



Great Lakes Restoration Initiative

Action Plan II Measures Reporting Plan

September 26, 2017

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Introduction

The Great Lakes Restoration Initiative Action Plan II¹ (Action Plan II) summarizes the actions that federal agencies plan to implement during FY 2015-2019 to protect and restore the largest fresh surface water system in the world. These actions build on restoration and protection work carried out under the first GLRI Action Plan. Activities are conducted in the following five Focus Areas:

- Toxic Substances and Areas of Concern
- Invasive Species
- Nonpoint Source Pollution Impacts on Nearshore Health
- Habitats and Species
- Foundations for Future Restoration Actions

Measures of Progress

34 Measures of Progress have been developed to track all actions implemented under Action Plan II. 10 of these Measures have annual targets and the remaining 24 Measures are “indicator” measures that do not have targets. Progress under the Action Plan II measures also supports Goal 2 of EPA’s *FY 2014-2018 Strategic Plan*.

EPA is the lead agency responsible for coordinating reporting activities of the Great Lakes Regional Working Group to report on the Measures in Action Plan II.

The *GLRI Action Plan II Measures Reporting Plan* (Measures Reporting Plan) is intended to be used by the Regional Working Group as a tool to support consistent and accurate reporting on the Measures. It is also intended to support the quality and reliability of data input into the Environmental Accomplishments in the Great Lakes (EAGL) information system. The EAGL system is EPA’s information system for collecting results achieved against the Measures by GLRI-funded projects.

Results collected in the EAGL system are used in reporting to headquarters, Office of Management and Budget, and other stakeholders through the Annual Commitment System Reporting, the Government Performance and Results Modernization Act, and the Great Lakes Restoration Initiative Annual Report to Congress and the President.

This Plan will be updated as needed.

¹ <http://greatlakesrestoration.us/actionplan/pdfs/glri-action-plan-2.pdf>

Summary of Significant Changes

The March 27, 2017 Measure Reporting Plan has been revised for clarification and to address issues that arose during the FY17Mid-Year Data Call. This Summary describes the following key changes incorporated in the September 13, 2017 Measures Reporting Plan that affect data entry into the Environmental Accomplishments in the Great Lakes (EAGL) information system:

<u>Measure of Progress</u>	<u>Current Lead</u>	<u>New Lead</u>
Focus Area 1	Marc Tuchman	
1.1.1	John Perrecone & Marc Tuchman	Amy Pelka
1.1.2	John Perrecone & Marc Tuchman	John Perrecone
1.2.1	Amy Pelka	Jackie Fisher
1.2.2	Beth Murphy	
Focus Area 2	James Schardt	Jackie Adams
2.1.1	James Schardt	Jackie Adams
2.1.2	James Schardt	Jackie Adams
2.1.3	James Schardt	Jackie Adams
2.2.1	James Schardt	Jackie Adams
2.2.2	James Schardt	Jackie Adams
2.3.1	James Schardt	Jackie Adams
2.3.2	James Schardt	Jackie Adams
Focus Area 3	Jackie Adams	Santina Wortman & Danielle Green
3.1.1	Kevin O'Donnell	Santina Wortman
3.1.2	Kevin O'Donnell & Jackie Adams	Santina Wortman
3.1.3	Kevin O'Donnell & Jackie Adams	Santina Wortman
3.2.1	Jackie Adams	Danielle Green
3.2.2	Jackie Adams	Danielle Green
3.2.3	Kevin O'Donnell & Jackie Adams	Danielle Green
Focus Area 4	Kevin O'Donnell	
4.1.1	Kevin O'Donnell	
4.1.2	Kevin O'Donnell	
4.1.3	Kevin O'Donnell	
4.1.4	Kevin O'Donnell	
4.2.1	Kevin O'Donnell	
4.2.2	Kevin O'Donnell	
Focus Area 5	Todd Nettesheim	
5.1.1	Todd Nettesheim	Mike Russ
5.1.2	Todd Nettesheim	Mike Russ
5.2.1	Todd Nettesheim	Nicole Singleton
5.2.2	Todd Nettesheim	Nicole Singleton
5.3.3	Todd Nettesheim	Derek Ager
5.3.4	Todd Nettesheim	Derek Ager
5.3.5	Todd Nettesheim	Derek Ager
5.3.6	Todd Nettesheim	Derek Ager
5.3.7	Todd Nettesheim	Derek Ager

How to use the GLRI Action Plan II Measures Reporting Plan

Each Measure in this Plan is defined by 14 sections:

Sections 1-8: Consist of general information regarding each Measure including: Measure Code, Measure Language, Type of Measure, Action Plan II Targets for the Measure, EPA Measure Lead, Units, Universe Baseline.

Sections 8-9: Provide definitions of Measure terms, guidelines on the acceptability or unacceptability of data, and descriptions of acceptable calculation methodologies. Data providers should make frequent reference to these sections.

Sections 10-12: Describe the EAGL information system and responsibilities for gathering, storing, summarizing, and tracking information in the EAGL information system. Each agency is responsible for its own data.

Section 13-14: Describe Data Quality Procedures, Data Limitations and Qualifications.

Agencies are responsible for only reporting results in accordance with the definitional requirements of the Measures in the Measures Reporting Plan.

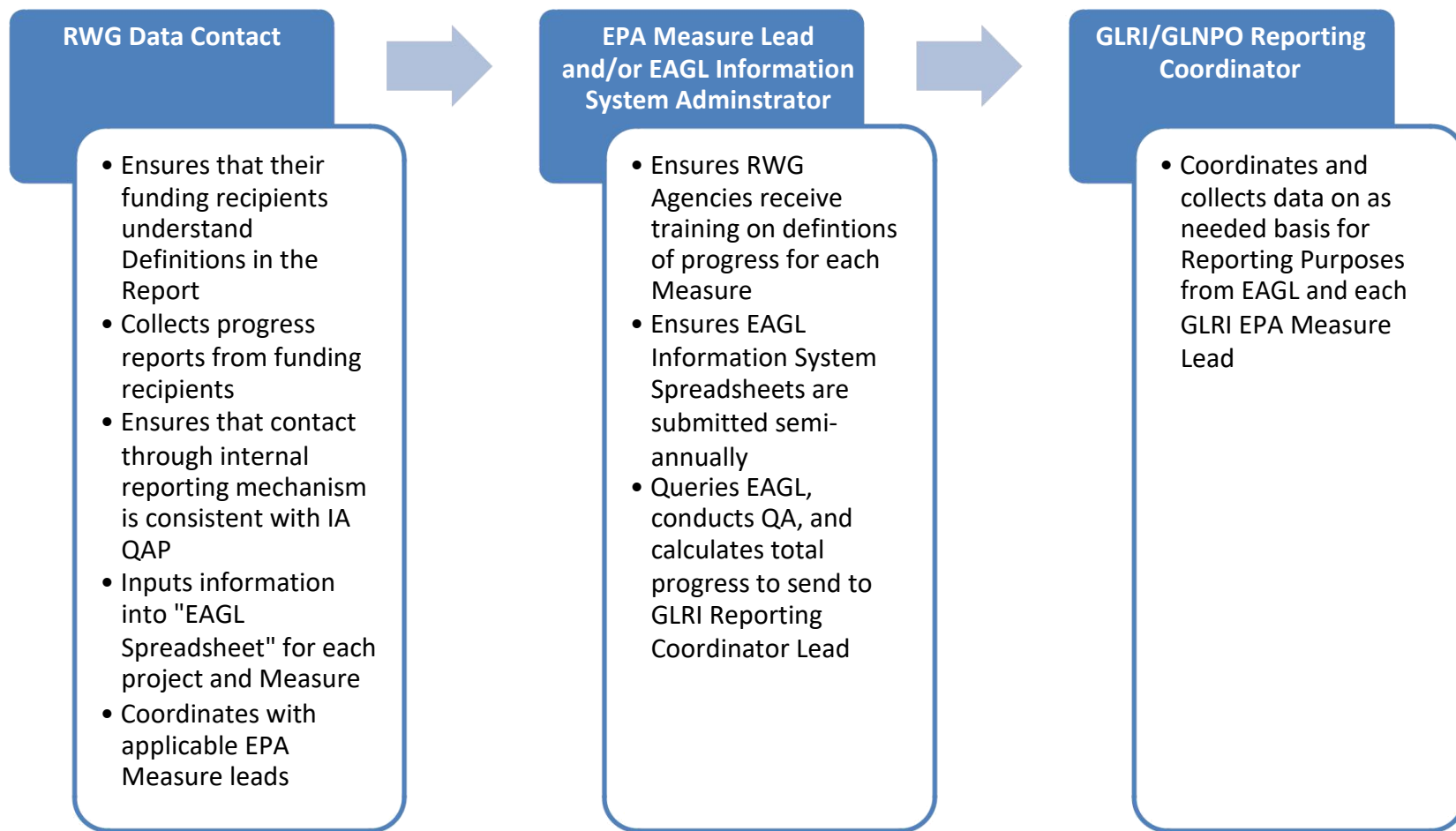


Figure 1. GLRI Action Plan II Measures of Progress data collection and reporting processes

Definitions

Great Lakes Restoration Initiative (GLRI): The GLRI was launched in 2010 to accelerate efforts to protect and restore the largest system of fresh surface water in the world – to provide additional resources to make progress toward the most critical long-term goals for this important ecosystem. The GLRI advances federal agency coordination through the Interagency Task Force and the Regional Working Group. GLRI Action Plan II, developed by the agencies, summarizes actions federal agencies plan to implement during FY 2015-2019 within the Focus Areas referenced above.

For more information: http://greatlakesrestoration.us/_Great_Lakes_Restoration_Initiative

Great Lakes National Program Office (GLNPO): Under Executive Order 13340, the Great Lakes National Program Office of the Environmental Protection Agency assists the Interagency Task Force and the Regional Working in the performance of their functions. The Great Lakes National Program Manager is chair of the Regional Working Group.

For more information: <http://www2.epa.gov/aboutepa/about-great-lakes-national-program-office-glnpo>

Great Lakes Regional Working Group (RWG): The RWG is composed of the appropriate regional administrator or director with programmatic responsibility for the Great Lakes system for each agency represented on the Task Force including: the Great Lakes National Program Office of the Environmental Protection Agency; the United States Fish and Wildlife Service, National Park Service, and United States Geological Survey within the Department of the Interior; the Natural Resources Conservation Service and the Forest Service of the Department of Agriculture; the National Oceanic and Atmospheric Administration of the Department of Commerce, the Department of Housing and Urban Development; the Department of Transportation; the Coast Guard within the Department of Homeland Security; and the Army Corps of Engineers within the Department of the Army. The RWG coordinates and makes recommendations on how to implement the policies, strategies, projects, and priorities of the Task Force.

Environmental Accomplishments in the Great Lakes (EAGL) Information System: The EAGL information system is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress.

Focus Areas/Leads: The current Leads for each Focus Area are listed in this report.

Toxic Substances and Areas of Concern: Marc Tuchman
(tuchman.marc@epa.gov / 312-353-1369)

Invasive Species: Jackie Adams
(adams.jacqueline@epa.gov / 312-353-7203)

Nonpoint Source Pollution Impacts on Nearshore Health:
Santina Wortman – Agriculture – (wortman.santina@epa.gov / 312-353-8319)
Danielle Green – Urban – (green.danielle@epa.gov / 312-886-7594)

Habitats and Species: T. Kevin O'Donnell
(odonell.thomas@epa.gov / 312-886-0813)

Foundations for Future Restoration Actions: Todd Nettesheim
(nettesheim.todd@epa.gov / 312-353-9153)

The Focus Area Leads and the respective EPA Measure Leads are responsible for overseeing data transmitted and reported as final through the EAGL information system as described for the respective measures and for transforming transmitted data for final reporting.

EAGL Information System Administrator: The current EAGL Information System Administrator is Ken Klewin, GLNPO IT Specialist (klewin.kenneth@epa.gov / 312-886-4794). The EAGL system administrator administers the EAGL site; ensures RWG Agencies receive training on definitions of progress for each Measure; ensures EAGL Information System Spreadsheets are submitted semi-annually, and facilitates EPA Measures Leads and the GLRI/GLNPO Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

GLRI/GLNPO Reporting Coordinator: The current GLRI/GLNPO Reporting Coordinator is Mike Russ (russ.michael@epa.gov / 312-886-4013). The Reporting Coordinator coordinates with the Focus Area Leads and the EAGL System Administrator in utilizing data from EAGL to meet programmatic reporting requirements.

Focus Area 1 – Toxic Substances and Areas of Concern

(1.1.1) Areas of Concern where all management actions necessary for delisting have been implemented (cumulative)

1. Measure Code:

In Annual Commitment System: GL-SP31

In Action Plan: AP 1.1.1

2. Measure Language:

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

3. Type of Measure:

Budget, Action Plan, ACS Commitment (Target)

Action Plan II Targets					
Year	2015	2016	2017	2018	2019
AOCs	8	9	11	12	17

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

4. EPA Measure Lead:

Amy Pelka

312-886-6785

5. Units:

Areas of Concern

6. Universe:

There were once a total of 43 Great Lakes AOCs: 26 located entirely within the United States; 12 located wholly within Canada; and 5 shared by both countries. The Universe is considered to be the 31 United States or Binational AOCs.

7. Baseline:

The baseline is 7 AOCs where all management actions had been implemented as of October 1, 2014.

8. Definition of Measure Terms:

Great Lakes Areas of Concern (AOCs) are severely degraded geographic areas within the Basin. An AOC is described in 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."

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 delist the relevant Beneficial Use Impairments (BUIs) and, hence, 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, leading to the eventual delisting of the AOC.

What results are acceptable to count for this measure?

Completion of all of the state-identified Management Actions for an AOC. Examples of Management Actions include:

- A completed remediation project that will lead to controlling contamination source(s) in an AOC;
- A completed habitat restoration project that will lead to improving environmental conditions in an AOC

What results are unacceptable to count for this measure?

Ongoing or periodic monitoring programs that provide information on environmental conditions.

Staff work or time spent on projects that support the ongoing work at an AOC.

When to count results for this Measure:

Implementation of all management actions necessary for delisting of an AOC will be counted following delivery of either: (i) applicable State documentation to the effect that all the requisite work for all of the management actions at the AOC has been completed or (ii) a memo to the GLNPO Director from the applicable AOC Task Force Lead, through the appropriate EPA manager, verifying the completion of all management actions previously identified by the applicable State as necessary for delisting (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). The results of that completed work need not be realized in order for the necessary management actions to be completed.

(d) When to identify a project with this Measure:

Reporting for this Measure consists of identifying relevant projects with this Measure. Identification of a project with this Measure means selecting and assigning Measure 1.1.1 to the records of relevant projects in the EAGL information system.

Projects that may be identified with Measure 1.1.1 include:

Projects that contribute to the ultimate purpose of completing all management actions necessary for delisting an AOC

It is unacceptable to identify projects with Measure 1.1.1 if:

The project only indirectly contributes to the completion of such management actions.

The project consists of work implemented after an AOC has been delisted.

The project was completed prior to the start of Action Plan II (beginning October 1, 2014).

Relevant projects that are active during Action Plan II (beginning October 1, 2014) are identified with this Measure at least semiannually.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

Data necessary to track this Measure is provided by GLNPO's AOC Task Force Leads. The AOC Task Force leads are GLNPO staff members who oversee AOCs, including the tracking of BUIs and completion of management actions.

Task Force Leads receive their information from State AOC program managers. Local AOC leads provide information to State AOC leads.

(b) Data Collection

GLNPO relies on the AOC Task Force Leads to coordinate with their state and local counterparts to verify their information. When all management actions necessary to delist the AOC have been completed, the Task Force Lead documents that fact in a memorandum through the Measure Lead to the GLNPO Director.

Data about the management actions taken by AOC stakeholders (including state agency staff and managers and local AOC members) are collected and tracked by GLNPO Task Force Leads. Data is received from projects undertaken via GLRI funding and/or other state programs.

States identify the management actions necessary to remove BUIs and delist AOCs in documentation provided to GLNPO. EPA's Measure Lead collects information from Task Force Leads regarding the completion of management actions as they are completed throughout each year. This information is collected and maintained in AOC program files.

GLRI/RWG agencies may use a variety of methods to identify relevant projects in the EAGL information system with Measure 1.1.1 to the satisfaction of requirements in Section 8d above, such as a review of project workplans, or of periodic progress reports. The RWG/GLRI agency is responsible for storing all records and documentation used to support identification of relevant projects with Measure 1.1.1.

(c) Data Transmission

Documentation for any completions of management actions are transmitted to the Measure Lead by the Task Force Leads as management actions are completed. The Measure Lead reports results achieved since the start of GLRI Action Plan II (beginning October 1st, 2014) through the

end of the semi-annual reporting period, with documentation, into the EAGL information system at least semi-annually.

Agency contacts identify relevant projects with this Measure at least semi-annually directly through the EAGL information system. GLRI/RWG agencies are responsible for storing all records and documentation used to support the identification of relevant projects with this Measure.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. EAGL accepts data in the form of one standardized EAGL Information System Spreadsheet (EAGL Spreadsheet) from each RWG agency per semiannual Reporting Period (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>). For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator sums the result reported into EAGL by the Measure Lead with the baseline value to calculate the final reported value, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: GLNPO Technical Assistance and Analysis Branch, through the AOC Program Coordinator, located in the GLNPO Technical Assistance and Analysis Branch.

Source Data Reporting Oversight Responsibilities: Coordinate amongst federal, state, and tribal agencies; track and report on progress; and ensure supporting data and files are stored and maintained.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on the definition of progress for this Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; support the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator

Final Reporting Oversight Responsibilities: Review data input into EAGL by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with Targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Known sources of error include the provision of premature data by a state to the Task Force Lead.

(1.1.2) Area of Concern Beneficial Use Impairments Removed (cumulative)

1. Measure Code:

In Annual Commitment System: GL-05

In Action Plan: AP 1.1.2

2. Measure Language:

Area of Concern Beneficial Use Impairments Removed (cumulative)

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
60	65	72	78	85

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

4. EPA Measure Lead:

John Perrecone

(312) 353-1149

5. Units:

Beneficial Use Impairments

6. Universe:

A total of 255 BUIs have been identified in 26 AOCs located entirely within the United States and the 5 AOCs that are shared by both the United States and Canada.

