeted?

Specific Follow-Up Areas

Goal 1:

- Relating to "Impacts of Global Climate Change," second bullet, on page 7 of the *Strategic Plan Change Document*, EPA is interested in feedback on organizations for collaboration with EPA's research program to leverage local government efforts in identifying and developing global climate change adaptation strategies.

Goal 2:

- Because the anticipated data are not available for measuring the shellfish acres impacted by anthropogenic sources that are approved for use, EPA is requesting input on a replacement shellfish measure (under Sub-objective 2.1.2).

- As discussed on page 10 of the *Change Document*, EPA is pursuing some pilot efforts to improve the suite of water quality measures under Sub-objective 2.2.1. EPA is interested in suggestions and reactions related to efforts to improve the suite of water quality measures.

Goal 4:

- Similar to Goal 1, relating to “Impacts of Global Climate Change” on page 12 of the *Change Document*, EPA is interested in feedback on organizations for collaboration with EPA’s research program to leverage local government efforts in identifying and developing global climate change adaptation strategies.
- Related to “Research Strategic Directions and Targets” on page 15, EPA is interested in feedback on any partnerships for developing ecological science indicators that have been useful to local government decision-makers.

Goal 5:

EPA’s enforcement program is moving to a new problem-based performance measurement structure in Goal 5 (Objective 5.1). While the Agency is interested in feedback on the new approach overall, we are particularly seeking input on two areas:

- When EPA reports the results for the measure on pounds of water pollutants estimated to be reduced, treated or eliminated (Sub-objective 5.1.2), EPA will break out the "environmentally significant" water pollutants that affect the top 5 to 10 causes of Clean Water Act Section 303(d) listed impairment to waters. EPA currently plans to define "environmentally significant" pollutants as nutrients (with related environmental effects), pathogens, mercury, other metals, sediment/turbidity, toxic organics, pH, temperature, and salinity. We would like your reaction and ideas regarding this approach.
- EPA is investigating methods for reporting out "environmentally significant" waste, toxics, and pesticides pollutants for the measure on pounds of pollutants estimated to be reduced, treated or eliminated (Sub-objective 5.1.3), but has not yet selected the methodology. EPA is currently exploring a toxicity equivalent approach to this measure. Based on your experience, can you provide suggestions?

Appendix III

Examples of Regulatory Innovation

A. NPDES program

The NPDES program has been identified over the years as one in need of an upgrade. In the early 1990's EPA formed a Permit Improvement Team (PIT), which identified NPDES streamlining as a high priority. In conjunction with streamlining, the group discussed ways in which delegated states could be given more flexibility to improve the effectiveness of the program, for example:

- Issuing watershed permits for all NPDES dischargers in a watershed;
- Allowing watershed-based trading;
- Focusing more resources on non-compliance issues and high-priority watersheds;
- Allowing permit renewals to be synchronized so all permits are reviewed simultaneously in a given watershed.

More recently, the State of Colorado has suggested that major NPDES discharges be inspected less frequently in return for more frequent inspection of “minor” NPDES discharges, of which there are many more compared to “majors” and, arguably, are significantly under-regulated.

Although there are arguments that legislation is needed to make changes to the NPDES program, counter-arguments can be made that much can be done by regulation and policy while others, such as allowing 10 year renewals rather than 5 year renewals, might require a change to the Clean Water Act.

B. Environmental Results Program

Eighteen states participate in the Environmental Results Program (ERP) Consortium, a group of states that are embracing the Massachusetts-born alternative to traditional regulation. The ERP program typically captures a large number of small, under-regulated facilities such as dry cleaners, printers, photo-processors, and gas stations that collectively have a significant environmental footprint. The program consists of the following steps:

The state:

- conducts an inventory of all facilities,
- develops a baseline compliance rate with existing regulations (in some cases, facilities are operating, illegally, outside the regulatory system), and,

- based on the initial inventory and compliance evaluation,
- rolls out a comprehensive technical assistance program to inform the facilities how to get into compliance and stay in compliance.

The facilities must then certify that they are in compliance or identify where they need to get into compliance and commit to doing so. This is done annually through a self-certification on-line system.

The state then conducts random, numerically statistically significant inspections to assess overall compliance and takes enforcement action where necessary for non-compliant facilities or those that fail to certify.

This system takes less time and has proven to be more effective than traditional command-and-control regulation. The states would not have the resources to conduct the thousands of inspections needed at all of these small facilities. The ERP program shifts some of the burden to the facilities themselves, and provides more robust assessment tools for the state agency to ensure improved compliance from the sector.

Although EPA has funded ERP development in the states, it has not embraced this tool for its own regulatory programs. There is an opportunity to mainstream ERP within EPA core programs in the new Administration.

C. Differential Oversight

States with delegated federal programs have suggested that EPA use more discretion in determining the level of state oversight needed. It is wasteful and duplicative to have sound, effective, and in some cases, state run programs that are more protective than EPA's, burdened by intervention with little value added by EPA.

EPA might be better served to evaluate state and tribal programs, and shift oversight resources to states and tribes that are under-performing, and undertake other activities to augment regulatory programs in those jurisdictions that need less oversight.

Appendix IV

NACEPT Strategic Plan Workgroup Members

NACEPT Members

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Appendix V

Public Comments

From: ChickenLady86@aol.com
To: Sonia Altieri/DC/USEPA/US@EPA
Date: 12/09/2008 05:39 PM
Subject: Environmental Research

The five EPA goals are Clean Air and Global Climate Change, Clean and Safe Water, Land Preservation and Restoration, Healthy Communities and Ecosystems, and Compliance and Environmental Stewardship.

The Science Channel had a show about researching various ways of producing needed resources from waste. Methane from manure and landfills. Waste (sewage) water recycling into drinking water. Growing plants in places normally not used. These units were all independent of one another. This independence was not financially economical.

Why not combine all under one roof or as one facility? From various forms of waste to methane, and clean water, which feeds growing plant greenhouses with water and fertilizer. These facilities could be built near cities using the city's waste.

With so many of big companies reducing staff, a facility like this would turn our world around.