GREAT LAKES RESTORATION CROSSCUT

Report to Congress

Office of Management and Budget

January 2016

The Great Lakes Watershed



FY 2016 Great Lakes Restoration Crosscut

This report represents an accounting of Federal funding for Great Lakes restoration activities. This report is provided to Congress in response to Section 738 of the Financial Services and General Government Appropriations Act, 2014 (Division E of Public Law 113-76, the 2014 Consolidated Appropriations Act.)

The Fiscal Year (FY) 2016 Budget continues the Administration's commitment to Great Lakes environmental restoration by requesting \$785 million for high priority programs and projects in the Great Lakes watershed. This is a \$173 million decrease (-18%) from FY 2015 levels. Approximately one-third of this decrease is from two Army Corps of Engineers projects, which were funded at higher levels in FY 2015 to facilitate completion in FY 2016.

FY 2016 funding levels will allow for a robust Great Lakes program reflective of the region's environmental significance. Funding will support a number of critical restoration activities, including projects for aquatic invasive species including Asian carp, toxics and contaminated sediments, nonpoint source pollution, and habitat protection and restoration.

This crosscut presents information on Federal funding from FY 2011 through the FY 2016 Budget for Great Lakes restoration work in the following formats:

- Total Federal funding by agency, including national and Great Lakes programs and projects;
- Agency allocations of the Great Lakes Restoration Initiative;
- Agency funding for national programs;
- Agency funding for Great Lakes Programs; and
- Agency funding for Great Lakes projects

It is important to note that for national programs, in many instances the numbers shown for FY 2016, and in some cases FY 2015, are extrapolated either from past funding provided to the region, or by using a percentage of land in the Great Lakes basin relative to the rest of the State. The funding ultimately provided to the Great Lakes basin through national programs may differ from these estimates.

A few other funding notes are necessary. All Federal agency dollars are reported in millions; programs and projects that have not received at least \$500,000 in funding over the period of FY 2011 to FY 2016 are excluded, and rounding errors may occur. FY 2013 totals represent funding levels after sequestration. The programs included are those identified by agencies as having a significant restoration component in the Great Lakes, but their inclusion is not meant to apply that all dollars in each program fund restoration work. Finally, FY 2016 allocations shown for the Great Lakes Restoration Initiative are provisional and final allocations may differ.

Table 1--Federal Agency Totals

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Great Lakes Restoration Initiative | 299 | 300 | 284 | 300 | 300 | 250 |
| Department of Agriculture | 195 | 177 | 225 | 195 | 179 | 182 |
| Department of the Army | 146 | 83 | 114 | 113 | 156 | 68 |
| Department of Commerce | 41 | 40 | 38 | 40 | 40 | 40 |
| Department of Homeland Security | 1 | 2 | 1 | 2 | 1 | 1 |
| Department of the Interior | 66 | 70 | 62 | 63 | 64 | 67 |
| Department of State | 27 | 26 | 23 | 26 | 27 | 22 |
| Department of Transportation ¹ | 4 | 4 | 4 | 4 | 4 | 4 |
| Environmental Protection Agency | 235 | 220 | 202 | 217 | 187 | 151 |
| Total, All Agencies | 1,014 | 922 | 953 | 960 | 958 | 785 |

In all tables, funding amounts are rounded to the nearest million. Rounding errors may result.

All tables exclude programs and projects that have received or requested less than \$500,000 across FYs 2011-2016.

¹ While DOT does not make any direct programmatic funding contributions to Great Lakes Restoration, States use DOT funds for a variety of environmental mitigation activities that undoubtedly contribute to restoration efforts. DOT funding amounts are estimates and are not based on reported data.