7. Baseline:

The baseline is 52 BUIs removed. Of the 255 BUIs identified in the 31 United States or Binational AOCS, 52 have been removed as of October 1, 2014.

8. Definition of Measure Terms:

Areas of Concern: Great Lakes Areas of Concern (AOCs) are severely degraded geographic areas within the Basin. An AOC is described in 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."

Beneficial Use Impairments: This measure tracks the cumulative total number of beneficial use impairments (BUIs) removed within the 31 United States or Binational AOCs. Restoration of U.S. or Binational AOCs will ultimately be measured by the removal of all BUIs. Additional information is available at: <http://www.epa.gov/grtlakes/aoc/>. An impaired beneficial use means a change in the chemical, physical or biological integrity of the Great Lakes system 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
- loss of fish and wildlife habitat

Remedial Action Plans (RAP) for each of the AOCs address one or up to 14 BUIs associated with the AOC. State or local stakeholders establish BUI removal criteria for associated BUIs. RAPs are developed by the state for each AOC and outline the management actions needed to meet these criteria and thus remove the associated BUIs.

Removed: A removed BUI indicates that the state and GLNPO Director have ratified that all management actions necessary for removal of the BUI (determined by the RAP) have been completed and the BUI removal targets have been met. The state provides documentation that monitoring data indicates that the BUI removal targets have been met and environmental conditions have improved such that the impairment no longer exists.

What results are acceptable to count for this measure?

Monitoring data indicates that the BUI removal targets have been met and environmental conditions have improved such that the impairment no longer exists and the applicable state has submitted a BUI removal package to the GLNPO Director, and the GLNPO Director has transmitted the Approval Letter to the state, approving the state's BUI removal package.

What results are unacceptable to count for this measure?

All actions determined by the state or local stakeholder necessary through a RAP (or other removal criteria) to remove the BUI have not yet been completed
Monitoring data does not indicate that environmental conditions have improved to achieve the restoration targets.
The state has not transmitted a BUI removal package to the GLNPO Director.

The GLNPO Director has not transmitted the Approval Letter to the state, approving the state's BUI removal package.

When to count results for this Measure:

Results for this Measure count when the GLNPO Director transmits the Approval Letter to the state, approving their BUI removal package. The date of the Approval Letter is the date of the BUI removal.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The Measure Lead is the data source for results entered into EAGL for this Measure. The Measure Lead uses source information collected from the GLNPO Director and the applicable U.S. state to report results for this Measure.

(b) Data Collection

The measure lead collects data from the GLNPO Director and the applicable state, including letters from the State and the GNPO Director indicating that all management actions necessary for removal of the BUI have been completed and the BUI removal targets have been met.

When reasonable and realistic management actions have been completed for a BUI, the appropriate state informs EPA that local environmental conditions are improving and they are on a path to removing a BUI. EPA, state staff and local entities coordinate the information to address all comments, concerns and documentation that the BUI has met the removal targets. The BUI removal package is submitted by the state to the GLNPO Director via AOC Task Force Leads

The BUI removal package consists of a state letter and associated documentation to the effect that: (i) all management actions necessary for removal of the BUI have been completed and the applicable BUI removal targets have been met and (ii) monitoring data indicates that the BUI removal targets have been met and environmental conditions have improved such that the impairment no longer exists.

State requests to remove BUIs and/or to delist AOCs are reviewed according to the 2001 US Policy Committee document, **"Delisting Principles and Guidelines"** (<http://www.epa.gov/glnpo/aoc/rapdelistingfinal02.PDF>). After review, the GLNPO Director transmits the Approval Letter to the state, approving the BUI removal. The date of the Approval Letter is the date of the BUI removal.

(c) Data Transmission

EPA AOC Task Force Leads work with states to produce the BUI removal package. BUI removal packages are based on internal tracking and communications with Great Lakes states, the US Department of State, and the International Joint Commission. GLNPO maintains tracking for the removal of U.S. or binational BUIs in office files. Data includes information (such as formal letters and other supporting documentation) supplied by EPA, the other federal agencies and the state and local agencies involved in AOC work.

EPA's AOC Task Force Leads transmit the state-verified BUI removal request package to the GLNPO Director. Upon review, the GLNPO Director transmits an Approval Letter certifying the BUI removal. The date of the Approval Letter is the date of the BUI removal.

A copy of the Approval Letter is kept with the Measure lead in the BUI program files and included in the EAGL system to document the result. Information is collected for this Measure as it is achieved. The Measure Lead transmits the number of BUIs removed since the start of GLRI Action Plan II (beginning October 1st, 2014), with documentation, in the EAGL system at least semi-annually.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts the number of BUI removals since the start of GLRI Action Plan II (beginning October 1st, 2014) through the end of the Reporting Period submitted by the Measure Lead. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead's submission into EAGL for completeness and reasonableness. The Reporting Coordinator sums the result reported into EAGL by the EPA Measure Lead with the baseline value to calculate the final reported value, and submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: GLNPO Technical Assistance and Analysis Branch, through the AOC Program Coordinator, located in the GLNPO Technical Assistance and Analysis Branch.

Source Data Reporting Oversight Responsibilities: Coordinate amongst federal, state, and tribal agencies; track and report on progress; and ensure supporting data and files are maintained.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on the definition of progress for this Measure; assist the Measure Lead in submitting data for this Measure into EAGL; support the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator

Final Reporting Oversight Responsibilities: Review data input into EAGL by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with Targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

Data Limitations/Qualifications:

General/Qualifications: GLNPO relies on verification by the States to provide monitoring data and supporting documentation that indicates that BUI removal targets have been met and a BUI can be removed. EPA technical staff review such requests, as input to management decisions. Known sources of error include the input of unacceptable data by a state or local partner, data that is incomplete regarding management actions and other data that may be applicable to actions in the AOC but are not relevant to actions that lead to BUI removal. When all BUIs have been removed the site is eligible for the state to formally request delisting as an AOC.

Data Lag Length and Explanation: None expected from the time the GLNPO director transmits the approval letter. Approval itself could take up to a month after a State transmits its letter and associated documentation.

(1.2.1) Number of people provided information on the risks and benefits of Great Lakes fish consumption by GLRI-funded projects

Measure Code:

Not in ACS

In Action Plan: AP 1.2.1

Measure Language:

Number of people provided information on the risks and benefits of Great Lakes fish consumption by GLRI-funded projects

Type of Measure:

Action Plan.

EPA Measure Lead:

Jackie Fisher

312-353-1481

Units:

People

Universe:

N/A

Baseline:

0. For the purposes of the GLRI, the baseline of “0” defines the status of efforts on October 1, 2014 at the initiation of this effort. Data previously collected by individual states, tribes or Federal agencies cannot be assimilated to establish a different meaningful baseline.

8. Definition of Measure Terms:

GLRI-funded project means an organized activity or set of activities conducted during a fiscal year that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

Number of people means the total number of individuals that are directly or indirectly provided information by means of a GLRI funded project.

Provided information means the dissemination of public health outreach messages targeted to populations who consume or potentially consume fish from the Great Lakes basin. Dissemination may include mixed media efforts and other communication channels (some interpersonal and some community-based).

Information related to the risks and benefits of consuming Great Lakes fish means information from Federal, Tribal, State, Universities or other institutions that have experience and skills to

provide the public with meaningful information on the risks and benefits of Great Lakes fish consumption.

(a) What results are acceptable to count for this measure?

The data collected by each GLRI funded project will vary per project and will be determined in accordance with the terms and conditions of the respective projects. Examples of acceptable results that can be counted include but are not limited to:

- Number of hits to a fish consumption website
- Number of people responding to a survey
- Number of people in a focus group
- Number of physicians who receive training
- Number of pamphlets printed and distributed
- Estimates of the number of people who are reached by print, radio or TV ads
- Estimates of the number of people who are reached by social media, etc.

Results from various projects may be acceptable, including:

- ATSDR bio monitoring project
- Great Lakes Indian Fish and Wildlife Commission- Mercury Fish Advisory Program
- Great Lakes Sports Fish Consumption Consortium
- State projects that relate to fish consumption, provided that the state, such as Wisconsin, has the capacity to measure the number of people retrieving information from their website
- Fish consumption advisory projects by States and Tribal Governments

What results are unacceptable to count for this measure?

- Unverified results reported by recipients that do not have the experience and skills to provide the public with meaningful information on the risks and benefits of Great Lakes fish consumption.
- Estimates of unique individuals “reached” or “potentially reached” that have not been approved by the GLRI/RWG agency. An estimation methodology would generally be included in project workplans.

When to count results for this Measure:

Results are counted only after a demonstration that they have been achieved. Approved estimated results from an activity may only be counted after the activity has occurred, not just when it was funded.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

Data for this measure is provided by the GLRI award recipient (grantee, Federal Agency, contractor, etc.) and is verified by program audits and ongoing evaluation efforts.

External organization(s) that may be data sources include those described above in 8 (a).

(b) Data Collection

Data may be collected by a GLRI/RWG agency or their funding recipients and sub-recipients using methodologies approved by the GLRI/RWG agency for counting unique individuals such as those contained in the [MassTAPP public health program guidance](#) for systematically measuring people served.

Methods for counting may include “direct” count measures of individuals reached, such as workshop attendance, as well as some indirect count measures. If approved by the GLRI/RWG agency, indirect measures could include counts from: google analytics measuring individuals reaching the advisory websites; purchases of fishing licenses; the number of state boat launch users in the Great Lakes (the program updates the kiosks at the launches with the advisory and boat users can be exposed to the information via that route); pamphlets distributed to WIC clinics, public health departments, district offices etc. coupled with an estimate of how many individuals visit those sites; press releases on the advisory coupled with a list of which newspapers, radio etc. picked up a story and their circulation.

(c) Data Transmission

For each project that achieves a result for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the appropriate reporting fields on a semi-annual basis until the project is complete:

Number of people provided information on the risks and benefits of Great Lakes fish consumption by GLRI-funded projects, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency’s EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record for any relevant Measures of Progress (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure’s total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final

reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Results from this Measure will be useful to provide a gross indication of progress and to assess the effectiveness of individual GLRI funded projects. Funding agencies can also use this Measure to identify successful outreach strategies that support this Measure. This Measure also helps provide a qualitative indication of progress on the Action Plan commitment to reduce human exposure to contaminants Great Lakes fish consumption. However, results from this Measure may over or under estimate the actual number of people provided information on the risks and benefits of Great Lakes fish consumption by GLRI-funded projects for various reasons, including:

State/Tribal Fish Advisory Programs have a limited number of tools or accounting systems at their disposal to measure the number of people provided information on the risks and benefits of Great Lakes fish consumption. While printed materials are occasionally produced as part of outreach and education projects, the majority of the Great Lakes residents retrieve fish consumption outreach and education information directly from the internet. As of September, 2015 only one state (WI) has the capacity to measure the number of people retrieving information from their website. Given the limited ability to account for the vast majority people retrieving fish consumption outreach and education information from the internet, it will be difficult to not only innumerate those individuals but it will be almost impossible to differentiate the number of people retrieving this information by GLRI project. Other estimates are speculative.

Collection methods and quality procedures may still need to be developed.

Results cannot be used as an indication of: (i) Great Lakes fish consumer's knowledge about contaminants or (ii) protection of vulnerable populations by reducing human exposure to contaminants from Great Lakes fish consumption.

(1.2.2) Number of GLRI-funded projects that identify and/or assess impacts of emerging contaminants on Great Lakes fish and wildlife

Measure Code:

Not in ACS

In Action Plan: AP 1.2.2

Measure Language:

Number of GLRI-funded projects that identify and/or assess impacts of emerging contaminants on Great Lakes fish and wildlife

Type of Measure:

Action Plan

EPA Measure Lead:

Beth Murphy

(312) 353-4227

Units:

Projects

Universe:

NA - The universe of potential projects which could measure CECs and/or CEC impacts may change over time depending on the needs of AP 1.2.2. The Universe may include the following:

USFWS Early Warning System Program

USGS Tributary Monitoring Program

USGS Tree Swallow Program

NOAA Mussel Watch Program

USACE Transcriptomics – Vicksburg, MS

USEPA Coastal Conditions Program (fish fillets)

USEPA Great Lakes Fish Monitoring and Surveillance Program

USEPA Office of Research and Development Bio-Effects Support

USEPA Integrated Atmospheric Deposition Network

Baseline:

0

8. Definition of Measure Terms:

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

Emerging contaminant means contaminants of emerging concern (CECs) described by the EPA as the chemicals that are “discovered in water that previously had not been detected or...detected at levels that may be significantly different than expected.”

(<http://water.epa.gov/scitech/cec/>)

Great Lakes fish and wildlife means fish and wildlife in the Great Lakes Basin.

What results are acceptable to count for this measure?

Relevant projects that are active beginning on or after October 1, 2014.

What results are unacceptable to count for this measure?

It is unacceptable to count a single program as multiple projects by subdividing the program by time, location, etc.

Results for a project under this measure may not be reported more than once each fiscal year.

When to count results for this Measure:

Results for this Measure may be conducted at multiple locations across the basin, but are only counted once per fiscal year.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Source data collection methodologies may include a review of project planning or progress reporting documents, such as workplans, or of quarterly, semiannual, or annual progress reports.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on an annual basis:

A numerical value such as “1” or “5” is entered into the results field to indicate the number of projects supporting this measure. If a project has already been reported in the previous reporting period or there is no subsequent result to report, a “0” should be entered into the results field to acknowledge that this field was reviewed.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency’s EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each

record against any relevant Measures of Progress (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure’s total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The result could be over or under-estimated to the extent that programs are represented as single or multiple projects. In this instance, error would be attributed to a misinterpretation of the definition of 'project' as it pertains to this Measure.

Focus Area 2 – Invasive Species

(2.1.1) Number of GLRI-funded Great Lakes rapid responses or exercises conducted

1. Measure Code:

In Annual Commitment System: GL- 07

In Action Plan: AP 2.2.1

2. Measure Language:

Number of GLRI-funded Great Lakes rapid responses or exercises conducted

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
8	8	8	8	8

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Rapid responses or exercises.

6. Universe:

N/A – The universe represents all rapid responses and exercises that could be done by GLRI-funded agencies. The universe is without limit.

7. Baseline:

0 – This is an annual measure in Action Plan II. The similar Action Plan I measure was cumulative. Targets were thus not comparable; consequently this measure starts with a baseline of “0.”

8. Definition of Measure Terms:

GLRI-Funded means the implementation of rapid responses or exercises wholly or partially supported by the use of GLRI funds.

Great Lakes means the implementation of responses or exercises must include the goal of preventing the introduction of invasive species to the Great Lakes basin. The actual location of the response or exercise may occur outside of the Great Lakes basin.

rapid means the response takes place in a timely manner before a species becomes widely established. The actual amount of time may vary significantly given the specific species and the ecology of the invasion site. Note: 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. 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.

response is an actual on-the-ground or in-the-water effort intended to reduce the population of an invasive species that is not widely established in the Great Lakes, including but not limited to netting, trapping, electrofishing, and the use of chemical treatments. In contrast, the word “control” is used for activities that reduce the population of already widely established species.

exercises are training drills, ranging from "table top" discussions to simulated on-the-ground or on-the-water actions, in which agencies practice responses to a fictional scenario. Exercises provide a cost-effective method for testing response planning and/or field techniques in advance of an actual detection of an invasive species.

conducted means implementation has been completed. Note that some rapid response activities can span months or years. A response or exercise is counted once it has been completed, not upon initiation.

What results are acceptable to count for this measure?

Exercises intended to rehearse multi-agency rapid response actions. May be done through in-person meetings (“table-top exercises”) or through field exercises.

In the case of multi-agency exercises, the result is equal to the number of agencies that act in the incident commander role.

On-the-ground or in-the-water response actions intended to eliminate small populations of invasive species before they have a chance to become widely spread.

Acceptable response actions are typically within the Great Lakes basin (watershed), but actions may be counted that are outside of the basin if they reduce the risk of a Great Lakes population becoming established, e.g, Asian Carp actions within the Chicago Area Waterway System.

What results are unacceptable to count for this measure?

Actions to reduce common, wide-spread invasive species from sites. (These are “control” actions.)

In the case of multi-agency exercises, it is unacceptable to count an agency’s participation as an exercise if it merely supports another agency acting in the incident commander role.

Actions done outside of the Great Lakes basin that do not reduce risk of invasion to the Great Lakes.

Activities implemented without the support of GLRI funding.

When to count results for this Measure:

A response or exercise is counted once upon completion of the response or exercise. Results are reported annually. Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

The GLRI/RWG Agencies’ funding recipients are expected to document their rapid response exercises for their GLRI/RWG agencies. The data collected by GLRI/RWG agencies is readily-available descriptions of the action funded by the agencies, including type of response, invasive species name, and start/end date for each year of appropriated GLRI funding. Agencies will use best professional judgment to develop a short action narrative. The lead agency will also use best professional judgment to identify the nearest city and choose a representative date (month, year) and representative coordinates (in latitude, longitude) for the action.

The EPA Measure Lead may collect additional information for this Measure from other agencies through independent inquiry. This inquiry may consist of emailing a spreadsheet containing the historical record of responses/exercises for updating by appropriate RWG agencies. As necessary, the EPA Measure Lead investigates and resolves discrepancies between data reported through the EAGL information system and data obtained through this inquiry.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact of the lead agency conducting the rapid response or exercise will enter the following information into the EAGL information system in the applicable reporting fields on a semi-annual basis:

Number of Great Lakes rapid responses or exercises conducted, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The cumulative number of responses and exercises is likely to be easily interpreted. Reporting will include a data lag for data collection and will therefore reflect the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

(2.1.2) Number of GLRI-funded projects that block pathways through which aquatic invasive species can be introduced to the Great Lakes ecosystem

Measure Code:

Not in ACS

In Action Plan: AP 2.1.2

Measure Language:

Number of GLRI-funded projects that block pathways through which aquatic invasive species can be introduced to the Great Lakes ecosystem

Type of Measure:

Action Plan

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Projects

6. Universe:

N/A - The universe represents all potential prevention projects that could be done by GLRI-funded agencies. The universe is without limit.

