FY 2014 NWPG Great Lakes Measure Definitions

Measure Code: GL-433.N11

Measure Language: Improve the overall ecosystem health of the Great Lakes by preventing water pollution and protecting aquatic ecosystems.

Type of Measure: Target measure; Annually reported

Measure Contact: Michael Russ, EPA Great Lakes National Program Office

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Measure Definition

Index: A calculated number that represents an overall quality or condition based on a series of eight indicators. The index has no units (e.g., pounds, acres, concentration, etc.), but its numeric position on a scale provides a relative assessment of "good" or "bad" conditions.

Methodology for computation of results: The Great Lakes Index uses assessments of the condition of eight ecosystem indicators (*i.e.*, coastal wetlands, phosphorus concentrations, Areas of Concern (AOC) sediment contamination, benthic health, fish tissue contamination, beach closures, drinking water quality, and air toxics deposition) to evaluate the overall condition of the Great Lakes. For each indicator, a rating from 1 (poor) to 5 (good) is assigned, based on predetermined numeric criteria. The scores for the eight indicators are then summed to create the index score. This results in an overall "universe" of a 40 point scale.

Measures under EPA's Great Lakes annual performance goal assess the overall progress U.S. environmental programs are making in protecting and restoring the chemical, physical, and biological integrity of the Great Lakes ecosystem. Improvements in the index and its eight indicators would indicate that fewer toxics are entering the food chain; ecosystem and human health is better protected; fish are safer to eat; water is safer to drink; and beaches are safer for swimming.

Units: Points on the scale

Universe: 40 point scale

Baseline: 21.5 points on the 40 point scale (FY 2005)

Measure Code: GL-SP29

Measure Language: Cumulative percentage decline for the long term trend in average concentrations of PCBs in Great Lakes fish.

Type of Measure: Target measure; Annually reported

Measure Contact: Michael Russ, EPA Great Lakes National Program Office

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Measure Definition

Terms and phrases: *PCBs* are polychlorinated biphenyls, a type of contaminant.

Methodology for computation of results: This measure is part of the Great Lakes Fish Monitoring and Surveillance Program (GLFMSP). The Great Lakes National Program Office (GLNPO) is the principal source of data for the GLFMSP. The Program was created to: (1) determine time trends in contaminant concentrations, (2) assess impacts of contaminants on the fishery using fish as biomonitors, and (3) assess potential risk to the wildlife that consumes contaminated fish. The Open Trend Monitoring portion of the Program includes data from ten 600-700 mm lake trout (Salvelinus namaycush) whole fish composites (5 fish in each composite) from each of the lakes and are collected during spawning between September and October of each calendar year. Since sufficient lake trout are not found in the western basin of Lake Erie, data for 400 – 500 mm whole walleye (Stizostedion vitreum vitreum) are used for that Lake. Each Great Lake is a unique environment with a distinct growth rate, food web, and chemical integrity. For this reason, a direct comparison of annual concentrations between basins is not appropriate. However, a basin-wide cumulative percent

decline from the year 2000 can be determined using an exponential decrease function on all data between 2000 and the most recent data available. The variability in the data is caused by the intra-lake uniqueness of each lake trout and walleye community.

A percent decrease of total PCB concentration in whole fish can be calculated and compared to the reduction target to determine if the target has been met. Each year, a site mean for total PCBs are calculated in each lake, for a total of 5 data points. These data are plotted over time on the same graph , with each year containing 5 data points. An exponential decrease is then found for the entire data set and the percent decrease is calculated from the best fit line. The EPA Great Lakes National Program Office rounds the calculated value to the nearest whole percentage for reporting and comparison purposes. The Program collects and monitors contaminants in Great Lakes fish at alternating locations throughout the Great Lakes Basin; fish are collected at one set of sites during even years and at another set in odd years. This portion of the Program has been collecting and measuring contaminants in the same sites at the same time of year annually starting in 1972 in Lake Michigan and in 1977 for the remaining lakes.

In FY 2014, the database will contain quality reviewed field data from fish collected in 2012 and all quality reviewed analytical data for fish collected between 1972 and 2012. Data collected in 2012 is expected to be able to be used for reporting in 2014. Data are reported approximately 6 – 8 months after collection and are specific to the even or odd year sampling schedule (even year sites are only compared to other even year sites etc.)

Units: Decline in PCBs

Universe: n/a: The universe represents all that is likely possible to protect, restore and enhance.