Table 2--Great Lakes Restoration Initiative, Agency Allocations

| et authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | 2016 Budge |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|
| Department of Agriculture | 26 | 35 | 27 | 32 | 31 | 25 |
| [Animal and Plant Health Inspection Service] | 1 | 1 | 1 | 1 | 1 | 1 |
| [Natural Resources Conservation Service] | 17 | 27 | 21 | 24 | 23 | 19 |
| [U.S. Forest Service] | 9 | 7 | 6 | 6 | 6 | 5 |
| Department of the Army | 31 | 36 | 32 | 29 | 46 | 17 |
| [Army Corps of Engineers] | 31 | 36 | 32 | 29 | 46 | 17 |
| Department of Commerce [National Oceanic and Atmospheric | 18 | 16 | 26 | 35 | 27 | 10 |
| Administration] | 18 | 16 | 26 | 35 | 27 | 10 |
| Department of Health and Human Services | 2 | 2 | 1 | 2 | 2 | 1 |
| [Agency for Toxic Substances and Disease Registry and Center for Disease Control] | 2 | 2 | 1 | 2 | 2 | 1 |
| Department of Homeland Security | 3 | 3 | 2 | 1 | 2 | 2 |
| [Coast Guard] | 3 | 3 | 2 | 1 | 2 | 2 |
| Department of the Interior | 74 | 67 | 60 | 76 | 64 | 37 |
| [Bureau of Indian Affairs] | 6 | 5 | 4 | 4 | 4 | 4 |
| [Fish and Wildlife Service] | 49 | 46 | 40 | 49 | 41 | 21 |
| [U.S. Geological Survey] | 15 | 13 | 13 | 20 | 16 | 9 |
| [National Park Service] | 5 | 4 | 3 | 3 | 3 | 3 |
| Department of State | 4 | 3 | 3 | 3 | 3 | 2 |
| [Great Lakes Fisheries Commission] | 4 | 3 | 3 | 3 | 3 | 2 |
| [International Joint Commission] | 0 | 0 | 0 | 0 | 0 | 0 |
| Department of Transportation | 4 | 4 | 3 | 3 | 2 | 2 |
| [Federal Highway Administration] | 1 | 1 | 1 | 1 | 1 | 0 |
| [Maritime Administration] | 3 | 2 | 2 | 2 | 1 | 2 |
| Environmental Protection Agency | 136 | 134 | 129 | 119 | 123 | 126 |
| Multiple Agencies ¹ | | | | | | 29 |
| Asian Carp | | | | | | 13 |
| Habitat | | | | | | 16 |
| - | 299 | 300 | 284 | 300 | 300 | 250 |

¹ Agency GLRI funding for Asian carp and habitat is included in agency totals through FY 2015. Agency GLRI allocations for Asian carp and a portion of habitat funding have not yet been determined for 2016.

Table 3--Department of Agriculture, National Programs

| (Budget authority in millions) | FY 2011 Actual | FY 2012 Actual | FY 2013 Actual | FY 2014 Estimated | FY 2015 Enacted | FY 2016 Budget |
|--|-------------------|-------------------|-------------------|----------------------|--------------------|-------------------|
| Natural Resources Conservation Service | | | | | | |
| Conservation Operations | 25 | 20 | 24 | 16 | 16 | 16 |
| Conservation Security Program | 15 | 10 | 9 | 6 | 2 | 1 |
| Conservation Stewardship Program | 2 | 15 | 25 | 23 | 30 | 32 |
| Environmental Quality Incentives Program | 39 | 40 | 46 | 39 | 38 | 38 |
| Farm and Ranch Lands Protection Program ¹ | 5 | 7 | 7 | 0 | 0 | 0 |
| Grasslands Reserve Program ¹ | 2 | 1 | 0 | 0 | 0 | 0 |
| Wetlands Reserve Program ¹ | 15 | 12 | 12 | 0 | 0 | 0 |
| Wildlife Habitats Incentive Program ^{1, 2} | 1 | 0 | 1 | 0 | 0 | 0 |
| Agricultural Conservation Easement Program | 0 | 0 | 0 | 15 | 18 | 21 |
| Total, NRCS | 104 | 105 | 124 | 99 | 103 | 107 |
| Farm Service Agency | | | | | | |
| Conservation Reserve Program | 50 | 49 | 51 | 47 | 46 | 45 |
| Total, FSA | 50 | 49 | 51 | 47 | 46 | 45 |
| Rural Development | | | | | | |
| Water/Wastewater Loans and Grants ³ | 22 | 12 | 39 | 40 | 20 | 20 |
| Total, RD | 22 | 12 | 39 | 40 | 20 | 20 |
| Forest Service | | | | | | |
| Capital Improvement and Maintenance | 9 | 5 | 4 | 4 | 4 | 4 |
| Forest Legacy | 5 | 1 | 1 | 0 | 1 | 1 |
| Forest Stewardship | 2 | 2 | 2 | 1 | 1 | 1 |
| Knutson-Vandenberg Fund | 1 | 1 | 1 | 1 | 1 | 1 |
| Land and Water Conservation Fund | 0 | 1 | 2 | 2 | 2 | 2 |
| National Forest System | 2 | 1 | 1 | 1 | 1 | 1 |
| Total, FS | 19 | 11 | 11 | 9 | 10 | 10 |
| Total, USDA | 195 | 177 | 225 | 195 | 179 | 182 |