7. Baseline:

0. This is a new measure for the GLRI Action Plan II.

8. Definition of Measure Terms:

GLRI-funded project: an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose. Each project corresponds directly with a single record in EAGL and on GLRI.us.

block is a general term that applies to a wide range of actions that prevent introduction of invasive species or limit the movement of an invasive species beyond its current range.

pathways includes any means by which invasive species can be moved beyond their range, including: commercial shipping (ballast water and hull fouling); recreational boats (ballast, bilge, livewell and baitwell water and hull/trailer fouling); other recreational/resource users (hiking, birding, diving, hunting, shorefishing, waterplanes); aquatic organisms in commercial trade (nursery and water garden trade, bait shops, aquarium trade, and internet trade); and canals/waterways.

aquatic means species that grows, lives, or frequents water, including river, lake, coastal, and wetland environments.

invasive species means non-native species that are not intentionally introduced or managed within the Great Lakes basin ecosystem.

What results are acceptable to count for this measure?

Projects that prevent the establishment of invasive species in the Great Lakes basin ecosystem, including but not limited to enforcement and commercial harvesting of Asian Carps.

Projects that prevent the movement of species through commercial shipping, recreational boating, other recreational/resource use, commercial trade, and/or canals/waterways.

Projects may include but are not limited to: development of ballast water management programs, education and outreach campaigns, boat wash facilities, species risk assessments to inform management of organisms in trade, investigations of contamination by invasive species at various points of sale (internet trade, nursery trade, bait trade, etc.) .

What results are unacceptable to count for this measure?

Actions to reduce common, wide-spread invasive species from sites. (These are “control” actions.)

Actions done outside of the Great Lakes basin that do not reduce risk of invasion to the Great Lakes.

Activities implemented without the support of GLRI funding.

Projects that conduct rapid responses/exercises or consist of early detection monitoring are unacceptable to count for this Measure. These activities should be counted under Measures 2.1.1 and 2.1.3, respectively.

When to count results for this Measure:

Results for this Measure are counted when a project has been sufficiently planned and funded by the RWG agency (such as through the issuance of grants, signing of contracts, etc.) such that an agency can identify it as a new record in EAGL. A new record in EAGL is required whenever a project is funded with a new fiscal year’s appropriation; consequently, even if activities are conducted at the same place for the same purpose, those activities will count as separate projects for each new relevant appropriation that funds them.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

The data collected by Federal Agencies is readily-available descriptions of the GLRI-funded project or projects funded by the agencies.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semi-annual basis:

A numerical value such as “1” or “5” is entered into the results field to indicate the number of projects supporting this measure. If there is no subsequent result to report, a “0” should be entered into the results field to acknowledge that this field was reviewed.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency’s EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure’s total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports,

and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. Beginning in December of 2015 GLNPO's Quality Management System will be combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The cumulative number of projects is likely to be easily interpreted. Reporting could include a data lag for projects determined after issuance of the GLRI-funded grant or contract. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from six months to a year old depending on the timing of the tracking and reporting deadlines.

(2.1.3) Number of GLRI-funded early detection monitoring activities conducted

Measure Code:

Not in ACS

In Action Plan: AP 2.1.3

Measure Language:

Number of GLRI-funded early detection monitoring activities conducted.

Type of Measure:

Action Plan

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Activities

6. Universe:

N/A - The universe represents all potential early detection monitoring activities that could be done by GLRI-funded agencies. The universe is without limit.

7. Baseline:

0 - This is a new measure for the GLRI Action Plan II.

8. Definition of Measure Terms:

GLRI-funded means the implementation of monitoring activities wholly or partially supported by the use of GLRI funds.

early detection monitoring means monitoring that is intended to detect small populations of invasive species and communicate such detections to management agencies.

activities are defined as a groups of similar early detection monitoring actions.. A single activity is a monitoring program focused on a particular species or using a particular sampling approach.

conducted means the monitoring activity has commenced (*e.g.*, sample collection is being conducted) . Initiation requires activity beyond just funding, however the activity does not need to be fully completed to be counted. For reporting purposes, the date of the initial sample collection is when the monitoring was “conducted” during the fiscal year.

(a) What results are acceptable to count for this measure?

Monitoring activities that collect environmental data to detect small populations of invasive species in the Great Lakes basin ecosystem.

Monitoring activities may also take place outside of the Great Lakes basin ecosystem if the intent is to prevent these species from becoming established in the Great Lakes basin ecosystem. For example, Asian Carp monitoring activities in the Chicago Area Waterway System is acceptable to count for this measure.

Monitoring activities can include but are not limited to conventional fishing, electrofishing, netting, trapping, environmental DNA sampling, genomic techniques, and other molecular methodologies.

If multiple funding streams are used to conduct a single monitoring activity in a given fiscal year, report this one time under the funding stream that contributed most toward achieving the work.

It is acceptable to count multi-year monitoring activities once per fiscal year monitoring is conducted.

What results are unacceptable to count for this measure?

Individually counting multiple actions that support a single monitoring goal. The recording of multiple samples, conducting actions on different dates, or conducting actions at multiple locations to support a single monitoring goal should be grouped and reported as a single activity.

Counting a monitoring activity more than once during a fiscal year.

Monitoring to detect common, wide-spread invasive species already established in the Great Lakes basin.

Actions done outside of the Great Lakes basin that do not reduce risk of invasion to the Great Lakes.

Activities implemented without the support of GLRI funding.

It is unacceptable to count the same monitoring activity under more than one funding source. For example, if several state ANS plan grants are used to implement a single monitoring activity, it should only be reported once under the grant that provided most of the funding used to implement the work.

When to count results for this Measure:

Results for this Measure count when the monitoring has been “conducted” as defined in Section 8 above. A single monitoring activity is counted once each fiscal year the monitoring activity is “conducted.”

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

The data collected by Federal Agencies is descriptions of the action funded by the agencies.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semi-annual basis:

The number of GLRI-funded early detection monitoring activities conducted, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was be combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The cumulative number of early detection monitoring activities is likely to be easily interpreted. Reporting includes a data lag for data collection and therefore reflects the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from six months to a year old depending on the timing of the tracking and reporting deadlines.

GLRI-funded early-detection monitoring activities are counted and reported at the initiation of the activity, and do not have to be completed in order to be counted toward this Measure. Thus the reported results may differ from the number of GLRI-funded early-detection monitoring activities completed.

(2.2.1) Number of aquatic/terrestrial acres controlled by GLRI-funded projects

1. Measure Code:

In Annual Commitment System: GL-09

In Action Plan: AP 2.2.1

Measure Language:

Acres

Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
50,000	60,000	70,000	80,000	90,000

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Acres

6. Universe:

N/A - The universe represents all possible acres which could have invasive species removed in the Great Lakes. Data is not available to determine the total universe. Developing such data would be a significant resource commitment beyond the scope of the GLRI.

7. Baseline:

36,000 acres - This reflects the represents the total number of GLRI-funded responses and exercises funded under GLRI Action Plan 1 as of October 1, 2013.

8. Definition of Measure Terms:

Aquatic/terrestrial means all habitat types within the Great Lakes basin, whether they are covered in water or not.

Acres means the unit of area equivalent to 1/640th of a square mile or 43,560 square feet. Acres includes the total geographic area addressed by a management action, recognizing that most invasive species infestations will vary in their percent coverage. Acreage can be determined through a variety of means, including but not limited to line transects,

randomized plot sub-sampling, estimation based on photographic surveys, GPS mapping, and professional judgment.

Controlled means the acreage has received an initial treatment to reduce the populations of invasive species. While the typical goal of control projects is to reduce invasive species to levels as close to zero as possible, there is often a need for retreatment in order to support long-term restoration of the project site. The retreatment of acres that have already received an initial treatment from GLRI funded activities are not counted.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Acreage resulting from the initial treatment that reduces common, wide-spread invasive species from project sites.

Acreage may be terrestrial, wetland, or aquatic.

Acreage resulting from activities that are fully or partially funded through the GLRI.

What results are unacceptable to count for this measure?

Acreage resulting from the retreatment of acres that have already received an initial treatment from GLRI funding.

Acreage resulting from actions that address species that are not widely-established. (These are considered “rapid responses”.)

Acreage resulting from activities not funded by GLRI.

Acres that were surveyed for invasive species, but did not receive a control action

It is unacceptable to calculate the total acres as the sum of the area of each species controlled. The correct area is equal to the area of the parcel of land receiving initial treatment. For example, if a total of 10 acres are treated, which contains 7 acres of species A and 10 acres of species B, the correct area that should be reported is 10 acres, not 17 acres.

(c) When to count results for this Measure:

Results for this Measure count after the acre(s) has received initial treatment to reduce the populations of invasive species. Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This Measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients use various methods to calculate acreage including but not limited to line transects, randomized plot sub-sampling, estimation based on photographic surveys, use of GPS mapping, manual calculations through direct observation, and other methods using professional judgment acceptable to the GLRI funding agency.

(c) Data Transmission

For each project that achieves results for this measure, the GLRI designated RWG agency contact enters the following information into the EAGL system in the applicable reporting fields on a semi-annual basis until the project is complete:

Number of aquatic/terrestrial acres controlled by GLRI-funded projects, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the

Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Reporting may include a data lag for data collection and could actually reflect the cumulative progress as of the previous reporting period. Because a data lag could exist for both information

collection and reporting, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

(2.2.2) Number of tributary miles protected by GLRI-funded projects

Measure Code:

Not in ACS

In Action Plan: AP 2.2.2

Measure Language:

Number of tributary miles protected by GLRI-funded projects.

Type of Measure:

Action Plan

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Miles

6. Universe:

N/A – A universe would consist of all Great Lakes tributary miles that could need to be protected from invasive species upon realizing the existence of: (i) a threat from a specific species and (ii) a GLRI project that would be effective in stopping that threat. It is not possible to know all such threats or projects.

7. Baseline:

0. This is a new measure for the GLRI Action Plan II.

8. Definition of Measure Terms:

Tributary miles means the number of linear miles of a tributary (river, creek, and seasonal/intermittent streams) of a Great Lake.

Protected means the tributary is now unavailable for use by targeted invasive species due to implementation of GLRI-funded projects.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Tributary miles made unavailable for use by an invasive species by a physical, chemical, electrical or other type of a barrier.

Barriers need not completely exclude the species. Exclusion may focus on a critical season or life stage of an invasive species.

The most frequently GLRI funded barrier will be physical Sea Lamprey barriers which excludes adult lamprey from spawning locations in Great Lakes tributaries.

What results are unacceptable to count for this measure?

Tributary miles beyond the next obstructed pathway are not acceptable.

Tributary miles that are projected, rather than realized in the reporting period, are not acceptable.

When to count results for this Measure

Progress toward this Measure is counted when the project is complete and the barrier is in use. Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This Measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients may use various methods to calculate stream miles including walking the stream, Geographic Information System, the USACE stream mile calculator, manual calculations through direct observation, and other methods acceptable to the GLRI funding agency.

For USACE projects that install barriers that deny spawning habitat to Sea Lamprey, typically the following methodology is used:

The river miles of all tributaries upstream of the project is estimated using HUC12 or HUC8 boundaries (depending on the location of the project) and National Hydrography Dataset (NHD) data were used to determine the streams impacted by the project and their lengths (river miles).

The lengths of tributaries that are not passable due to existing, upstream dams over 3 feet in height are identified and subtracted. Information in the National Inventory of Dams and on State maintained lists of dams is reviewed for dams present within the studied watershed and how their physical characteristics that would prevent species passage, including their height (e.g., a dam with an elevation of 3+ feet).

River miles above the first impassable upstream barrier are subtracted from the total miles upstream of the project. The result is the number of river miles impacted by the completed project.

Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact enters the following information into the EAGL system in the applicable reporting fields on a semi-annual basis until the project is complete:

Number of tributary miles protected by GLRI-funded projects, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Information in the EAGL system is inputted by multiple Federal agencies using different methodologies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time. Reporting includes a data lag for data collection and therefore reflects the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

(2.3.1) Number of technologies and methods field tested by GLRI-funded projects

Measure Code:

Not in ACS

In Action Plan: AP 2.3.1

Measure Language:

Number of technologies and methods field tested by GLRI-funded projects

Type of Measure:

Action Plan

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Technologies and methods

6. Universe:

N/A The universe represents all potential technologies or methods that could be developed by GLRI-funded agencies. The universe is without limit.

7. Baseline:

55. This measure is a continuation of a GLRI Action Plan I objective; the cumulative total through FY 2014 was 55 technologies.

8. Definition of Measure Terms:

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

Technologies includes any type of physical, chemical, or biological management tool that prevents or controls invasive species, including but not limited to ballast water treatment technology, attractant or dispersal pheromones, electronic imaging technology, and molecular species detection tools.

Methods includes new approaches or protocols for effectively using existing tools for prevention or control of invasive species.

Field tested means completed testing in environments comparable to the Great Lakes basin ecosystem or under field-like conditions. Due to the potential risk of testing effectiveness on invasive species, some of the testing may be under simulated field conditions. Field testing is considered complete when the testing demonstrates the successful development of the technology or method for use in the Great Lakes.

What results are acceptable to count for this measure?

Technologies can include but are not limited to ballast water treatment technology, attractant or dispersal pheromones, electronic imaging technology, molecular detection tools.

Methods may include improvements in timing of treatment, combining multiple technologies to increase effectiveness, and other systematic approaches that prevent or control invasive species.

What results are unacceptable to count for this measure?

Technologies or methods that are not relevant to invasive species prevention and control in the Great Lakes.

Previously proven technologies or methods that are already in use in the Great Lakes.

Technologies or methods field tested without the support of GLRI funding.

Technologies or methods for which field testing has not yet been completed.

When to count results for this Measure:

Results are counted when field testing has been completed as defined in Section 8 above.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This Measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

GLRI/RWG agencies that fund the technology development include: DOT-MARAD for ballast water technology; White House-CEQ for technology developed for Asian Carp; and State Department-GLFC for Sea Lamprey control technology.

(b) Data Collection

The data collected by Federal Agencies includes descriptions of the technology/methods tested and the field testing conducted and funded by the agencies.

The EPA Measure Lead may collect additional information for this Measure from other agencies through independent inquiry. This inquiry may consist of emailing a spreadsheet containing the historical record of technologies/methods field tested for updating by appropriate RWG agencies. As necessary, the EPA Measure Lead investigates and resolves discrepancies between data reported through the EAGL information system and data obtained through this inquiry.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact enters the following information into the EAGL information system in the applicable reporting fields on a semiannual basis:

Number of technologies and methods field tested by GLRI-funded projects, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

The Invasive Species EPA Measure Lead uses best professional knowledge and judgment in collecting the information received from GLRI/RWG agencies and reviews submissions for unacceptable or incomplete data.

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The cumulative number of technologies/methods is likely to be easily interpreted. Reporting includes a data lag for data collection and therefore reflects the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from six months to a year old depending on the timing of the tracking and reporting deadlines.

(2.3.2) Number of collaboratives developed/enhanced with GLRI funding

Measure Code:

Not in ACS

In Action Plan: AP 2.3.2

Measure Language:

Number of collaboratives developed/enhanced with GLRI funding

Type of Measure:

Action Plan

EPA Measure Lead:

Jackie Adams

312-353-7203

Units:

Collaboratives

Universe:

N/A - The universe represents collaborations for all potential invasive species that are either present or could be introduced into the Great Lakes. There is not sufficient information to determine the universe of potential species. .

7. Baseline:

0 – This is a new measure for the GLRI Action Plan II.

8. Definition of Measure Terms:

GLRI-Funded means the development or enhancement of the collaborative wholly or partially supported by the use of GLRI funds.

collaboratives means a group of agencies and stakeholders which shares information on prevention or control technologies, best management practices, monitoring protocols, and/or the state of science of a single invasive species or several related species. Collaborations are often coordinated by a lead agency.

developed means the initiation of a new species-specific collaboration.

enhanced means the improvement of a collaboration including but not limited to receiving an increase in GLRI funding, offering additional services, expanding membership, or expanding outreach efforts.

(a) What results are acceptable to count for this measure?

Collaboratives by several agencies to better coordinate prevention or control activities of one or more invasive species. These collaborations should be planned to continue for several years.

Collaboratives developed and initiated under the GLRI Action Plan II (e.g. developed after October 1, 2014), provided it was funded by a GLRI appropriation, such as the Monoecious Hydrilla Collaborative.

Collaboratives enhanced by GLRI funding under the GLRI Action Plan II, such as the Asian Carp Regional Coordinating Committee and the Phragmites Collaborative.

What results are unacceptable to count for this measure?

Uncoordinated actions that prevent or control an invasive species.

Individual collaboration meetings or events that are not expected to continue for several years.

Collaboratives that focus on species not relevant to the Great Lakes basin ecosystem.

Collaboratives implemented without the support of GLRI funding.

An enhancement to a collaborative that has been developed under GLRI Action Plan II.

An enhancement to a collaborative not developed under GLRI Action Plan II but that has been previously been enhanced under GLRI Action Plan II.

When to count results for this Measure:

Results are counted when the collaborative has been initiated or enhanced. A collaborative is only counted once during GLRI Action Plan II either upon initiation or upon the first instance of enhancement under Action Plan II.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source is the lead GLRI/RWG agency of the collaborative working in coordination with their funding recipients and sub-recipients (if applicable). The lead GLRI/RWG agency of a collaborative is designated by the Measure Lead. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

The data collected by Federal Agencies includes descriptions of the action funded by the agencies.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact representing the lead GLRI/RWG agency of the collaborative(s) will enter the following information into the EAGL information system in the applicable reporting fields on a semi-annual basis:

Number of collaboratives developed/enhanced with GLRI funding, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information

System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

The Invasive Species EPA Measure Lead uses best professional knowledge and judgment in collecting the information received from our partners and reviews submissions for unacceptable or incomplete data.