Baseline: 0% (FY 2000)

Measure Code: GL-SP31

Measure Language: Number of Areas of Concern in the Great Lakes where all management actions necessary for delisting have been implemented (cumulative)

Type of Measure: Target measure; Annually reported

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Measure Definition

Terms and phrases:

- An *Area of Concern (AOC) de-listing* indicates that all management and on the ground actions that need to be taken have been implemented at the AOC to restore all impaired beneficial uses, that monitoring verifies the environmental improvement, and the respective state's request for de-listing has been approved.
- *Great Lakes AOCs* are severely degraded geographic areas within the Basin. They are defined by the U.S.-Canada Great Lakes Water Quality Agreement (Annex 1 of the 2012 Protocol) as "a geographic area designated by the Parties where significant impairment of beneficial uses has occured as a results of human activities at the local level." Additional information is available at: http://www.epa.gov/glnpo/aoc/index.html

- *Management Actions Necessary for Delisting* are the actions identified by stakeholders in the AOC and the states in a Remedial Action Plan (RAP) that outlines the reasonable and realistic management actions that could be taken to remove the relevant BUIs and, hence, delist the AOC. Reasonable and realistic management actions refer to the set of local, state and federal actions that are believed to be necessary to remove the impairment. These actions may not result in the removal of a set of BUIs immediately; however, these actions are expected to remove the contaminant threat that will allow environmental conditions to improve over time which will lead to eventual delisting of the AOC. Implementation of all management actions necessary for delisting is deemed to have occurred at the time those actions have commenced and the work is completed over the life of the project (e.g., a Legacy Act dredging project that takes place over a 6 month period would be considered a completed management action at the end of that 6 month period.)

Methodology for computation of results: This measure uses information from the Great Lakes National Program Office. Of the universe of 31 U.S. and Bi-national Areas of Concern, none were restored and de-listed in the baseline year of 2005. One has been de-listed since then, in 2006, and all Management Actions Necessary for Delisting were completed for another, in 2011, thus the cumulative total through FY 2012 is 2. De-listing of an AOC requires a determination that all beneficial uses at the AOC are not impaired. Each AOC may have up to 14 beneficial use impairments (BUI).

Units: Areas of Concern (AOCs)

Universe: 31 AOCs that are likely possible to protect, restore and enhance.

Baseline: 0 AOC (FY 2005) (Great Lakes Action Plan baseline is 1, the Oswego River AOC, delisted in July 2006).

Measure Code: GL-SP32.N11

Measure Language: Cubic yards (in millions) of contaminated sediment remediated in the Great Lakes (cumulative from 1997).

Type of Measure: Target measure; Annually reported

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Measure Definition

Methodology for computation of results: This measure totals the cumulative volume of contaminated sediments remediated in the Great Lakes basin since 1997, the first year for which this information was collected. The Great Lakes National Program Office (GLNPO) collects sediment remediation data from various State and Federal project managers across the Great Lakes region that conduct and coordinate contaminated sediments work. These data are obtained directly from the project manager via an information fact sheet the project manager completes for any site in the Great Lakes basin (primarily rivers and harbors) that has performed any remedial work on contaminated sediment. The data collected to track sediment remediation in the Great Lakes basin show the amount of sediment remediated (removed, capped, undergoing natural recovery, or other) for that year, the amount of sediment remediated in prior years, and the amount of sediment remaining to be addressed for a particular site.

Data tracking of sediment remediation is compiled in two different formats. The first is a matrix that shows the annual and cumulative totals of contaminated sediment that were remediated in the Great Lakes basin in the reporting year and from 1997 for each Area of Concern or other non-Areas of Concern with sediment remediation. The second format depicts the yearly and cumulative totals on a calendar year basis graphically. Sediment remediation volumes are reported in the year following the completion of work, thus, results from calendar year 2013 remediation will be reported in FY 2014.

GLNPO first sums the data as reported by the individual project managers (after converting all volumes into cubic yards, if necessary) and then rounds the total. The yearly volume total is rounded to the nearest one thousand cubic yard and the cumulative volume total is rounded to the nearest one hundred thousand cubic yard.

Units: Cubic yards

Universe: The universe of contaminated sediments requiring remediation in the Great Lakes is believed to have been approximately 46.5 million cubic yards in 1997.

Baseline: 3.7 million cubic yards cumulative total in calendar year 2004 (reported FY 2005) (Great Lakes Action Plan baseline is 5.5 million cubic yards through calendar year 2007, reported in FY2008.)