¹ These programs were eliminated or consolidated into other programs.

² FY 2014 included about \$40,000 as an initial program allocation for technical assistance to work on prior year contracts.

Repealed program utilized the Farm Bill's Transitional Provision that allows prior work with prior (Farm Bill - 2008) funding.

³ FY 2014 and FY 2015 are estimates based on previous years' data. Actual funding is based on applications received.

Table 4--Department of the Army, National Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Army Corps of Engineers | | | | | | |
| Aquatic Ecosystem Restoration ¹ | 3 | 0 | 1 | 1 | 2 | 1 |
| Beneficial Use of Dredged Material ¹ | 1 | 1 | 1 | 1 | 0 | 2 |
| Dredged Material Disposal Facilities | 0 | 0 | 7 | 2 | 6 | 0 |
| Environmental Dredging | 0 | 0 | 0 | 0 | 0 | 0 |
| Environmental Infrastructure | 0 | 3 | 0 | 5 | 12 | 0 |
| Formerly Utilized Sites Remedial Action Program ² | 26 | 21 | 16 | 14 | 22 | 9 |
| Restoration of Environmental Quality ¹ | 0 | 0 | 0 | 0 | 0 | 1 |
| Watershed Studies | 2 | 0 | 0 | 0 | 0 | 0 |
| Wetlands Permitting ³ | 12 | 12 | 12 | 12 | 12 | 12 |
| Total, Department of the Army | 44 | 38 | 37 | 36 | 55 | 24 |

¹FY 2015 Enacted represents the final work plan. FY 2016 Budget amount represents nationwide total. Portion for Great Lakes is unknown.

Table 5--Department of the Army, Great Lakes Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Army Corps of Engineers | | | | | | |
| Great Lakes Fishery and Ecosystem Restoration | 0 | 2 | 5 | 0 | 0 | 0 |
| Great Lakes Remedial Action Plans | 3 | 0 | 0 | 0 | 0 | 0 |
| Great Lakes Tributary Model | 1 | 1 | 1 | 1 | 1 | 1 |
| Surveillance of Northern Boundary Waters | 5 | 5 | 5 | 5 | 5 | 5 |
| Total, Department of the Army | 9 | 9 | 11 | 6 | 6 | 6 |

 $^{^{2}}$ FY 2015 funds reflect those allocated to programs in Great Lakes that may include other areas.

³ Estimate of expenditures for regulatory activities within Great Lakes watershed (involves all or part of five district offices)

Table 6--Department of the Army, Great Lakes Projects

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Army Corps of Engineers | | | | | | |
| Chicago Sanitary & Ship Canal Dispersal Barriers | 13 | 22 | 24 | 36 | 50 | 28 |
| Indiana Harbor Confined Disposal Facility | 8 | 0 | 0 | 0 | 0 | 0 |
| Indiana Shoreline Erosion | 0 | 0 | 0 | 1 | 0 | 0 |
| Interbasin Control Great Lakes, Mississippi River, Aquatic Nuisance Species | 1 | 3 | 5 | 3 | 1 | 1 |
| McCook and Thornton Reservoirs | 70 | 12 | 36 | 31 | 46 | 9 |
| Presque Isle Peninsula | 2 | 0 | 1 | 2 | 0 | 0 |
| Total, Department of the Army | 93 | 37 | 66 | 72 | 96 | 38 |