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The cumulative number of collaboratives is likely to be easily interpreted. Reporting includes a data lag for data collection and therefore reflects the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from six months to a year old depending on the timing of the tracking and reporting deadlines.

Focus Area 3 – Nearshore Health and Nonpoint Source Pollution

(3.1.1) Projected phosphorus reductions from GLRI-funded projects in targeted watersheds (measured in pounds)

1. Measure Code:

In Annual Commitment System: GL-17

In Action Plan: AP 3.1.1

2. Measure Language:

Projected phosphorus reductions from GLRI-funded projects in targeted watersheds (measured in pounds)

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
130,000	310,000	525,000	795,000	1,070,000

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

Santina Wortman

312-353-8319

Units:

Pounds

Universe:

N/A

Baseline:

Definition of Measure Terms:

Projected total phosphorus reductions from GLRI-funded projects in Great Lakes watersheds (predicted in average annual total phosphorus pounds reduced each year): This prediction is made for reductions at the edge of fields or land parcels and is aggregated over those land units to establish an annual average. The prediction is also made for projects that are implemented in stream corridors and act to sequester total phosphorus sequestered from upstream so there is a reduced amount transported downstream via streamflow.

Total phosphorus: mass of both dissolved and particulate forms of phosphorus

Average annual: the predicted average annual total phosphorus reduction based on a 47-year weather simulation time period to capture and incorporate known climatic variability into the prediction

Edge of field/land parcel: a land unit where surface and subsurface land and hydrologic processes operate, excluding in-stream and limnological processes.

Stream corridor: land areas impacted by stream and river processes including stream banks and floodplain.

Targeted watersheds: GLRI agencies have used adaptive management principles to select the watersheds in which they will fund nutrient reductions projects to have the greatest environmental benefit. The watersheds so selected each year are the “targeted watersheds.”

What results are acceptable to count for this measure?

Projections resulting from behaviors and physical activities planned to be implemented with a primary or additional benefit of reducing total phosphorus leaving a field or land parcel and entering a receiving stream or other water body in the Great Lakes Watershed.

Projections resulting from planned implementation that is described and captured within a contract, grant award, or legal agreement between an entity (e.g., federal or state agency, local entity) and the private landowner and/or project partner.

Projections resulting from a contract, grant award, or legal agreement with the private landowner and/or project partner during the reporting period, regardless of the GLRI appropriation year.

What results are unacceptable to count for this measure?

Projections from initial grant awards or agreements to an entity that still must identify individual project locations or landowners that will adopt behavioral/physical activities.

Projections from features of projects that do not reduce total phosphorus leaving a field or land parcel.

Projections calculated using an unapproved calculation methodology (see Section 9(b) below for acceptable calculation methodologies)

When to count results for this Measure:

The projections are to be estimated and reported for this measure for the reporting period in which the project implementation is sufficiently described and captured within a contract, grant award, or legal agreement between an entity (e.g., federal or state agency, local entity) and the private landowner and/or project partner. Results are reported semi-annually (with a six month reporting period) if possible; otherwise results are reported annually (with a one year reporting period). No additional progress reporting for this measure is required in the EAGL system once the complete projection has been reported.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements. The principal agencies reporting into the EAGL system, with their data sources, are expected to be:

US Department of Agriculture – Natural Resources Conservation Service (NRCS)

Protracts Software: a contracting software used by NRCS to document signed contracts with private landowners and containing associated project details including schedules of measures to be implemented to reduce total phosphorus on individual land parcels

US Environmental Protection Agency (EPA)

Integrated Grants Management Software (IGMS): a financial tracking and award-making software used by EPA to store and organize grant award documents containing details of projects with total phosphorus reduction benefits. These workplans are collected to allow summary of project types (i.e., single or suites of behavioral and/or physical measures) by land area impacted.

EAGL System: summary of land areas impacted by project elements and behavioral/physical measures is documented

US Army Corps of Engineers (USACE)

Individual, finalized project technical and design documents used for by contractors for construction at individual project sites

(b) Data Collection

All agencies use an OMB-approved, NRCS developed calculation and convert acres of practices to project average annual total phosphorus reduced (lbs). These calculations are customized by practice type and watershed location, incorporating local, regional conditions and processes important to phosphorus loss. This method relies on the results of the NRCS Conservation Effects Assessment Project (CEAP) and science-based predictions using state-of-the-science water quality models. Results of this effort and developed specifically for Great Lakes watersheds are summarized into “lookup tables” that allow a conversion of land area impacted by a measure or suite of measures by watershed (HUC8 level) into projected average annual total phosphorus reductions. Additional technical guidance is available from the EPA Measure Lead.

NRCS RAD CEAP staff use the above OMB-approved, NRCS developed calculation and convert acres of practices to project average annual total phosphorus reduced (lbs) using NRCS Protracts Software.

EPA IGMS & EAGL

Information from EPA grants is collected through the EPA grant system (IGMS) and EAGL as follows:

- Grants involving phosphorus reduction require that when phosphorus reduction practices are established for an area, subsequent progress reports include:
 - planned phosphorus reduction practice or suite of practices;

an estimate of the land area impacted by planned practice or suite of practices and the spatial location of land areas impacted by the (i.e., watersheds, counties).

EPA Project Officers enter the above information and attach recipient progress reports to the EAGL system to document the progression of planned phosphorus reduction activities.

EPA's Measure Lead summarizes planned practices by watershed and reporting period from EAGL.

EPA Measure Lead uses the above OMB-approved, NRCS developed calculation and convert acres of practices to project average annual total phosphorus reduced (lbs).

USACE Design Documents

USACE staff documents final design specifications by project, indicating the land area impacted by phosphorus reduction measures and specific project elements that are employed.

USACE staff, or upon request the EPA Measure Lead, uses the above OMB-approved, NRCS developed calculation and convert acres of practices to project average annual total phosphorus reduced (lbs).

Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact enters the following information into the EAGL information system in the applicable reporting fields on a semiannual basis, if possible, or an annual basis otherwise:

Projected phosphorus reductions from GLRI-funded projects in targeted watersheds (measured in pounds), as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG

agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, the EPA Measure Lead submits results against this Measure 3.1.1 to EAGL using data submitted to EAGL by EPA project officers, as described in Section 9(b), above.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Reporting will include a data lag for data collection and will therefore reflect the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines. The EAGL System will identify projections at the time they are first reported, but will not identify subsequent changes that could result from project modifications. Statistics from the system reflect a point in time.

The projections are to be estimated and reported when the project implementation is sufficiently described and captured within a contract, grant award, or legal agreement between an entity (e.g., federal or state agency, local entity) and the private landowner and/or project partner. A sufficiently detailed contract, award, or agreement to complete the work constitutes an assumption that the work will be implemented largely as planned.

(3.1.2) Number of GLRI-funded nutrient and sediment reduction projects in targeted watersheds (measured in acres)

Measure Code:

Not in ACS.

In Action Plan: AP 3.1.2

Measure Language:

Number of GLRI-funded nutrient and sediment reduction projects in targeted watersheds (measured in acres)

3. Type of Measure:

Type of Measure: Action Plan

4. EPA Measure Lead:

Santina Wortman

312-353-8319

Units:

Acres

Universe:

As of 2003, there were an estimated 1,739,869 acres of cropland with a high to moderate need of conservation and susceptible to phosphorus loss via surface water in the Great Lakes.²

Baseline:

Definition of Measure Terms:

Nutrient/Sediment Reduction Projects: behaviors and physical measures planned to be implemented with a primary or additional benefit of reducing total phosphorus, total nitrogen, and sediment leaving a field or land parcel and entering a receiving stream or other water body in the Great Lakes Watershed.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

² United States. Dept. of Agriculture. Natural Resources Conservation Service. *Assessment of the Effects of Conservation Practices on Cultivated Cropland in the Great Lakes Region*. 2011.

Targeted watersheds: GLRI agencies have used adaptive management principles to select the watersheds in which they will fund nutrient reductions projects to have the greatest environmental benefit. The watersheds so selected each year are the “targeted watersheds.”

What results are acceptable to count for this measure?

Acres impacted by a planned project implemented with a primary or additional benefit of reducing total phosphorus leaving a field or land parcel and entering a receiving stream or other water body in the Great Lakes Watershed.

Acres are calculated at the discretion of the agency, grantee, or project partner documenting a planned project and may rely on Geographic Information Systems (GIS), land surveys, established land deeds, aerial maps, established project databases, etc.

What results are unacceptable to count for this measure?

Initial grant awards or agreements to an entity that still must identify acres impacted by planned activities (i.e., individual project elements).

Acres resulting from or described and captured within projects, contracts, awards, and agreements entered into before October 1, 2014.

Acres of land impacted by projects activities that do not reduce nutrient and sediment leaving a field or land parcel.

When to count results for this Measure:

Acres (i.e., projects) planned will be acceptable and counted when the project implementation for those acres is sufficiently described and captured within a contract, grant award, or legal agreement between an entity (e.g., federal or state agency, local entity) and the private landowner and/or project partner. Planned projects are determined to be “sufficiently” described when individual project elements, associated acres impacted, and timeframe for eventual implementation is documented.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements. The principal agencies reporting into the EAGL system, with their data sources, are expected to be:

US Department of Agriculture – Natural Resources Conservation Service (NRCS)

Protracts Software: a contracting software used by NRCS to document signed contracts with private landowners and containing associated project details including schedules of measures to be implemented to reduce total phosphorus on individual land parcels

US Environmental Protection Agency (EPA)

Integrated Grants Management Software (IGMS): a financial tracking and award-making software used by EPA to store and organize grant award documents containing details of projects with total phosphorus reduction benefits. These workplans will be

collected to allow summary of project types (i.e., single or suites of behavioral and/or physical measures) by land area impacted

Environmental achievements in the Great Lakes (EAGL): summary of land areas impacted by project elements and behavioral/physical measures will be documented

US Army Corps of Engineers (USACE)

Individual, finalized project technical and design documents used for by contractors for construction at individual project sites

Data Collection

Funding recipients may use various methods to calculate acreage and report it to their GLRI/RWG agency. Processes for NRCS, EPA, and USACE are described below.

NRCS Protracts Software

NRCS staff enter key data fields into individual project contracts including project elements (i.e., phosphorus reduction measures) to be implemented and the field areas impacted by those project elements.

NRCS staff enter spatial data for each project contract allowing the location of activities to be determine at the HUC12 spatial scale.

NRCS staff enter the schedule of implementation for the phosphorus reduction measures including the year in which they are planned to constructed and/or adopted into the farm operations.

NRCS staff enter this data into Protracts completely by the end of the FY

EPA IGMS & EAGL

EPA staff serving as Project Officers for grants funded by GLRI identify phosphorus reduction elements of project workplans and require grantees to include as part of their workplan a determination of land area impacted by planned measure or suite of measures

EPA Project Officers also require grantees to indicate spatial location of land areas impacted by phosphorus reduction measures

EPA Project Officers will attach periodic progress reports to the EAGL system during the active grant period specifically documenting progression of planned activities as defined above

EPA point of contact for this measure of progress will summarize planned practices by watershed and reporting period from EAGL for EPA grants only

USACE Design Documents

USACE staff will summarize final design specifications by project, indicating land area impacted by phosphorus reduction measures and specific project elements employed

Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semiannual basis:

Number of GLRI-funded nutrient and sediment reduction projects in targeted watersheds (measured in acres), as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants oversee and review information provided in grantee progress reports, and submit data to EAGL on the basis of those reports and communication with grantees. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Reporting will include a data lag for data collection and will therefore reflect the cumulative progress as of the previous reporting period. Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

The EAGL System will identify acreage described in the respective contract, award, or agreement, but will not identify subsequent changes that could result from project modifications. Statistics from the system reflect a point in time.

Reporting against this Measure is operating under the assumption that a field or land parcel is contracted only once using GLRI funding within the five-year window of FY15-19.

Some conservation practices are measured by number or linear feet or number of occurrences rather than by area. Converting these practices to acres impacted may introduce error.

(3.1.3) Measured nutrient and sediment reductions from monitored, GLRI-funded projects in targeted watersheds (measured in pounds)

Measure Code:

Not in ACS

In Action Plan: AP 3.1.3

Measure Language:

Measured nutrient and sediment reductions from monitored, GLRI-funded projects in targeted watersheds (measured in pounds)

Type of Measure:

Action Plan

EPA Measure Lead:

Santina Wortman

312-353-8319

Units:

Pounds

Universe:

N/A

Baseline:

N/A – Monitoring and statistical designs are still under development and results are not expected until FY17 at the earliest.

8. Definition of Measure Terms:

Monitored, GLRI-funded projects: an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose. There are a limited number of monitored sites (<10) that will be used to report on this measure. These sites have been strategically picked to be representative of environmental outcomes expected for larger Great Lakes watersheds where additional GLRI projects have been implemented.

Nutrient and sediment reductions: the difference between: (i) the amount (in pounds) of total phosphorus, total nitrogen, and sediment that leaves a field or land parcel and enters a receiving stream or other water body in the Great Lakes Watershed before project implementation and (ii) such amount after project implementation.

Field: the land unit where surface and subsurface land and hydrologic processes operate, excluding in-stream and limnological processes.

Total phosphorus: the mass of both dissolved and particulate forms of phosphorus

Total nitrogen: the mass of both dissolved and particulate/organic nitrogen

Suspended sediment: the mass of sediment suspended in water column and transported to a sampling apparatus

Measured: an observation based on field-based quantification of constituents in field runoff. For the purposes of this Measure, reductions are quantified through implementation of standardized USGS monitoring and statistical designs.

Targeted watersheds: GLRI agencies have used adaptive management principles to select the watersheds in which they will fund nutrient reductions projects to have the greatest environmental benefit. The watersheds so selected each year are the “targeted watersheds.”

What results are acceptable to count for this measure?

Measured nutrient and sediment reductions due to GLRI-funded projects in targeted watersheds that are quantified through the implementation of standardized USGS monitoring and statistical designs.

What results are unacceptable to count for this measure?

Measured reductions that are not quantified through the implementation of standardized USGS monitoring and statistical designs
Reductions from projects other than those specified above.

When to count results for this Measure:

Results count for this Measure after a reduction has been measured and quantified through the implementation of standardized USGS monitoring and statistical designs. Results are not anticipated until FY17 at the earliest. USGS will provide preliminary results in FY17, and final results at the end of FY19.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The USGS Wisconsin Water Science Center will measure, quantify, analyze, and report the reductions due to GLRI-funded projects for individual monitored fields.

(b) Data Collection

Data from fields will be collected and analyzed based on methods described in:

Stuntebeck, T. D., Komiskey, M. J., Owens, D. W., Hall, D. H., 2008, Methods of data collection, sample processing, and data analysis for edge-of-field, streamgaging, subsurface-tile, and meteorological stations at Discovery Farms and Pioneer Farm in Wisconsin, 2001-7. U.S. Geological Survey

USGS calculates nutrient and sediment reductions from each field by employing an Analysis of Covariance (ANCOVA) statistical design with nutrient/sediment as the dependent variable, climatic variables as covariates, and a main effect/independent variable for 1) pre/post project period in cases where a single site is monitored before and after a project is implemented and 2) control/impact site when a control field is monitored in addition to the field where the GLRI project is implemented. An adjusted means calculation and the absolute/relative difference between adjusted means will be used to calculate nutrient and sediment reduction for each field. Measured phosphorus, nitrogen, and sediment reductions for individual sites are summed, respectively, across all monitored fields.

(c) Data Transmission

No original data is received by EPA. Original data is received by USGS, then analyzed and reported to USGS. USGS will employ agency data quality procedures and will consult with EPA on final statistical approaches and significance levels used for a determination of reductions.

The GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields once in FY17 reflecting results obtained, and once again in FY19 reflecting final results:

Measured phosphorus reductions in pounds from monitored GLRI-funded projects in targeted watersheds (in the associated incremental results field)

Measured nitrogen reductions in pounds from monitored GLRI-funded projects in targeted watersheds (in the associated comment field)

Measured sediment reductions in pounds from monitored GLRI-funded projects in targeted watersheds (in the associated comment field)

Range of % reduction each for phosphorus, nitrogen, and sediment reductions for the set of sites contributing to the result (in the associated comment field)

Range of reduction each for phosphorus, nitrogen, and sediment reductions for the set of sites contributing to the result (in the associated comment field)

Number of sites in the set of sites contributing to the result (in the associated comment field)

Data is transmitted directly through the EAGL system. USGS is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to

support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

The number of sampled events, weather variability incorporated by sampling period, the interaction of weather and farming systems, and the expected relative impact of the GLRI-funded project must be considered for each field. These factors are inherently incorporated into ANCOVA statistical designs along with a final determination of the significance level/probability at which a significant difference in loading is identified and quantified.

Statistical designs are such that the relative confidence of the final determination increases with the number of sampled events. The number of sampled events increases as the duration of monitoring activities increases. Thus, information reported in FY17 is a preliminary result for estimating progress. Results reported in FY19 will be a revision of the FY17 report, and serves as the final result exhibiting the highest significance level for the time period over which monitoring was conducted.

Results from this measure of progress should not be compared to projected total phosphorus reduction or project acres. Measured values are specific to the projects from which they were obtained. However, measured values can be used to inform projections of reductions in larger surrounding watersheds.

(3.2.1) Projected volume of untreated urban runoff captured or treated by GLRI-funded projects (measured in millions of gallons)

1. Measure Code:

In Annual Commitment System: GL-18

In Action Plan: AP 3.2.1

2. Measure Language:

Projected volume of untreated urban runoff captured or treated by GLRI-funded projects (measured in millions of gallons)

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
30	70	120	185	250

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

Danielle Green

312-886-7594

Units:

Gallons (measured in millions).

Universe:

N/A

Baseline:

Definition of Measure Terms:

Projected volume: Gallons (measured in millions per year) of untreated urban runoff captured or treated due to implementation of GLRI-funded projects in urban areas. These gallons will be estimated for the reporting period in which they can first be identified for the project.