Measure Code: GL-05

Measure Language: Number of beneficial use impairments removed within Areas of Concern. (cumulative)

Type of Measure: Target measure; Annually reported

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Measure Definition Please see additional information available at: http://www.epa.gov/glnpo/aoc/index.html

Terms and phrases:

- An *impaired beneficial use* means a change in the chemical, physical or biological integrity of the Waters of the Great Lakes sufficient to cause any of the following:
  - restrictions on fish and wildlife consumption;
  - tainting of fish and wildlife flavor;
  - degradation of fish wildlife populations;
  - fish tumors or other deformities;
  - bird or animal deformities or reproduction problems;
  - degradation of benthos;
  - restrictions on dredging activities;
  - eutrophication or undesirable algae;
  - restrictions on drinking water consumption, or taste and odor problems;
  - beach closings;
  - degradation of aesthetics;
  - added costs to agriculture or industry;
  - degradation of phytoplankton and zooplankton populations; and
  - loss of fish and wildlife habitat.

- *Great Lakes Areas of Concern* (AOC) are severely degraded geographic areas within the Basin. They are defined by the U.S.-Canada Great Lakes Water Quality Agreement (Annex 1 of the 2012 Protocol) as "a geographic area designated by the Parties where significant impairment of beneficial uses has occurred as a result of human activities at the local level." Additional information is available at: http://www.epa.gov/glnpo/aoc/index.html

Methodology for computation of results: This measure tracks the cumulative total Beneficial Use Impairments (BUIs) removed within the 26 Areas of Concern (AOC) located entirely within the United States and the 5 AOCs that are shared by both the United States and Canada.

A BUI is determined to be removed when:

- A state or other local stakeholder has established the delisting criteria.
- A state or other local stakeholder has developed the appropriate Remedial Action Plan (RAP).
- All management actions necessary for removal of the BUI (determined by the RAP) have commenced and the delisting targets have been met. Also, the state needs to show that monitoring data indicates that the delisting targets have been met and environmental conditions have improved such that the impairment no longer exists.

After all BUIs in an AOC are de-listed, the entire AOC can be de-listed.

Restoration of U.S. or Bi-national AOCs will ultimately be measured by the removal of all beneficial use impairments, leading to de-listing of all of the U.S. or Bi-national AOCs. A total of 43 Great Lakes Areas of Concern have been identified: 26 located entirely within the United States; 12 located wholly within Canada; and 5 that are shared by both countries. As of July 2013, 29 United States or Bi-national Areas of Concern remain. Remedial Action Plans for each of these AOCs address one or more of the 14 beneficial use impairments associated with these areas.

Units: Beneficial Use Impairments (BUIs)

Universe: At the end of FY 2006, there was a total universe of 256 beneficial use impairments reported in the 31 United States or Bi-national Areas of Concern

Baseline: The baseline (the total of beneficial use impairments that had been removed) in the Great Lakes Action Plan (through 2009) for this measure was 11. As of summer 2013, 37 BUIs have been removed.

Measure Code: GL-06

Measure Language: Number of aquatic nonnative species newly detected in the Great Lakes ecosystem.

Type of Measure: Target measure; Annually reported

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Measure Definition

Terms and phrases: Aquatic nonnative (non-indigenous) species includes aquatic, wetland, and coastal species. More than 180 such species now have become established in the Great Lakes,causing the degradation of habitat and adverse impact on native species and the food webs.

Methodology for computation of results: The Great Lakes have a long history of aquatic non-native species introductions – both intentional and unintentional. A number of ongoing federal programs are working to reduce the rate of introductions. The programs supported by GLRI funding will reduce the rate of introductions, enhanced rapid response efforts, and reduce the rate of establishment of new species. During the ten-year period prior to the Great Lakes Restoration Initiative (2000-2009), ten new non-native species were discovered to have become established within the Great Lakes. This is a baseline rate of invasion of 1.0 species per year. Changes in the rate will be assessed by extending this cumulative average into the time period of the GLRI (2000-present).

This methodology assumes that the detection of established populations of non-native species in the environment correlates with actual invasion rates. It is recognized that there can be lag time in discovery because the Great Lakes ecosystem receives the input of a number of vectors that introduce invasive species -- including, live organisms in commerce, canals/waterways, ballast water, and recreational and resource users activities -- the results of the GLRI effort cannot be measured independently from the suite of other ongoing U.S. and Canadian programs at work in the Great Lakes.

Great Lakes Aquatic Nonindigenous Species Information System (GLANSIS) functions as a Great Lakes specific node of the USGS Nonindigenous Aquatic Species (NAS) national database. Information entered for GLANSIS automatically appears in NAS. GLANSIS provides targeted access to the information – especially collection records – for established Great Lakes nonindigenous species in the NAS Database. The list of aquatic nonindigenous species found via GLANSIS is subject to constant revision based on the following criteria: (a) Geographic criterion, (b) Aquatic criterion, (c) Nonindigenous criterion, and (d) Established criterion.

Units: Number of established non native-species, Average species/year

Universe: 181 non-native species detected in the Great Lakes basin.

Baseline: 1 species/year is the starting rate of invasion (2000-2009), based on a reassessment and reclassification by NOAA scientists.

Measure Code: GL-07

Measure Language: Number of multi-agency rapid response plans established, mock exercises to practice responses carried out under those plans, and/or actual response actions (cumulative).

Type of Measure: Target measure; Annually reported

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Measure Definition

Terms and phrases:

- *Multi-agency rapid response plans* are location-specific or species-specific plans that describe how multiple government agencies will initiate surveillance activities to detect new Aquatic Nuisance Species (ANS) and establish the capacity, methods and contingency plans for a rapid response. The principle plans supporting these actions are the State ANS Management Plans created under the Aquatic Nuisance Species Prevention and Control Act. State ANS Management Plans are approved by the (National) Aquatic Nuisance Species Task Force as a requirement to obtain funding under Section 1204 of the ANSPCA. Implementation of these State ANS Plans will result in a comprehensive multi-state agency program to address the problems caused by aquatic invasive species. Joint planning will allow the mobilization of shared resources to create the best opportunity for eradicating species before they become established.
- *Mock exercises* range from "table top" discussions to fully-simulated drills in which individuals and agencies establish appropriate responses to a fictional scenario. Mock exercises provide a cost-effective method for testing response capabilities in advance of an actual detection of an invasive species.
- *Response actions* are those intended to eradicate a population of invasive species or reduce the population to as close to zero as possible so that the population cannot become established and self-sustaining. Response actions can push back the front line of invasion; remove strategic pockets of an infestation, and/or target removal efforts at an ecologically and/or economically significant area.
- *Rapid* is defined in the context of the specific species and the ecology of the invasion site. In contrast to chemical emergencies in which response occurs in a matter of days or hours, biological response actions may occur within days or months and, in rare cases, several years after detection. The criteria for "rapid" refers to the response taking place before the species can become widely established. Biological response actions are typically complex and require the consideration of not just the removal of invasive species, but also the protection and/or minimization of damage to the native resources within the invasion site. As a result, natural resource managers spend a significant amount of time planning before mobilization and responding to new invasions. Species with slower growth rates, invasion sites with lower productivity, and/or the initial containment of invasion sites can provide for additional time for planning strategic and efficient response actions.

Methodology for computation of results: The cumulative total number plans/exercises/actions will be coordinated by the Invasive Species Focus Area Lead, relying on input from key experts.

Units: Number of Multi-agency rapid response plans, rapid response exercises or actions.

Universe: n/a: The universe represents all rapid response plans that could be done and all exercises/actions which may be done in the Great Lakes. It is not practical to develop these numbers.

Baseline: 0 Plans, 0 response exercises/actions (FY 2009)

Measure Code: GL-09

Measure Language: Acres managed for populations of invasive species controlled to a target level (cumulative).

Type of Measure: Target measure; Annually reported

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Measure Definition

Terms and phrases:

- *Acres managed* is the total geographic area addressed by a management action, recognizing that most invasive species infestations will vary in their percent coverage.
- *Invasive species* refer to nonnative species that tend to overtake and exclude native species. During typical restoration efforts, invasive species are specifically targeted along with other nonnative species, so that native species are restored.
- *Target level* is the end-state desired by management agencies. The typical goal of management at site-specific locations is to reduce invasive species to levels as close to zero as possible. There may be limitations given the control techniques available for the targeted species. More extensive species-specific management programs, such as the Sea Lamprey control program, have regional targets for eradication.

Methodology for computation of results: The cumulative total number acres managed as a results of GLRI-funded projects will be calculated using the GLRI Accountability System database.