Untreated urban runoff: nonpoint source surface runoff resulting from urbanization that is not captured or treated in any way.

Captured or treated: For the purposes of this measure, capture and treatment are technologies used as means of reducing volume of urban nonpoint source pollution runoff in an effort to remove pollutants that degrade water quality of tributaries and coasts.

Urban watershed: includes urban and downtown areas, city neighborhoods, suburban municipalities, and unincorporated areas characterized by encroaching urban sprawl (<http://www.indiancreekwp.org/watershed.html>)

Mixed land cover watersheds: have a combination of land use types that can differ in the proportion of use classes (e.g. urban, agricultural, forested, grasslands, open space, low density suburban).

GLRI-funded project: means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Projected amount (measured in millions of gallons) of stormwater captured or treated due to implementation of GLRI-funded projects in urban or mixed land cover watersheds

What results are unacceptable to count for this measure?

Results from projects implemented without the expenditure of GLRI funds

Results from projects implemented in non-urban or non-mixed land cover watersheds

Projections calculated using an unapproved calculation methodology (see Section 9(b) below for acceptable calculation methodologies)

When to count results for this Measure:

Projections are to be estimated and reported for this measure for the reporting period in which they can first be identified for the project. For U.S. Forest Service and for U.S. EPA, that will generally be when grants are issued. For U.S. Army Corps that will generally be when the project moves from design to construction. No additional progress reporting for this Measure is required in EAGL once the complete projection has been reported.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be U.S. Forest Service, U.S. Army Corps or U.S. EPA or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system.

This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection:

Three methods below are acceptable, and the methodology used will be dependent on the best management practice being implemented to capture or treat runoff:

U.S. Forest Service: The Restore Urban and Community Forests program grant funds will be used each fiscal year for tree plantings (8,000 trees per year). Volume of runoff calculation assumes the following conversion factor: 59 gallons of rainfall intercepted annually for the representative annual tree (5-year average), each year, from the USDA

Midwest Community Tree Guide General Technical Report PSW-GTR-199. (http://www.fs.fed.us/psw/publications/documents/psw_gtr199/).

U.S. EPA: Method of calculation will vary, depending on project type and grantee's choice of model to estimate benefits of implementation, but must be an approved, recognized model appropriate for BMP planning. Acceptable models may include the National Stormwater Calculator (<http://www2.epa.gov/water-research/national-stormwater-calculator>), WinSLAMM, (<http://www.winslamm.com/>), HydroCad stormwater modeling (<http://www.hydrocad.net/>), or others.

U.S Army Corps: The Long-Term Hydrologic Impact Assessment Low Impact Development (L-THIA LID) model will be used to estimate project benefits (<https://engineering.purdue.edu/~lthia/>).

Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the applicable reporting fields:

Projected volume of runoff captured or treated (in millions of gallons), as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and

submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA

GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Limitations attributed to the combination of multiple models to project gallons of untreated runoff captured or treated have not yet been assessed. Limitations such as the combined effects of variance and bias across several different models should be recognized until further assessment of these limitations can be conducted.

Statistics developed through the use of EAGL System rely on the inputted data of Federal agencies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. The EAGL System will identify projections at the time they are first reported, but will not identify subsequent changes that could result from project modifications. Statistics from the system reflect a point in time.

(3.2.2) Number of GLRI-funded projects implemented to reduce the impacts of untreated urban runoff on the Great Lakes

1. Measure Code:

Not in ACS

In Action Plan: AP 3.2.2

2. Measure Language:

Number of GLRI-funded projects implemented to reduce the impacts of untreated urban runoff on the Great Lakes

Type of Measure:

Action Plan

EPA Measure Lead:

Danielle Green

312-886-7594

Units:

Projects

Universe:

N/A - The universe of potential projects which could reduce the impacts of untreated urban runoff on the Great Lakes may change over time depending on the needs of AP 3.2.2.

Baseline:

Definition of Measure Terms:

GLRI-funded project: an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose. Each project corresponds directly with a single record in EAGL and on GLRI.us.

Activities implemented to reduce the impacts of untreated urban run-off in the Great Lakes: Activities that further the goal of reducing the volume of untreated urban runoff, including: green infrastructure implementation, development of decision support tools, edge-of-field monitoring, etc. Project implementation may take place in urban or mixed land cover watersheds.

Untreated urban runoff: nonpoint source surface runoff resulting from urbanization that is not captured or treated in any way.

Urban watersheds include urban and downtown areas, city neighborhoods, suburban municipalities, and unincorporated areas characterized by encroaching urban sprawl (<http://www.indiancreekwp.org/watershed.html>)

Mixed land cover watersheds have a combination of land use types that can differ in the proportion of use classes (e.g. urban, agricultural, forested, grasslands, open space, low density suburban).

What results are acceptable to count for this measure?

GLRI-funded projects that implement activities that reduce the impacts of untreated urban run-off in urban or mixed land cover watersheds in the Great Lakes.

What results are unacceptable to count for this measure?

Projects which do not include the expenditure of GLRI funds.

Projects which do not reduce the impacts of urban run-off.

Projects implemented in non-urban or non-mixed land cover watersheds.

Projects which do not reduce the impacts of urban run-off in the Great Lakes.

Projects awarded prior to the start of GLRI Action Plan II (beginning October 1st, 2014).

When to count results for this Measure:

Results for this Measure are counted when a project has been sufficiently planned and funded by the RWG agency (such as through the issuance of grants, signing of contracts, etc.) such that an agency can identify it as a new record in EAGL. A new record in EAGL is required whenever a project is funded with a new fiscal year's appropriation; consequently, even if activities are conducted at the same place for the same purpose, those activities will count as separate projects for each new relevant appropriation that funds them.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection:

U.S. EPA and other GLRI/RWG agencies (such as US Army Corps of Engineers and US Forest Service) will report number of projects that they have funded (via grants, contracts, or agreements to states, local governments, watershed groups, universities) to reduce the impacts of untreated urban runoff in the Great Lakes.

U.S. EPA Project Officers for the relevant U.S. EPA grants are responsible for reviewing and reporting the number of projects applicable to this Measure, as described in the Statement of Work, into the EAGL information system. Leads from RWG federal agencies are responsible for reviewing and entering the number of projects into EAGL for their respective projects.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the applicable reporting columns on a semi-annual basis:

A numerical value such as “1” or “5” is entered into the results field to indicate the number of projects supporting this measure. If there is no subsequent result to report, a “0” should be entered into the results field to acknowledge that this field was reviewed.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency’s EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure’s total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and

contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the Great Lakes Accountability System rely on the inputted data of GLRI/RWG agencies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

(3.2.3) Measured volume of untreated urban runoff captured or treated by monitored GLRI-funded projects

Measure Code:

Not in ACS

In Action Plan: AP 3.2.3

Measure Language:

Measured volume of untreated urban runoff captured or treated by monitored GLRI-funded projects

Type of Measure:

Action Plan

EPA Measure Lead:

Danielle Green

312-886-7594

5. Units:

Gallons (measured in millions of gallons)

Universe:

N/A

Baseline:

N/A – Monitoring and statistical designs are still under development and results are not expected until FY16 at the earliest.

8. Definition of Measure Terms:

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

Urban watersheds include urban and downtown areas, city neighborhoods, suburban municipalities, and unincorporated areas characterized by encroaching urban sprawl (<http://www.indiancreekwp.org/watershed.html>).

Mixed land cover watersheds have a combination of land use types that can differ in the proportion of use classes (e.g. urban, agricultural, forested, grasslands, open space, low density suburban).

Untreated urban runoff: nonpoint source surface runoff resulting from urbanization that is not captured or treated in any way

Measured volume: Gallons (measured in millions) of untreated urban runoff captured or treated. Volume is quantified through USGS monitoring and statistical designs.

Captured or treated refers to the capture or treatment of urban runoff due to GLRI-funded projects as quantified by USGS monitoring and statistical designs. These projects implement capture and treatment technologies, including infiltration technologies, to reduce volume of untreated urban runoff entering the Great Lakes.

What results are acceptable to count for this measure?

Measured volume of urban runoff captured or treated due to GLRI-funded projects in urban and mixed land cover watersheds that is quantified through standardized USGS monitoring and statistical designs in millions of gallons

What results are unacceptable to count for this measure?

Measured volume of urban runoff captured or treated due to implementation of non-GLRI-funded projects

Measured volume of urban runoff captured or treated not quantified through standardized USGS monitoring and statistical designs

Measured volume of urban runoff captured or treated due to the implementation projects not in urban or mixed-land cover areas

Measured volume of urban runoff captured or treated not for the benefit of the Great Lakes

When to count results for this Measure:

Results for this Measure count after a measured reduction has been quantified through USGS monitoring and statistical designs. As monitoring and statistical designs are still under development by USGS, results are not anticipated until FY16 at the earliest. Results are reported beginning in FY16, and annually every year thereafter.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be U.S. Geological Survey. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection:

Source data collection methodologies include field monitoring by U.S. Geological Monitoring design is still under development by USGS. Reporting on this measure is not anticipated until FY16 at the earliest, as no FY15 funds are being used to monitor urban runoff at GLRI-funded project sites.

USGS conducts monitoring both before and after any green infrastructure implementation is completed to document the changes in quantity of runoff, and the fate of redirected runoff. Possible monitoring activities by the USGS and other partners for the quantification of green infrastructure effectiveness depend on the type and size of green infrastructure implemented, the scale of the study, the geology, hydrology and other physical factors, other green infrastructures implemented nearby, and other considerations. Monitoring activities may consist of the monitoring of rainfall, runoff, seepage to groundwater, and changes in stormwater capture/discharge. Data collection components may include rainfall, sewer monitoring, groundwater, streamflow, water quality, modeling and innovative methodologies.

Once monitoring design is developed, source data collection methodology will include appropriate documentation (study design documents, QAPPs, SOPs, data analysis techniques, etc.).

(c) Data Transmission

Beginning in FY16, the GLRI designated RWG agency contact for USGS will enter the following information into the EAGL information system in the applicable reporting fields on an annual basis:

Measured volume (in million gallons) of untreated urban runoff captured or treated by the monitored GLRI-funded project

Data is transmitted directly through the EAGL system. USGS is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of EAGL rely on the inputted data of Federal agencies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

There is a time lag associated with this measure, as the measurement is dependent on aspects of design that are still under development with USGS (including the development of a monitoring design, installation of equipment, GI implementation, measurement and analysis of results). It is expected that monitoring design will be in place by start of FY16.

Information is collected annually and subsequently reported annually. Therefore, the reported information may be from one month to a 2 years old depending on the timing of the tracking and reporting deadlines.

Focus Area 4 – Habitat and Wildlife Protection and Restoration

(4.1.1) Number of miles of Great Lakes tributaries reopened by GLRI-funded projects

1. Measure Code:

In Annual Commitment System: GL-19

In Action Plan: AP 4.1.1

2. Measure Language:

Number of miles of Great Lakes tributaries reopened by GLRI-funded projects.

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
2,200	2,500	2,800	3,100	3,400

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

T. Kevin O'Donnell

(312) 886-0813

Units:

Miles

6. Universe:

20,000 miles (In 2005, the Great Lakes Regional Collaboration estimated the universe of total possible miles of river reopened for fish passage to be 20,000 miles.)

7. Baseline:

3,475 miles as of October 1, 2014. (GLRI Action Plan II states a baseline value of 1,900 miles as of October 1, 2013. However, an additional 1,575 miles was reported re-opened in FY 2014, for a revised cumulative total from FY 2010 to FY 2014 of 3,475 miles of Great Lakes tributaries reopened by GLRI-funded projects.)

8. Definition of Measure Terms:

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

Miles of Great Lakes tributaries is the number of miles of in-stream habitat including mileage for seasonal and intermittent streams in the Great Lakes Basin.

Reopened means the tributaries are available for the target species to move into as a result of bypassing or removing a barrier.

What results are acceptable to count for this measure?

Tributary miles reopened including mileage for seasonal and intermittent streams if one or more of a target species gains additional access to spawning and/or rearing habitat from the reconnection of those habitats.

Re-opened tributary miles realized from completion in the current reporting period from projects funded by a previous GLRI appropriation.

What results are unacceptable to count for this measure?

Tributary miles beyond the next obstructed pathway are not “reopened” and are thus not acceptable.

Tributary miles that are projected, rather than realized in the reporting period, are not acceptable.

When to count results for this Measure

Progress toward this Measure is counted either as stream miles are reopened for projects that sequentially open up miles, or when the project is complete (for example large scale dam removal). **Progress is only counted once at the conclusion of the project.** Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients may use various methods to calculate stream miles including walking the stream, Geographic Information System, the USACE stream mile calculator, manual calculations through direct observation, and other methods acceptable to the GLRI funding agency.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the applicable reporting columns on a semi-annual basis until the project is complete:

Number of miles of Great Lakes tributaries reopened, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Information in the EAGL system is inputted by multiple Federal agencies using different methodologies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

(4.1.2) Number of miles of Great Lakes shoreline and riparian corridors protected, restored and enhanced by GLRI-funded projects.

1. Measure Code:

In Annual Commitment System: GL-20

In Action Plan: AP 4.1.2

2. Measure Language:

Number of miles of Great Lakes shoreline and riparian corridors protected, restored and enhanced by GLRI-funded projects.

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
75	100	175	225	300

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

T. Kevin O'Donnell

(312) 886-0813

Units:

Miles

6. Universe:

N/A - There are 10,000 miles of Great Lakes coastline and thousands of miles of tributaries. No comprehensive estimate of restorable shoreline or riparian corridors is available.

7. Baseline:

0 miles of shoreline and riparian corridors. For the purposes of the GLRI, the baseline of "0 miles" defines the status of efforts on October 1, 2014 at the initiation of this effort. Data is not readily available to determine the history of miles of shoreline and riparian corridors protected, restored and enhanced by past programs.

8. Definition of Measure Terms:

Shoreline means the aquatic and terrestrial coastal habitats of all of the Great Lakes.

Riparian corridor means the in-stream and bank habitats of Great Lakes tributaries and rivers.

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.

GLRI-funded project means an organized activity or set of that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Miles of aquatic and terrestrial habitats that have been protected, restored and/or enhanced along the Great Lakes coast and the in-stream and bank habitats of tributaries and streams.

Miles of aquatic and terrestrial habitats that have been protected, restored and/or enhanced in the current reporting period from projects funded by a previous GLRI appropriation.

Because individual projects generally protect, restore or enhance only a single problem or a small portion of a geographic area, many projects may be needed to completely protect, restore or enhance a habitat. For example, a habitat to be restored may need to have drain tiles removed to restore hydrology, invasive plants removed that outcompete native plants, and native plants and animals reintroduced to improve the species composition. Each could be a different project and the same acres may be counted at the completion of each individual project.

What results are unacceptable to count for this measure?

Miles of inland lake coasts

Projections of miles that have not yet been protected, restored, or enhanced.

When to count results for this Measure:

Progress toward this Measure is counted when the planned individual project work to protect, restore, or enhance applicable shoreline and riparian corridors is complete. **Progress is only counted once at the conclusion of the project.** Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients use various methods to calculate stream miles including walking the stream, Geographic Information System, the USACE stream mile calculator, manual calculations through direct observation, and other methods acceptable to the GLRI funding agency.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the applicable incremental and reporting columns on a semi-annual basis until the project is complete:

Number of miles of Great Lakes shoreline and riparian corridors protected, restored and enhanced, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports,

and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Information in the EAGL system is inputted by multiple Federal agencies using different methodologies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

(4.1.3) Acres of Great Lakes coastal wetlands protected, restored and enhanced by GLRI-funded projects

1. Measure Code:

In Annual Commitment System: GL-21

In Action Plan: AP 4.1.3

2. Measure Language:

Number of acres of Great Lakes coastal wetlands protected, restored and enhanced by GLRI-funded projects.

3. Type of Measure:

Budget, Action Plan, ACS Commitment (w/ target)

Action Plan II Targets				
2015	2016	2017	2018	2019
7,000	15,000	30,000	52,000	60,000

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

T. Kevin O'Donnell

(312) 886-0813

Units:

Acres

6. Universe:

375,000 acres (US) plus additional acreage (unknown) having a previous hydrologic connection to a Great Lake or a connecting channel via surface or subsurface water such that water levels of the wetland are influenced by Great Lakes water levels as identified by the Great Lakes Wetland Consortium via an updated GIS analysis. Prior to this updated analysis, the Universe value stated in GLRI Action Plan II was 260,000 acres. (In 2005, the Great Lakes Regional Collaboration estimated that the total acres of wetlands and wetland-associated uplands that potentially could be protected, restored, or enhanced is 550,000 acres in both the US and Canada.)

7. Baseline:

0 acres. (For the purposes of the GLRI, the baseline of “0 acres of wetlands” defines the status of efforts in September 2014 prior to the initiation of this effort. Data is not readily available to determine the history of acres of wetlands restored, protected or enhanced by past programs.)

8. Definition of Measure Terms:

Great Lakes Coastal Wetlands: Historical or the existing 375,000 acres of US of wetlands with a current, previous, or potential hydrologic connection to a Great Lake or connecting channel via

surface or subsurface water such that water levels of the wetland are influenced by Great Lakes water levels. These can be wetlands on a Great Lake, connecting channel, river (if the river is influenced by the Great Lakes), or an isolated wetland (with a subsurface connection to the Great Lakes). Note that funding and results under GLRI only pertain to Great Lakes Coastal Wetlands in the US.

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.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

U.S. “coastal wetland acres” as defined above are acceptable to count for this measure.

Acres realized in the current reporting period from projects funded by a previous GLRI appropriation.

Because individual projects generally protect, restore or enhance only a single problem or a small portion of a geographic area, many projects may be needed to completely protect, restore or enhance a habitat. For example, a habitat to be restored may need to have drain tiles removed to restore hydrology, invasive plants removed that outcompete native plants, and native plants and animals reintroduced to improve the species composition. Each could be a different project and the same acres may be counted at the completion of each individual project.

What results are unacceptable to count for this measure?

Inland wetland acres are not acceptable.

Coastal wetland acres in Canada are not acceptable.

It is unacceptable to count the acreage for shoreline or riparian corridors that are being reported as miles under Measure 4.1.2.

Acres that are projected, rather than realized in the reporting period, are not acceptable.

When to count results for this Measure

Progress on this Measure is counted when planned individual project work to protect, restore, or enhance the coastal wetland has been completed. **Progress is only counted once at the conclusion of the project.** Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients use various methods to calculate acreage including but not limited to using standard GIS or Google Earth-type mapping tools, estimation based on photographic surveys, use of GPS mapping, manual calculations through direct observation, and other methods using professional judgment acceptable to the GLRI funding agency.

(c) Data Transmission

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the applicable reporting columns on a semi-annual basis until the project is complete:

Number of acres of Great Lakes coastal wetlands protected, restored and enhanced, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

12. Final Reporting Timing and Oversight:

The GLNPO Reporting Coordinator is responsible for overseeing final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with Targets
- GLRI Fiscal Year Annual Report to Congress and the President

Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will

provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Information in the EAGL system is inputted by multiple Federal agencies using different methodologies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

(4.1.4) Number of acres of other habitats in the Great Lakes basin protected, restored and enhanced by GLRI-funded projects

1. Measure Code:

In Annual Commitment System: GL-22

In Action Plan: AP 4.1.4

2. Measure Language:

Number of acres of other habitats in the Great Lakes basin protected, restored and enhanced by GLRI-funded projects.

3. Type of Measure:

Budget, Action Plan, ACS Commitment

Action Plan II Targets				
2015	2016	2017	2018	2019
127,000	147,000	167,000	187,000	207,000

These are the targets in Action Plan II, however annual targets may be adjusted during GLRI budget processes.

EPA Measure Lead:

T. Kevin O'Donnell

(312) 886-0813

Units:

Acres

6. Universe:

1,290,000 acres (In 2005, the Great Lakes Regional Collaboration estimated that the total acres of other habitats that potentially could be protected, restored, or enhanced; however, no comprehensive estimate of restorable "other habitats" is available.)

7. Baseline:

117,000 acres as of October 1, 2013. (For the purposes of the GLRI, the baseline of "117,000 acres" defines the status of efforts in September 2013 prior to the initiation of this effort. This measure is a combination of two measures from Action Plan 1: acres of wetlands and wetland-associated uplands and coastal, upland and island habitats protected, restored and enhanced.)

This acreage will be included in the summary total of cumulative results for this measure under GLRI Action Plan II.

8. Definition of Measure Terms:

Great Lakes Coastal Wetlands: The 216,545 hectares of wetlands with a hydrologic connection to a Great Lake via surface or subsurface water such that water levels of the wetland are influenced by Great Lakes water levels. These can be wetlands on a Great Lake, connecting

channel, river (if the river is influenced by the Great Lakes), or an isolated wetland (with a subsurface connection to the Great Lakes).

Other habitats, (excluding coastal wetlands as defined above), means all habitats within the Great Lakes basin within the following systems: open water; nearshore waters and connecting channels; coastal shore; rivers and tributaries; inland lakes and wetlands; uplands.

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.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Acres of “other habitats” within the Great Lakes basin within the following systems: open water; nearshore waters and connecting channels; coastal shore; rivers and tributaries; inland lakes and wetlands; uplands that have been protected, restored or enhanced will be reported.

Acres realized in the current reporting period from projects funded by a previous GLRI appropriation.

Because individual projects generally protect, restore or enhance only a single problem or a small portion of a geographic area, many projects may be needed to completely protect, restore or enhance a habitat. For example, a habitat to be restored may need to have drain tiles removed to restore hydrology, invasive plants removed that outcompete native plants, and native plants and animals reintroduced to improve the species composition. Each could be a different project and the same acres may be counted at the completion of each individual project.

What results are unacceptable to count for this measure?

Acres of coastal wetlands protected, restored or enhanced are not acceptable to count for this Measure.

It is unacceptable to count the acreage of shoreline or riparian corridors that are being reported as miles protected, restored, or enhanced under Measure 4.1.2.

Acres that are projected, rather than realized in the reporting period, are not acceptable.

When to count results for this Measure:

Progress toward this Measure is counted when planned individual project work to restore, protect, or enhance the habitat has been completed. Past results should not be changed; rather, results that were achieved in an earlier period may be reported in a later period (because of a time lag associated with calculating the result and preparing the documentation that demonstrates the result).

9. Calculation Methodology for Individual Project Entries:

(a) Data Source:

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients use various methods to calculate acreage including but not limited to using standard GIS or Google Earth-type mapping tools, estimation based on photographic surveys, use of GPS mapping, manual calculations through direct observation, and other methods using professional judgment acceptable to the GLRI funding agency.

(c) Data Transmission:

For each project that achieves results for this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL system in the applicable reporting columns on a semi-annual basis until the project is complete:

Number of acres of other habitats protected, restored and enhanced, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: A total cumulative result from the start of Action Plan II (beginning October 1st, 2014) through the end of the applicable reporting period is calculated by the EPA Measure Lead. The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result. The annual total is summed with the cumulative total from the previous year to calculate the current cumulative total, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the cumulative total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

- ACS commitments to track performance for Measures with targets
- Government Performance and Results Act reporting
- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Semi-annual in May and November

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the

USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Many projects may be needed to completely protect, restore or enhance a habitat and the same acreage for those projects could be counted multiple times. Information in the EAGL system is inputted by multiple Federal agencies using different methodologies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

(4.2.1) Number of GLRI-funded projects that promote recovery of federally-listed endangered, threatened, and candidate species

Measure Code:

Not in ACS

In Action Plan: AP 4.2.1

Measure Language:

Number of GLRI-funded projects that promote recovery of federally-listed endangered, threatened, and candidate species

Type of Measure

Action Plan

EPA Measure Lead:

T. Kevin O'Donnell

(312) 886-0813

Units:

Projects

6. Universe:

N/A - This is a new quantitative metric for GLRI Action Plan II; universe is unknown and may change according to the needs of Measure 4.2.1.

7. Baseline:

0 projects that promote recovery of federally-listed endangered, threatened, and candidate species. This is a new quantitative metric for GLRI Action Plan II.

8. Definition of Measure Terms:

GLRI-funded project: an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose. Each project corresponds directly with a single record in EAGL and on GLRI.us. For the purposes of this Measure, the primary goal or an additional benefit of the project must be implementing a recovery action(s), as described in the species *Recovery Plan*, for a federally-listed endangered, threatened or candidate species.

Federally-listed endangered, threatened, and candidate species or ***Listed Species*** is a threatened, endangered or candidate Great Lakes species that receives protection provided by the Endangered Species Act of 1973, as amended, and has the greatest opportunity for accelerated recovery as a result of enhanced funding. As of July 2015, such Listed Species are:

Federally Endangered, Threatened and Candidate Species of the Great Lakes Basin

Mammals

Canada lynx (*Lynx canadensis*), T
Gray wolf (*Canis lupus*), E (Minnesota – T)
Indiana bat (*Myotis sodalis*), E
Northern long-eared bat (*Myotis septentrionalis*), T

Clams (Freshwater Mussels, Unionids)

Clubshell (*Pleurobema clava*), E
Fanshell (*Cyprogenia stegaria* (=c. *irrorata*)), E
Fat pocketbook (*Potamilus capax*), E
Northern riffleshell (*Epioblasma torulosa rangiana*), E
Orangefoot pimpleback (*Plethobasus cooperianus*)
Purple cat's paw pearlymussel (*Epioblasma* (=dysnomia) *obliquata obliquata*), E
Rayed Bean (*Villosa fabalis*), E
Snuffbox (*Epioblasma triquetra*), E

Birds

Kirtland's warbler (*Setophaga kirtlandii*) [= *Dendroica kirtlandii*], E
Piping plover (*Charadrius melodus*) - Great Lakes population, E
Rufa Red knot (*Calidris canutus rufa*), T

Reptiles

Copperbelly water snake (*Nerodia erythrogaster neglecta*), T
Eastern massasauga (*Sistrurus catenatus*), C
Bog turtle (*Clemmys muhlenbergii*), T

Snails

Chittenango ovate amber snail (*Novisuccinea chittenangoensis*), T

Insects

American burying beetle (*Nicrophorus americanus*), E
Hine's emerald dragonfly (*Somatochlora hineana*), E
Hungerford's crawling water beetle (*Brychius hungerfordi*)
Karner blue butterfly (*Lycaeides melissa samuelis*), E
Mitchell's satyr butterfly (*Neonympha mitchellii mitchellii*), E
Poweshiek skipperling (*Oarisma poweshiek*), E
Mitchell's Satyr Butterfly (*Neonympha mitchellii mitchellii*), E

Plants

American hart's-tongue fern (*Asplenium scolopendrium* var. *americanum*), T
Dwarf lake iris (*Iris lacustris*), T
Eastern prairie fringed orchid (*Platanthera leucophaea*), T
Fassett's locoweed (*Oxytropis campestris* var. *chartacea*), T
Houghton's goldenrod (*Solidago houghtonii*), T
Lakeside daisy (*Hymenoxys herbacea* (=H. *acaulis* var. *glabra*)), T
Michigan monkey-flower (*Mimulus michiganensis*), E
Pitcher's thistle (*Cirsium pitcheri*), T
Leedy's roseroot (*Rhodiola integrifolia* ssp. *Leedyi*), T

Recovery is the process that stops the decline of an endangered or threatened species by removing or reducing threats, ensuring the long-term survival of the species in the wild. For the purposes of this Measure, projects that promote the recovery of Listed Species are projects that implement a recovery action(s) from a federal or state endangered, threatened, or candidate species management plan.

What results are acceptable to count for this measure?

GLRI-funded projects with a primary goal or additional benefit of implementing a recovery action(s) as defined in the species *Recovery Plan*.

What results are unacceptable to count for this measure?

Projects which do not involve the expenditure of GLRI funds.

Projects which do not implement a recovery action(s) as defined in the species *Recovery Plan*.

Projects which implement recovery actions for species of the Great Lakes Basin other than those provided protection under the Endangered Species Act of 1973, as amended.

Projects denoted by project records that were listed on glri.us prior to October 1st, 2014.

When to count results for this Measure

Results for this Measure are counted when a project has been sufficiently planned and funded by the RWG agency (such as through the issuance of grants, signing of contracts, etc.) such that an agency can identify it as a new record in EAGL. A new record in EAGL is required whenever a project is funded with a new fiscal year's appropriation; consequently, even if activities are conducted at the same place for the same purpose, those activities will count as separate projects for each new relevant appropriation that funds them.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Funding recipients and sub-recipients may be from federal, state, tribal, local, non-governmental, and academic entities. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection:

GLRI Federal agencies collect source data through various internal budget and project tracking databases.

(c) Data Transmission

For each project counting toward this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semi-annual basis:

A numerical value such as “1” or “5” is entered into the results field to indicate the number of projects supporting this measure. If there is no subsequent result to report, a “0” should be entered into the results field to acknowledge that this field was reviewed.

Species targeted (in the associated Keywords or Comments field).

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency’s EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure’s total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of Federal agencies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

(4.2.2) Number of GLRI-funded projects that promote populations of native non-threatened and non-endangered species self-sustaining in the wild

Measure Code:

Not in ACS

In Action Plan: AP 4.2.2

Measure Language:

Number of GLRI-funded projects that promote populations of native non-threatened and non-endangered species self-sustaining in the wild.

Type of Measure

Action Plan

EPA Measure Lead:

T. Kevin O'Donnell

(312) 886-0813

Units:

Projects

6. Universe:

N/A - This is a new quantitative metric for GLRI Action Plan II; universe is unknown and may change according to the needs of Measure 4.2.2.

7. Baseline:

0 projects that that promote populations of native non-threatened and non-endangered species self-sustaining in the wild. This is a new quantitative metric for GLRI Action Plan II.

8. Definition of Measure Terms:

GLRI-funded project: an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose. Each project corresponds directly with a single record in EAGL and on GLRI.us. For the purposes of this Measure, the primary goal or an additional benefit of the project must be promoting populations of native non-threatened and non-endangered species self-sustaining in the wild.

Native means any species within historic range, within the Great Lakes Basin area occupied at the time of European colonization of North America.

Non-threatened and non-endangered means a species that is not protected under the Endangered Species Act. For the purposes of this Measure, activities focused on aquatic populations must be for aquatic populations included in the U.S. Fish and Wildlife Service Fisheries Information System (FIS) database.

Self-sustaining means the population is one that does not require augmentation by hatchery or out-of-basin fish for aquatic species; the genetic component is sufficient; and habitat requirements are met without further human intervention; or means as defined in current state or federal wildlife management plan(s).

What results are acceptable to count for this measure?

GLRI-funded projects with a primary goal or additional benefit of implementing activities that promote the health of a native non-threatened and non-endangered species to become or remain self-sustaining, as defined in established state or federal management plans (i.e., Fishery Management Plans, State Wildlife Action Plans, etc.). For all projects, activities must be consistent with goals and objectives in established state or federal management plans.

As identified by the U.S. Fish and Wildlife Service, projects for aquatic populations must be included in the FIS database targeted to the 214 native aquatic non-threatened and non-endangered species populations (for more information on populations contact Amy McGovern, USFWS, amy_mcgovern@fws.gov).

What results are unacceptable to count for this measure?

Projects consisting of activities for species that are non-native.

Projects consisting of activities for species listed under the Endangered Species Act or for aquatic populations not included in the FIS database.

Projects consisting of activities not consistent with goals and objectives in current state or federal wildlife management plans.

When to count results for this Measure

Results for this Measure are counted when a project has been sufficiently planned and funded by the RWG agency (such as through the issuance of grants, signing of contracts, etc.) such that an agency can identify it as a new record in EAGL. A new record in EAGL is required whenever a project is funded with a new fiscal year's appropriation; consequently, even if activities are conducted at the same place for the same purpose, those activities will count as separate projects for each new relevant appropriation that funds them.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Funding recipients and sub-recipients may be from federal, state, tribal, local, non-governmental, and academic entities. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection:

GLRI Federal agencies collect source data through various internal budget and project tracking databases.

(c) Data Transmission

For each project counting toward this Measure, the GLRI designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semi-annual basis:

A numerical value such as “1” or “5” is entered into the results field to indicate the number of projects supporting this measure. If there is no subsequent result to report, a “0” should be entered into the results field to acknowledge that this field was reviewed.

Species targeted (in the associated Keywords or Comments field)

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual Reporting Period. Broadly, each RWG agency’s EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see “Spreadsheet Guidance” available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure’s total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports,

and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of Federal agencies. There may be errors in classification, geo-referencing, input accuracy, as well as data omissions. Statistics from the system reflect a point in time. .

Focus Area 5 – Foundations for Future Restoration Actions

(5.1.1) By 2016, a standardized set of climate resiliency criteria will be developed for GLRI projects

Measure Code:

Not in ACS

In Action Plan: AP 5.1.1

Measure Language:

By 2016, a standardized set of climate resiliency criteria will be developed for GLRI projects

Type of Measure:

Action Plan

EPA Measure Lead:

Mike Russ

312-886-4013

Units:

N/A – Reporting consists of a result of “Yes” to indicate a set of standardized climate change resiliency criteria has been developed.

6. Universe:

N/A – Reporting consists of a result of “Yes” to indicate a set of standardized climate change resiliency criteria has been developed.

7. Baseline:

N/A – Reporting consists of a result of “Yes” to indicate a set of standardized climate change resiliency criteria has been developed. However, development of criteria is not anticipated until FY2016.

8. Definition of Measure Terms:

Standardized means criteria have been established and agreed to by the GLRI RWG Climate Change Subgroup.

Climate resiliency criteria refers to the factors that GLRI agencies will consider in the planning and implementation of GLRI-funded projects to ensure that projects account for the expected climate change impacts in the Great Lakes region as documented by the National Climate Assessment.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

A result of “Yes” indicating the development of a set of climate change resiliency criteria agreed to by the GLRI RWG Climate Change Subgroup, and reviewed and approved of by the RWG.

What results are unacceptable to count for this measure?

A result of “Yes” for general climate resiliency projects implemented under GLRI

A result of “Yes” for climate resiliency criteria that are not approved by the RWG.

A result of “Yes” for general criteria that agencies will “consider climate change” in project design.

When to count results for this Measure:

Development of climate change resiliency criteria is not anticipated until 2016. Results for this Measure count following approval of the criteria by the RWG

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source is the GLRI RWG Climate Change Subgroup.

(b) Data Collection

The GLRI RWG Climate Change Subgroup will develop a draft standardized set of climate resiliency criteria for GLRI projects. These criteria will be provided to the RWG for review and final approval.

(c) Data Transmission

The Measure Lead will enter the following information into the EAGL information system in the applicable reporting fields:

A result of “Yes” for the development of a set of standardized climate change resiliency criteria approved by the RWG.

Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead, in coordination with the GLRI RWG Climate Change Subgroup

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and assist the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

As it is not anticipated that these criteria will be developed until 2016, qualifications for acceptable climate change resiliency criteria listed in Section 8 above are subject to change according to the judgment of the RWG Climate Change Sub-group and the RWG.

(5.1.2) Starting in 2017, projects will include climate resiliency criteria in planning and implementation

Measure Code:

Not in ACS

In Action Plan: AP 5.1.2

Measure Language:

Starting in 2017, projects will include climate resiliency criteria in planning and implementation.

Type of Measure:

Action Plan

EPA Measure Lead:

Mike Russ

312-886-4013

Units:

Number of GLRI/RWG agencies that include climate resiliency criteria in their planning and implementation.

6. Universe:

15 – This measure is potentially applicable to funding actions of the following 15 RWG agencies: DHS-USCG; DOC-NOAA; DOD-USACE; DOI-BIA; DOI-NPS; DOI-USFWS; DOI-USGS; DOT-FHWA; DOT-MARAD; HHS-ATSDR; HHS-CDC; USDA-APHIS; USDA-NRCS; USDA-USFS; and USEPA. The total may change depending on the number of participating RWG agencies.