Units: Acres

Universe: n/a: the universe represents all possible acres which could be treated in the Great Lakes.

Baseline: 0 (FY 2009)

Measure Code: GL-10

Measure Language: Percent of populations of native aquatic non-threatened and endangered species self-sustaining in the wild (cumulative).

Type of Measure: Target measure; Annually reported

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Measure Definition

Terms and phrases:

- *Native:* Any species within historic range, with the Great Lakes Basin area occupied at the time of European colonization of North America.
- *Aquatic species:* An organism which lives in water (Great Lakes) most or all of its life.
- *Non-threatened* and *non-endangered:* A species not protected under the Endangered Species Act but capable of maintaining itself independently.
- *Self-sustaining:* In general, a population may be considered self-sustaining if no augmentation is required by hatchery or out-of-basin fish; the genetic component is sufficient and habitat requirements are met without further human intervention.

Methodology for computation of results: Data are reported on an annual basis (September of the fiscal year) to the Department of the Interior, Office of Management and Budget, and Congress in the Service's Operational Plan. The U.S. Fish and Wildlife Service (Service) Fisheries Information System (FIS), is a component of the Environmental Conservation Online System (ECOS). The FIS *Populations Module* provides information on what is known about populations of aquatic species (i.e., status, trend, geographic location, management plans, etc.) and has broad scientific utility.

Units: Native aquatic non-threatened and endangered species

Universe: 147. The universe represents all that is likely possible to protect, restore, and enhance native aquatic non-threatened and endangered species.

Baseline: 39/147 (27%) (FY 2009)

Measure Code: GL-11

Measure Language: Number of acres of wetlands and wetland-associated uplands protected, restored and enhanced (cumulative).

Type of Measure: Target measure; Annually reported

Measure Contact: Michael Russ, EPA Great Lakes National Program Office

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Measure Definition

Terms and phrases:

Wetlands are defined as lands where saturation with water is the dominant factor determining the nature of soil development and the types of plants and animal communities living in the soil and its surface (http://water.epa.gov/lawsreg/guidance/ wetlands/definition.cfm)

Wetlands-associated uplands are forests, shrublands, and grasslands adjacent to wetlands that are used by wetland species as part of their life cycle.

Protected means stress to ecosystems have been prevented.

Restored means the ecosystem has recovered from degradation, damage or destruction.

Enhanced means the value and effectiveness of habitats and species has increased.

Methodology for computation of results: The cumulative total number acres managed as a results of GLRI-funded projects will be calculated using the GLRI Accountability System database.

Units: Acres of wetlands and associated uplands

Universe: 550,000. The universe represents all acres of wetlands and wetland-associated uplands that are likely possible to protect, restore and enhance.

Baseline: 0 (FY 2005)

Measure Code: GL-12

Measure Language: Number of acres of coastal, upland, and island habitats protected, restored and enhanced (cumulative).

Type of Measure: Target measure; Annually reported

Measure Contact: Michael Russ, EPA Great Lakes National Program Office

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Measure Definition

Terms and phrases:

- *Coastal* means the physical structure and living communities of the land along the Great Lakes dominated by the effects of the Great Lakes, including wind, wave action, hydrology, temperature and humidity. (Reid, R. and Holland, K. Land by the Lakes, Nearshore Terrestrial Ecosystems. December 1997. Environment Canada and U.S. Environmental Protection Agency for the State of the Lakes Ecosystem Conference 1996).
- *Upland* means areas inland from the Great Lakes, consisting of the entire Great Lakes watershed, that support a diverse biota, including numerous forest types, barrens, prairies, savannas, and bedrock communities as well as inland lakes and ponds. (The Nature Conservancy. *Conservation of Biological Diversity in the Great Lakes Basin Ecosystem: Issues and Opportunities*. January 1994).
- *Island* means any land mass (natural or anthropogenic) within the Great Lakes or connecting channels that is surrounded by an aquatic ecosystem (Collaborative for the Conservation of Great Lakes Islands, *Island of Life*. 2010).
- *Protected* means stress to ecosystems have been prevented.
- *Restored* means the ecosystem has recovered from degradation, damage or destruction.
- *Enhanced* means the value and effectiveness of habitats and species has increased.

Methodology for computation of results: The cumulative total number acres manged as a result of GLRI-funded projects will be calculated using the GLRI Accountability System database.

Units: Acres of coastal, upland and island habitats

Universe: In 2005, the Great Lakes Regional Collaboration estimated that 1,000,000 total acres of coastal, upland and island habitats that potentially could be protected, restored, and enhanced.

Baseline: 0 acres of coastal, upland and island habitats (FY 2005).

Measure Code: GL-13

Measure Language: Number of species delisted due to recovery.

Type of Measure: Target measure; Annually reported

Measure Contact: Michael Russ, EPA Great Lakes National Program Office

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Measure Definition

Terms and phrases:

- *Species Delisting*: A process for removing a species from the lists of threatened and endangered species pursuant to 50 CFR 424.11: Factors for listing, delisting or reclassifying species. Title 50-Wildlife and Fisheries.
- *Recovery*: The process that stops the decline of an endangered or threatened species by removing or reducing threats. Recovery ensures that long-term survival of the species in the wild. At that point, the species is recovered, and protection of the ESA is no longer necessary. The law's ultimate goal is to "recover" species so they no longer need protection under the ESA. Recovery plans describe the steps needed to restore a species to ecological health. FWS biologists write and implement these plans with the assistance of species experts; other federal, state and local agencies; Tribes; nongovernmental organization; academia; and other stakeholders.

Methodology for computation of results: The U.S. Fish and Wildlife Service (Service) Threatened and Endangered Species System (TESS) and Recovery Online Activity Reporting system (ROAR) are both components of the Service's Environmental Conservation Online System (ECOS) (see reference below). Databases provide current reports of all federally listed animals and plants, as well as recovery plan information (i.e., plan access, action status, etc.) The Service's Endangered Species Program is the principal source of data. Cooperating organizations include other federal agencies, states, Tribes, and non-governmental partners that assist implementation of recovery actions. Before a plant or animal species can receive protection under the Endangered Species Act, it must first be placed on the Federal list of endangered and threatened wildlife and plants. To delist a species, the Service is legally required to determine that threats have been eliminated or controlled, based on several factors including population sizes and trends and the stability of habitat quality and quantity. The number of species delisted are reported annually in ECOS (September of the fiscal year) and to the Department of the Interior, Office of Management and Budget, and Congress in the Service's Operational Plan. The numbers of species delisted are reported as a cumulative metric. Delisting determinations are based on several complex factors (see reference), including annual and cumulative.

Units: Number of species delisted due to recovery

Universe: 28 species possible to delist due to recovery.

Baseline: 0 species delisted (FY 2005).

Measure Code: GL-16

Measure Language: Acres in Great Lakes watershed with USDA conservation practices implemented to reduce erosion, nutrients, and/or pesticide loading.

Type of Measure: Target measure; Annually reported

Measure Contact: Michael Russ, EPA Great Lakes National Program Office

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Measure Definition

Terms and phrases:

- *USDA Conservation Practices* are programs under the Farm Bill designed to reduce sediment, nutrient, and pesticide loading. .
- *Farm Bill*: The 2008 farm bill (P.L. 110-246, Food, Conservation, and Energy Act of 2008) contained 15 titles covering support for commodity crops, horticulture and livestock, conservation, nutrition, trade and food aid, agricultural research, farm credit, rural development, energy, forestry, and other related programs. It also included tax-related provisions and some new spending initiatives. The bill succeeds the 2002 farm bill (P.L. 107-171) and guides most federal farm and food policies through FY2012. The farm bill undergoes review and reauthorization roughly every five years.
- *EQIP: Environmental Quality Incentives Program*. This Farm Bill program offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible agricultural land. The practices are subject to NRCS technical standards adapted for local conditions.
- *CTA: Conservation Technical Assistance*. This Farm Bill program provides technical assistance supported by science-based technology and tools to help people conserve, maintain, and improve their natural resources, including direct conservation planning, design and implementation assistance.

Methodology for computation of results Natural Resources Conservation Service staff and conservation partners enter geo-located conservation planning and application information into the NCP daily. These data are the result of landowner/producer planning decisions and in-field certification of applied conservation practices. Certification occurs only after an applied practice meets NRCS standards and specifications. Conservation planning and application documentation warehoused in the NCP are date-stamped, geo-referenced and linked to an employee ID, enabling detailed quality-assurance reviews. Periodic in field reviews (spot checks_ are conducted to assess the accuracy of reported field data. Data are compiled by NRCS and provided to EPA staff.

Units: Acres in Great Lakes basin watershed

Universe: n/a

Baseline: 165,000 acres