7. Baseline:

0 – Climate resiliency criteria will not be developed until 2016. Inclusion of standard climate resiliency criteria in planning and implementation will not take place until such criteria are developed.

8. Definition of Measure Terms:

Climate resiliency criteria refers to the factors that GLRI agencies will consider in the planning and implementation of GLRI-funded projects to ensure that projects account for the expected climate change impacts in the Great Lakes region as documented by the National Climate Assessment.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

Planning and implementation are in reference to the planning and implementation of GLRI – funded projects. Planning means that GLRI/RWG agencies incorporate climate resiliency criteria into templates, interagency agreement workplans, competitive grant announcements, and assistance agreements. Implementation means that GLRI/RWG agencies put that climate resiliency criteria into effect through projects that they implement and that an evaluation is planned to ensure that criteria were implemented as proposed.

What results are acceptable to count for this measure?

The total number of GLRI/RWG agencies that have either: (i) implemented climate change resiliency criteria into project planning and implementation during the fiscal year or (ii) have provided an appropriate reason that excuses the agency for not implementing the criteria into project planning and implementation during the fiscal year (i.e. not having planned and/or implemented a project relevant to the criteria).

What results are unacceptable to count for this measure?

Number of projects incorporating climate change criteria in project planning

When to count results for this Measure:

Beginning with FY2017 reporting, each RWG agency will report annually whether its GLRI projects for that year include climate resiliency criteria in their planning and implementation. The Measure Lead may count results for this Measure after receiving certification from a GLRI/RWG agency that the agency has incorporated climate change resiliency criteria in their project planning and implementation.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The original data source is GLRI/RWG agencies. Only the Measure Lead inputs data into the EAGL information system.

(b) Data Collection

Beginning with FY 2017 reporting, each RWG agency will report annually to the Measure Lead whether its GLRI projects for that year include the standardized climate resiliency criteria in their planning and implementation. The RWG/GLRI agency is responsible for storing all records and documentation used to support its certification.

The Measure Lead determines the number of agencies that include standardized climate change resiliency criteria in project planning and implementation by summing the agencies that either: (i) have certified that they implemented climate change resiliency criteria into project planning and implementation or (ii) have an appropriate reason excusing the agency from having implemented climate change resiliency criteria into project planning and implementation (i.e. not having planned and/or implemented a project relevant to the criteria).

(c) Data Transmission

The Measure Lead will enter the following information into the EAGL system in the applicable reporting columns on an annual basis starting in 2017, during the end-of-year reporting window of the fiscal year results were achieved:

The number of GLRI/RWG agencies that include climate resiliency criteria in their project planning and implementation.

The number of agencies is transmitted directly through the EAGL information system and the Measure Lead will attach certifications within the EAGL information system.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead's submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead, in coordination with RWG agencies

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and assist the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

- GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the EAGL information system rely on the inputted data of GLRI/RWG agencies. These results rely on GLRI/RWG agencies to accurately report whether criteria are incorporated into project planning and implementation. There may be errors in interpretation, input accuracy, as well as data omissions.

As it is not anticipated that climate change resiliency criteria will be developed until 2016, and that reporting against this measure will not occur until 2017, qualifications above are subject to change according to the judgment of the RWG Climate Change Sub-group, the RWG, and the IATF.

(5.2.1) Number of educators trained through GLRI-funded projects

Measure Code:

Not in ACS

In Action Plan: AP 5.2.1

Measure Language:

Number of educators trained through GLRI-funded projects.

Type of Measure:

Action Plan

EPA Measure Lead:

Nicole Singleton

312-886-5254

Units:

Educators

Universe:

N/A

Baseline:

Definition of Measure Terms:

Educators broadly includes both formal K-12 educators and non-formal educators (such as program educators at parks, nature centers, museums and zoos) that engage one-on-one with K-12 students.

Trained: An educator is trained when they have engaged in a formal in-person hands-on GLRI-funded program dedicated to improving the educator's knowledge of the Great Lakes-based ecosystem education and stewardship. The program must include a programmatic evaluation to ensure training is implementing in the classroom.

GLRI-funded project means an organized activity or set of activities that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Number of educators trained after October 1st, 2014 from a GLRI-funded program.

The program must consist of formal in-person hands-on training and it must include a programmatic evaluation to ensure that training is implementing in the classroom.

Number of educators trained from Center for Great Lakes Literacy (CGLL), B-WET, or NPS interpretive programs.

—~~What results are unacceptable to count for this measure?~~

Number of educators from programs which do not consist of formal in-person hands-on training, but rather informal, not in-person, or passive training programs such as: online webinars, booklets, brochures, etc.

Number of educators trained from a program which does not conduct a programmatic evaluation to ensure training is implemented in the classroom.

Number of educators trained prior to Oct. 1, 2014.

Number of people trained who are not educators.

Number of educators trained from a non-GLRI-funded program.

Number of educators trained through a program for which training program requirements are not documented.

When to count results for this Measure:

Results are counted when educators have completed training according to individual educator training program requirements. The number of educators trained is reported on a semiannual basis.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients may use various methods to acquire requested data and report it to their GLRI/RWG agency, such as tracking attendance, conducting surveys, conducting evaluations, etc.

(c) Data Transmission

For each project that achieves a result for Measure, the GLRI-designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semiannual basis:

Number of educators trained through GLRI-funded projects, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual

Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of federal agencies. There may be errors in interpretation, classification, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

(5.2.2) Number of people educated on the Great Lakes ecosystem through GLRI-funded place-based experiential learning activities

Measure Code:

Not in ACS

In Action Plan: AP 5.2.2

Measure Language:

Number of people educated on the Great Lakes ecosystem through GLRI-funded place-based experiential learning activities.

Type of Measure:

Action Plan

EPA Measure Lead:

Nicole Singleton

312-886-5254

Units:

People

Universe:

N/A

Baseline:

Definition of Measure Terms:

Place-based means that people engage in a learning experience about the Great Lakes ecosystem on federal lands or adjacent locations (e.g. a visitor center located adjacent to a national park).

Experiential learning means learning through action, experience, or discovery and exploration. Learning should include focused reflection and an active hands-on learning component in order to increase knowledge, develop skills, and clarify values through direct interaction between the recipient and the individual providing instruction for the educational program.

GLRI-funded project means an organized activity or set of that is wholly or partially supported by the use of GLRI funds to achieve a common purpose.

What results are acceptable to count for this measure?

Number of people educated after October 1, 2014 through place-based experiential learning after October 1st, 2014.

People must be educated from a relevant GLRI-funded project, such as NPS interpretive programs, or other programs as approved of by the Measure Lead.

What results are unacceptable to count for this measure?

Number of people educated through a program that is not place-based.

Number of people educated through a program that does not consist of experiential learning. People educated through passive online webinars, displays, brochures, etc. cannot be counted toward this measure. People educated through a program that does not consist of direct interaction with the individual providing instruction for the educational program cannot be counted toward this measure.

Number of people educated prior to Oct. 1, 2014.

Number of people educated from programs not approved by the Measure Lead.

When to count results for this Measure:

Results are counted when people have completed the educational experience as determined by individual educational program requirements. The number of people educated is reported into EAGL on a semiannual basis.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

Funding recipients may use various methods to acquire requested data and report it to their GLRI/RWG agency, such as tracking attendance, conducting surveys, conducting evaluations, etc.

(c) Data Transmission

For each project that achieves a result for this Measure, the GLRI-designated RWG agency contact will enter the following information into the EAGL information system in the applicable reporting fields on a semiannual basis:

Number of people educated on the Great Lakes ecosystem through GLRI-funded place-based experiential learning activities, as defined in this Measures Reporting Plan, incrementally during the applicable Reporting Period.

Data is transmitted directly through the EAGL system. The RWG agency is responsible for storing all records and documentation used to support results they submit to EAGL.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. RWG agencies submit one EAGL Information System Spreadsheet (EAGL Spreadsheet) into EAGL per semiannual

Reporting Period. Broadly, each RWG agency's EAGL Spreadsheet is comprised of records of all GLRI-funded projects awarded by the agency, and the result(s) achieved respective to each record against any relevant Measures of Progress (for more information, see "Spreadsheet Guidance" available at the EAGL link from <https://login.glnpo.net>).

Source/Transformed Data: The individual EAGL Spreadsheets submitted by each RWG agency for the Reporting Period are compiled into a single spreadsheet. The EPA Measure lead queries the compiled spreadsheet for all results against this Measure and provides general oversight for the reasonableness of the results identified by the query. The Measure Lead sums each result identified by the query to produce the Measure's total annual result, which is then reported to the GLNPO Reporting Coordinator. The GLNPO Reporting Coordinator sums the annual total with the baseline value to calculate the value for final reporting, and submits the result for final reporting. The Reporting Coordinator posts the result used for final reporting to the EAGL website.

11. Data Oversight:

Source Data Reporting Oversight Personnel: RWG agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

For EPA, project officers for grants and project managers for Great Lakes Legacy Act projects oversee and review information provided in grantee and contractor progress reports, and submit data to EAGL on the basis of those reports and communication with grantees and contractors. The EPA Measure Lead provides general oversight for the reasonableness of information that has been entered into EAGL by EPA staff.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; and facilitate Measure Leads and the Reporting Coordinator in extracting and transforming data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; transform the result for final reporting; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of Federal agencies. There may be errors in interpretation, classification, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

Results from this Measure are not reflective of overall Great Lakes outreach and education, but only of the educational experiences acceptable under this Measure.

(5.3.1) Project evaluations completed and used to prioritize GLRI funding decisions each year

Measure Code:

Not in ACS

In Action Plan: AP 5.3.1

Measure Language:

Project evaluations completed and used to prioritize GLRI funding decisions each year.

Type of Measure:

Action Plan

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

N/A - Reporting consists of the identification of relevant projects with Measure 5.3.1, and a subsequent result of “Yes” for each year completed project evaluations are used to prioritize GLRI funding decisions. No units are attributed to this result.

6. Universe:

N/A - Reporting consists of the identification of relevant projects with Measure 5.3.1, and a subsequent result of “Yes” for each year completed project evaluations are used to prioritize GLRI funding decisions. However, as results are expected to be reported annually, a maximum of 5 results of “Yes” may be reported for the duration of GLRI Action Plan II.

7. Baseline:

N/A – This is a new Measure under GLRI Action Plan II, and results consist of a non-quantitative report.

8. Definition of Measure Terms:

Project evaluations refers to assessments that determine the effectiveness of actions taken through the implementation of a GLRI-funded project. The evaluation may be included as a component of the GLRI-funded project being assessed, or may be a separate GLRI-funded project conducting an evaluation of other GLRI-funded projects.

Prioritize GLRI funding decisions each year refers to the use of information obtained from project evaluations, annual monitoring, and the targeting of habitats, watersheds, and species to inform GLRI budgeting decisions each year. In a given fiscal year, the RWG makes planning and budgeting decisions at multiple scales and for fiscal years subsequent to that fiscal year.

(a) What results are acceptable to count for this measure?

The Measure Lead reports a result of “Yes” for the fiscal year if an assessment conducted by the Measure Lead indicates that project evaluations were used to prioritize GLRI funding decisions over the past fiscal year. That prioritization can be for funding decisions made for that year’s appropriation or for a future year’s appropriation.

(b) What results are unacceptable to count for this measure?

It is unacceptable for the Measure Lead to report a result of “Yes” for the fiscal year if an assessment conducted by the Measure Lead indicates that project evaluations were not used to prioritize GLRI funding decisions over the past fiscal year.

Reporting against this Measure is qualitative and does not specify:

The number of project evaluations completed

The number of projects completing project evaluations

When to count results for this Measure:

Results for this Measure are counted on an annual basis. The Measure Lead reports a result of “Yes” after an assessment has concluded that project evaluations were used to prioritize GLRI funding decisions over the past fiscal year.

(d) When to identify a project with this Measure:

Reporting for this Measure consists of identifying relevant projects with this Measure.

Identification of a project with this Measure consists of selecting and assigning Measure 5.3.1 to the relevant project(s) in the EAGL information system.

While all GLRI-funded projects are expected to be evaluated through a number of routine processes, this Measure is only identified for projects for which the evaluations consist of an assessment beyond routine processes. Projects which may be identified with Measure 5.3.1 include projects involving:

Pre- and post- GLRI-funded project implementation monitoring, such as edge-of-field monitoring.

Post-implementation evaluation of ecosystem outcomes and measurable outputs against predictive modelling or laboratory-scale studies

Unique assessment/evaluation projects to determine the effectiveness of restoration

Innovative restoration projects that include an assessment component.

This measure should not be identified for projects for which:

The evaluation is of outcomes and outputs not achieved through the implementation of GLRI-funded project(s)

The evaluation is routine evaluations such as progress reports and updates that help prioritize future efforts on that project.

Relevant projects that are active during Action Plan II (beginning October 1, 2014) are identified with this Measure at least annually.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

GLRI/RWG agencies may use a variety of methods to confirm a project evaluation will be completing a project evaluation to the satisfaction of requirements in Section 8 above, such as a review of project workplans, or of quarterly, semiannual, or annual reports. The RWG/GLRI agency is responsible for storing all records and documentation used to support identification of relevant projects with Measure 5.3.1.

The Measure Lead assesses whether project evaluations have been used to prioritize GLRI funding decisions using information that includes the identification of projects with this Measure through EAGL as described in Section 8 above and other information as appropriate. Each year the Measure Lead provides a written overview that supports the outcome of the assessment.

(c) Data Transmission

For fiscal years in which the Measure Lead assessment concludes that project evaluations were used to prioritize funding decisions over the past fiscal year, the Measure Lead will enter the following information into the EAGL information system in the applicable reporting fields on an annual basis:

A result of “Yes” indicating that project evaluations were used to prioritize GLRI funding decisions each year

A written overview that supports the outcome of the assessment

Agency contacts identify relevant projects with this Measure in EAGL at least annually directly through the EAGL information system. GLRI/RWG agencies are responsible for storing all records and documentation used to support the identification of relevant projects with this Measure.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead, and RWG/GLRI agencies, via RWG agency data contacts, in coordination with agency staff, their recipients, and subrecipients.

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of federal agencies. There may be errors in interpretation, classification, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

The project evaluations completed and used to prioritize GLRI funding decisions each year may pertain to the current fiscal year or to a future fiscal year.

(5.3.2) Annual Great Lakes monitoring conducted and used to prioritize GLRI funding decisions each year

Measure Code:

Not in ACS

In Action Plan: AP 5.3.2

Measure Language:

Annual Great Lakes monitoring conducted and used to prioritize GLRI funding decisions each year.

Type of Measure:

Action Plan

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

N/A - Reporting consists of the identification of relevant projects with Measure 5.3.2, and a subsequent result of “Yes” for each year annual Great Lakes monitoring has been conducted and used to prioritize GLRI funding decisions. No units are attributed to this result.

6. Universe:

N/A - Reporting consists of the identification of relevant projects with Measure 5.3.2, and a subsequent result of “Yes” for each year annual Great Lakes monitoring has been conducted and used to prioritize GLRI funding decisions. However, as results are expected to be reported annually, a maximum of 5 results of “Yes” may be reported for the duration of GLRI Action Plan II.

7. Baseline:

N/A – This is a new Measure under GLRI Action Plan II, and results consist of a non-quantitative report.

8. Definition of Measure Terms:

Great Lakes monitoring refers to sampling of water, aquatic life, sediments, air, wetlands and other relevant media in order to assess the physical, chemical, and biological health of the Great Lakes ecosystem conducted through the expenditure of GLRI funds.

Prioritize GLRI funding decisions each year refers to the use of information obtained from project evaluations, annual monitoring, and the targeting of habitats, watersheds, and species to inform GLRI budgeting decisions each year. In a given fiscal year, the RWG makes planning and budgeting decisions at multiple scales and for fiscal years subsequent to that fiscal year.

(a) What results are acceptable to count for this measure?

The Measure Lead reports a result of “Yes” for the fiscal year if an assessment conducted by the Measure Lead indicates that annual monitoring was used to prioritize GLRI funding decisions

over the past fiscal year. That prioritization can be for funding decisions made for that year's appropriation or for a future year's appropriation.

(b) What results are unacceptable to count for this measure?

It is unacceptable for the Measure Lead to report a result of "Yes" for the fiscal year if an assessment conducted by the Measure Lead indicates that annual monitoring was not used to prioritize GLRI funding decisions over the past fiscal year.

Reporting against this Measure is non-numeric. Therefore it is unacceptable to report the number of projects or programs conducting annual Great Lakes monitoring

(c) When to count results for this Measure:

Results for this Measure are counted on an annual basis. The Measure Lead reports a result of "Yes" after an assessment has concluded that annual monitoring was used to prioritize GLRI funding decisions over the past fiscal year.

(d) When to identify a project with this Measure:

Reporting for this Measure consists of identifying relevant projects with this Measure. Identification of a project with this Measure consists of selecting and assigning Measure 5.3.2 to the relevant project(s) in the EAGL information system.

Projects which may be identified with Measure 5.3.2 include projects involving:

- EPA's long-term monitoring programs
- CSMI intensive field year efforts
- Agency ecosystem monitoring efforts
- Remote sensing
- National Coastal Condition Assessment

It is unacceptable to identify projects with Measure 5.3.1 on the basis of the following activities:

- Project evaluations
- Predictive modeling

Relevant projects that are active during Action Plan II (beginning October 1, 2014) are identified with this Measure during annual end-of-year reporting.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

GLRI/RWG agencies may use a variety of methods to confirm a project has conducted annual Great Lakes monitoring over the past fiscal year, such as a review of project workplans, and

quarterly, semiannual, or annual reports. The RWG/GLRI agency is responsible for storing all records and documentation used to support identification of relevant projects with Measure 5.3.2.

The Measure Lead assesses whether annual monitoring has been used to prioritize GLRI funding decisions using information that includes the identification of projects with this Measure through EAGL as described in Section 8 above and other information as appropriate. Each year the Measure Lead provides a written overview that supports the outcome of the assessment.

(c) Data Transmission

For fiscal years in which the Measure Lead assessment concludes that annual monitoring was used to prioritize funding decisions over the past fiscal year, the Measure Lead will enter the following information into the EAGL information system in the applicable reporting fields on an annual basis:

A result of “Yes” indicating that annual Great Lakes monitoring was conducted and used to prioritize GLRI funding decisions for the each year

Agency contacts identify relevant projects with this Measure in EAGL at least semi-annually directly through the EAGL information system. GLRI/RWG agencies are responsible for storing all records and documentation used to support the identification of relevant projects with this Measure.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of federal agencies. There may be errors in interpretation, classification, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

The annual monitoring conducted and used to prioritize GLRI funding decisions each year may pertain to the current fiscal year or to a future fiscal year.

Information is collected annually and subsequently reported annually. Therefore, the reported information may be from one month to two years old depending on the timing of the tracking and reporting deadlines.

(5.3.3) GLRI-targeted watersheds, habitats and species identified and used to prioritize GLRI funding decisions

Measure Code:

Not in ACS

In Action Plan: AP 5.3.3

Measure Language:

GLRI-targeted watersheds, habitats and species identified and used to prioritize GLRI funding decisions.

Type of Measure:

Action Plan

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

N/A - Reporting consists of the identification of relevant projects with Measure 5.3.3, and a subsequent result of “Yes” for each year identified GLRI-targeted watersheds, habitats and species are used to prioritize GLRI funding decisions. No units are attributed to this result.

6. Universe:

N/A - Reporting consists of the identification of relevant projects with Measure 5.3.3, and a subsequent result of “Yes” for each year identified GLRI-targeted watersheds, habitats and species are used to prioritize GLRI funding decisions. However, as results are expected to be reported annually, a maximum of 5 results of “Yes” may be reported for the duration of GLRI Action Plan II.

7. Baseline:

N/A – This is a new Measure under GLRI Action Plan II, and results consist of a non-quantitative report.

8. Definition of Measure Terms:

GLRI-targeted watersheds, habitats, and species: GLRI agencies use adaptive management principles to identify the watersheds, habitats, and species for which they will implement projects in order to have the greatest environmental benefit.

Prioritize GLRI funding decisions each year refers to the use of information obtained from project evaluations, annual monitoring, and the targeting of habitats, watersheds, and species to inform GLRI budgeting decisions each year. In a given fiscal year, the RWG makes planning and budgeting decisions at multiple scales and for fiscal years subsequent to that fiscal year.

(a) What results are acceptable to count for this measure?

The Measure Lead reports a result of “Yes” for the fiscal year if an assessment conducted by the Measure Lead indicates that identification of targeted watersheds, habitats, and species was used to prioritize GLRI funding decisions over the past fiscal year.

(b) What results are unacceptable to count for this measure?

It is unacceptable for the Measure Lead to report a result of “Yes” for the fiscal year if an assessment conducted by the Measure Lead indicates that identification of targeted watersheds, habitats, and species was not used to prioritize GLRI funding decisions over the past fiscal year. Reporting against this Measure is non-numeric. Therefore it is unacceptable to report:

The number of projects that identify GLRI-targeted watersheds, habitats, and species
The number of GLRI-targeted watersheds, habitats, and species identified

When to count results for this Measure:

Results for this Measure are counted on an annual basis. RWG/GLRI agencies identify projects with Measure 5.3.3 for any relevant project that has conducted activities over the past fiscal year. The Measure Lead reports a result of “Yes” after an assessment has concluded that identification of targeted watersheds, habitats, and species was used to prioritize GLRI funding decisions over the past fiscal year. That prioritization can be for funding decisions made for that year’s appropriation or for a future year’s appropriation.

(d) When to identify a project with this Measure:

Reporting for this Measure consists of identifying relevant projects with this Measure. Identification of a project with this Measure consists of selecting and assigning Measure 5.3.3 to the relevant project(s) in the EAGL information system.

Projects which may be identified with Measure 5.3.3 include those which identify any watersheds, habitats, or species that should be targeted by the GLRI, such as those involving:

Modelling
Decision support tool development
Monitoring
Capacity funding for Lakewide Management Plan development or for Binational forums

Projects that cannot be identified with Measure 5.3.3 include:

Projects that are implemented for the benefit of watersheds, habitats, and species that are already targeted by the GLRI

Relevant projects that are active during Action Plan II (beginning October 1, 2014) are identified with this Measure during annual end-of-year reporting.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The data source may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system. This measure includes work directly implemented as well as work performed via subsequent contracting and granting arrangements.

(b) Data Collection

GLRI/RWG agencies may use a variety of methods to confirm to identify relevant projects with Measure 5.3.3, such as a review of project workplans, or of quarterly, semiannual, or annual reports. The RWG/GLRI agency is responsible for storing all records and documentation used to support identification of relevant projects with Measure 5.3.3.

The Measure Lead assesses whether targeting of watersheds, habitats and species has been used to prioritize GLRI funding decisions using information that includes the identification of projects with this Measure through EAGL as described in Section 8 above and other information as appropriate. Each year the Measure Lead provides a written overview that supports the outcome of the assessment.

(c) Data Transmission

For fiscal years in which the Measure Lead assessment concludes that the identification of targeted watersheds, habitats, and species was used to prioritize funding decisions over the past fiscal year, the Measure Lead will enter the following information into the EAGL information system in the applicable reporting fields on an annual basis:

A result of “Yes” indicating that identified GLRI-targeted watersheds, habitats and species were used to prioritize GLRI funding decisions each year

Agency contacts identify relevant projects with this Measure in EAGL at least semi-annually directly through the EAGL information system. GLRI/RWG agencies are responsible for storing all records and documentation used to support the identification of relevant projects with this Measure.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with

the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

RWG agencies are responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

13. Data Quality Procedures:

Acceptable quality documentation is required for EPA's recipients and sub-recipients of GLRI funding when that funding is used for projects involving the use or collection of environmental data. Federal agencies must have a quality assurance and quality control system in place that will provide the needed management and technical practices to assure that environmental data used to support GLRI decisions are of adequate quality and usability for their intended purpose. EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Statistics developed through the use of the GLRI reporting system rely on the inputted data of federal agencies. There may be errors in interpretation, classification, input accuracy, as well as data omissions. Statistics from the system reflect a point in time.

The GLRI-targeted watersheds, habitats and species identified and used to prioritize GLRI funding decisions each year may pertain to the current fiscal year or to a future fiscal year.

Information is collected semi-annually and subsequently reported semi-annually. Therefore, the reported information may be from one month to a year old depending on the timing of the tracking and reporting deadlines.

(5.3.4) Issue Annual GLRI Reports to Congress and the President

Measure Code:

Not in ACS

In Action Plan: AP 5.3.4

Measure Language:

Issue Annual GLRI Reports to Congress and the President.

Type of Measure:

Action Plan

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

Reports

6. Universe:

8. Prior to FY2015, Reports were issued for FY2010, FY2011, and FY2012. From 2015 through 2019, five Reports are expected, including a single Report in 2015 that covers GLRI progress in FY2013 and FY2014.

7. Baseline:

3 Reports were issued prior to FY2015.

8. Definition of Measure Terms:

GLRI Report to Congress and the President is a report that presents an overview of GLRI progress, including information on funding and performance on GLRI Action Plan Measures of Progress over the previous fiscal year. Prior to FY2015, Reports were transmitted for FY2010, FY2011, and FY2012. The Report in FY2015 covers FY2013 and FY2014.

Issued means the Report has been transmitted by EPA's Office of the Chief Financial Officer (OCFO) to Congress and the President.

What results are acceptable to count for this measure?

A response of "Yes," to indicate a Report has been issued upon notification that OCFO has transmitted the Report to Congress and the President or a response of "No" to indicate a Report has not been issued.

What results are unacceptable to count for this measure?

A result of "Yes" for a Report that has yet to be issued to Congress and the President.

A result of “Yes” for transmittal of program performance reports other than the GLRI Annual Report to Congress and the President

When to count results for this Measure:

The result is counted upon or following notification (generally by the Office of Water or OCFO) that a Report has been transmitted to Congress and the President.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The Data Source is OCFO.

(b) Data Collection

GLNPO’s planning group will receive e-mail notification, generally from the Office of Water or OCFO, informing the group of issuance of the Report.

(c) Data Transmission

GLNPO’s planning group will forward the e-mail notification, together with a copy of the Report, to the Measure Lead. The Measure Lead will enter the following information into the EAGL information system in the applicable reporting fields:

A result of “Yes” for each GLRI Report to Congress and the President issued.

The date of the issue.

The URL of the issue.

Data is transmitted directly through the EAGL information system.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

12. Final Reporting Timing and Oversight:

The GLNPO Reporting Coordinator is responsible for overseeing final reporting. Final reporting will include:

- Annual GLRI Report to Congress and the President

Data Quality Procedures:

EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

Reports for multiple years may, at the discretion of GLNPO management, be combined into a single report.

Information is collected annually and reported annually. While information included in each Report may be a year to two years old, there will be no data lag for reporting on transmission of the Report.

(5.3.5) Issue Great Lakes Water Quality Agreement Triennial Progress Reports of the Parties

Measure Code:

Not in ACS

In Action Plan: AP 5.3.5

Measure Language:

Issue Great Lakes Water Quality Agreement Triennial Progress Reports of the Parties

Type of Measure:

Action Plan

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

Reports

6. Universe:

NA. Triennial Reports are expected to begin in calendar year 2016.

Baseline:

Definition of Measure Terms:

Triennial Progress Report of the Parties is a triennially-issued Great Lakes Water Quality Agreement (GLWQA) progress report established under the Agreement to include:

- a review of the Progress Report of the Parties;
- a summary of Public input on the Progress Report of the Parties;
- an assessment of the extent to which programs and other measures are achieving the General and Specific Objectives of the GLWQA
- consideration of the most recent State of the Lakes Report; and
- other advice and recommendations, as appropriate.

Issued means the report was provided to the Public as required by the GLWQA.

What results are acceptable to count for this measure?

Issuance of a final Great Lakes Water Quality Agreement Triennial Progress Report of the Parties as required by the GLWQA.

(b) What results are unacceptable to count for this measure?

A Great Lakes Water Quality Agreement Triennial Progress Report of the Parties that has yet to be issued or is not yet final.

Program performance reports other than the Great Lakes Water Quality Agreement Triennial Progress Report of the Parties.

When to count results for this Measure:

Results for this Measure count after a final Triennial Progress Report of the Parties has been issued to the Public. The EPA Measure lead reports results during the end-of-year reporting window of the fiscal year the Report was issued.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The Data Source is Parties to the Great Lakes Water Quality Agreement.

(b) Data Collection

Information will be obtained from the Secretariat of the Great Lakes Executive Committee.

(c) Data Transmission

The Secretariat of the Great Lakes Executive Committee will notify the Measure Lead of issuance of the report. For each Report issued, the Measure Lead will enter the following information into the EAGL information system in the applicable reporting fields:

The number of Great Lakes Water Quality Agreement Triennial Progress Report of Parties issued

The date the Great Lakes Water Quality Agreement Triennial Progress Report of Parties was issued

The URL of the online version of the document

Data is transmitted directly through the EAGL information system.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead's submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with

the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

12. Final Reporting Timing and Oversight:

The GLNPO Reporting Coordinator is responsible for overseeing final reporting. Final reporting will include:

Number of Great Lakes Water Quality Agreement Triennial Progress Reports of the Parties Issued

Data Quality Procedures:

EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

No known data limitations or qualifications.

(5.3.6) Issue triennial State of the Lakes reports

Measure Code:

Not in ACS

In Action Plan: AP 5.3.6

Measure Language:

Issue triennial State of the Lakes reports

Type of Measure:

Action Plan

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

Reports

6. Universe:

NA. Triennial State of the Lakes Reports are expected to begin in calendar year 2016.

7. Baseline:

0. State of the Lakes Reports are expected to begin in calendar year 2016.

8. Definition of Measure Terms:

State of the Lakes Report is a triennially-issued Report describing “basin-wide environmental trends and lake-specific conditions using ecosystem indicators” to be issued to the Public and the International Joint Commission as established in the Great Lakes Water Quality Agreement (GLWQA).

Issued means the report was provided to the Public as required by the GLWQA.

What results are acceptable to count for this measure?

A result of “Yes” to indicate a Report has been issued to the Public.

What results are unacceptable to count for this measure?

A result of “Yes” for a Report that has yet to be issued to the Public or is not yet final.

A result of “Yes” for transmittal of program performance reports other than a State of the Lakes Report.

When to count results for this Measure:

Results for this Measure count after a final State of the Lakes Report has been issued to the Public.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

The Data Source is the applicable State of the Lakes Ecosystem Conference.

(b) Data Collection

Information will be obtained from the Science Annex sub-committee. That subcommittee composes and issues the Report.

(c) Data Transmission

The Report is transmitted by the co-chairs of the Science Annex sub-committee. The Measure Lead enters the following information into the EAGL information system in the applicable reporting field for each State of the Lakes Report issued

:

- A result of “Yes” for each Triennial State of the Lakes Report issued.
- The date of the issue.
- The URL of the issue.

Data is transmitted directly through the EAGL information system.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for

this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead as described in Section 10 above.

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

12. Final Reporting Timing and Oversight:

The GLNPO Reporting Coordinator is responsible for overseeing final reporting. Final reporting will include:

- Great Lakes Water Quality Agreement State of the Lakes Report(s)

Data Quality Procedures:

EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

No known data limitations or qualifications.

(5.3.7) Periodically update publicly available online information about the GLRI

Measure Code:

Not in ACS

In Action Plan: AP 5.3.7

Measure Language:

Periodically update publicly available online information about the GLRI

Type of Measure:

Action Plans

EPA Measure Lead:

Derek Ager

312-353-7463

Units:

N/A

6. Universe:

N/A - Reporting consists of a result of “Yes” for each periodic update to publicly available online information about the GLRI. However, as updates are expected semi-annually, a total of 10 updates are anticipated for the duration of GLRI Action Plan II.

7. Baseline:

N/A – Reporting consists of a result of “Yes” for each periodic update to publicly available online information about the GLRI.

8. Definition of Measure Terms:

Publicly available online information about the GLRI refers exclusively to information available to the Public on glri.us.

Periodically means glri.us is updated semi-annually with data transmitted through the EAGL information system during semi-annual GLRI reporting periods.

What results are acceptable to count for this measure?

A result of “Yes” to indicate glri.us has been updated with data transmitted through the EAGL information system during the previous semi-annual GLRI reporting period.

What results are unacceptable to count for this measure?

A result of “Yes” to indicate updates to publicly available online information about the GLRI on sites other than glri.us.

When to count results for this Measure:

Results for this Measure count after the GLNPO IT Specialist has received confirmation that glri.us has been updated with results transmitted during the previous GLRI semi-annual reporting period.

9. Calculation Methodology for Individual Project Entries:

(a) Data Source

Data transmitted through the EAGL information system is used to update glri.us. The data source for data used to update GLRI.us may be a GLRI/RWG agency or their funding recipients and sub-recipients. Only GLRI/RWG agencies report into the EAGL system.

The USEPA Region 5 Office of Exterior Communications is the original data source for confirmation that glri.us has been updated. The GLNPO IT Specialist receives confirmation from the USEPA Region 5 Office of Exterior Communications.

(b) Data Collection

The GLNPO IT Specialist receives confirmation that glri.us has been updated via an email from the USEPA Region 5 Office of Exterior Communications.

(c) Data Transmission

The EPA Measure Lead enters the following information into the EAGL information system in the applicable reporting field for each semi-annual update to glri.us:

A result of “Yes” for each update to glri.us.
The date glri.us was updated.

Data is transmitted directly through the EAGL information system.

10. Environmental Accomplishments in the Great Lakes (EAGL) Information System:

System Description: EAGL (available at the EAGL link from <https://login.glnpo.net>) is a GLNPO-hosted, SharePoint-based information system for RWG agencies to identify projects and report results achieved against GLRI Action Plan II Measures of Progress. For this Measure, EAGL accepts a result submitted by the Measure Lead, as described in Section 9 above.

Source/Transformed Data: The Reporting Coordinator reviews the EPA Measure Lead’s submission into EAGL for completeness and reasonableness. The Reporting Coordinator submits the result for final reporting.

11. Data Oversight:

Source Data Reporting Oversight Personnel: EPA Measure Lead

Source Data Reporting Oversight Responsibilities: The EPA Measure Lead is responsible for ensuring that all data they submit to EAGL is verified and validated; is in accordance with the Measures Reporting Plan and Spreadsheet Guidance; and for storing all records and documentation used to support the results they submit to EAGL.

Information Systems Oversight Personnel: EAGL Information System Administrator/GLNPO IT Specialist

Information Systems Oversight Responsibilities: Administer the EAGL site; ensure RWG Agencies receive training on definitions of progress for each Measure; ensure EAGL Information System Spreadsheets are submitted semi-annually; assist the Measure Lead in submitting data for this Measure into EAGL; and the Reporting Coordinator in extracting data submitted to EAGL for final reporting.

12. Final Reporting Timing and Oversight:

Final Reporting Oversight Personnel: GLRI/GLNPO Reporting Coordinator, in coordination with the EPA Measure Lead

Final Reporting Oversight Responsibilities: Review data reported by the EPA Measure Lead for completeness and reasonableness; and submit result for final reporting. Final reporting will include:

GLRI Fiscal Year Annual Report to Congress and the President

Final Reporting Timing: Annual

12. Final Reporting Timing and Oversight:

The GLNPO Reporting Coordinator is responsible for overseeing final reporting. Final reporting will include:

- GLRI Annual Report to Congress and the President

Data Quality Procedures:

EPA GLNPO's Quality Management System conforms to the USEPA Quality Management Order and is audited every five years in accordance with the Federal Policy for Quality Management. In December of 2015 GLNPO's Quality Management System was combined with EPA Region 5's Quality program.

14. Data Limitations/Qualifications:

No known data limitations or qualifications.