Table 7--Department of the Army, Great Lakes Projects-- Detail

| Budget authority in millions) | FY 2016 Budget | Description | Status | Authorized Funding Level (\$M) |
|---|-------------------|--|--|--------------------------------------|
| Army Corps of Engineers | | | | |
| Chicago Sanitary & Ship Canal Dispersal Barriers | 28 | System of electric barriers to deter movement of aquatic nuisance fish species between the Illinois River and Lake Michigan. | Three barriers are constructed and operational. Construction of barrier system, including a permanent upgrade of the first barrier, is scheduled to complete with FY 2016 funding. | no limit |
| Interbasin Control Great Lakes, Mississippi River, Aquatic Nuisance Species | 1 | Comprehensive study on a wide range of alternatives for preventing the migration of aquatic nuisance species between the Mississippi River and Great Lakes watersheds. | Evaluation of options for control at Lockport, IL under study. Public/stakeholder outreach continues. | no limit |
| McCook and Thornton Reservoirs | 9 | Reservoirs to address combined sewer (sanitary and storm) overflows (CSO) that cause flooding and watercourse contamination in Chicago metropolitan area. | Construction of Main Tunnel (Stage 1) - McCook Reservoir scheduled to complete with FY 2016 funding. | 836 (McCook Reservoir) |
| Total, Department of the Army | 38 | | | |

Table 8--Department of Commerce, National Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| National Oceanic and Atmospheric Administration | | | | | | |
| Aquatic Invasive Species Program (AISP) | 1 | 1 | 0 | 0 | 0 | 0 |
| Coastal and Estuarine Land Conservation Program $^{\mathrm{1}}$ | 1 | 0 | 0 | 0 | 0 | 0 |
| Coastal Zone Management Grants | 15 | 15 | 14 | 15 | 15 | 15 |
| National Center for Coastal Ocean Science External Competitive Research ² | 2 | 1 | 1 | 1 | 1 | 1 |
| National Estuarine Research Reserves | 1 | 1 | 1 | 1 | 1 | 1 |
| Marine and Aviation Ops Charter Vessel for Algal Bloom Projects | 0 | 1 | 1 | 0 | 0 | 0 |
| Oceans and Human HealthNOAA Center of Excellence | 0 | 0 | 0 | 0 | 0 | 0 |
| Sea Grant | 10 | 10 | 10 | 12 | 12 | 12 |
| National Marine Sanctuaries | 1 | 1 | 1 | 1 | 1 | 1 |
| Total, Department of Commerce | 31 | 30 | 28 | 30 | 30 | 30 |

¹ Funds were not requested or appropriated for this program in FYs 2013, 2014 and 2015. No funds are requested in FY 2016.

Table 9--Department of Commerce, Great Lakes Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| National Oceanic and Atmospheric Administration | 1 | | | | | |
| Great Lakes Environmental Research Laboratory | 10 | 10 | 10 | 10 | 10 | 10 |
| Total, Department of Commerce | 10 | 10 | 10 | 10 | 10 | 10 |

² FY 2015 and FY 2016 funding is an estimate based on historical trends. Actual funding amounts will be determined based on final appropriations as well as the number and quality of proposals received by NOAA.

Table 10--Department of Homeland Security, National Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Coast Guard Marine Environmental ProtectionBallast | | | | | | |
| Water/Invasive Species | 0 | 1 | 0 | 0 | 0 | 0 |
| Environmental, Compliance and Restoration Toxics and Contaminated Sediments | 1 | 1 | 1 | 2 | 1 | 1 |
| Total, Department of Homeland Security | 1 | 2 | 1 | 2 | 1 | 1 |

Table 11--Department of the Interior, National Programs

| Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| U.S. Geological Survey ¹ | | | | | | |
| Ecosystems/Status and Trends | 4 | 4 | 3 | 3 | 3 | 3 |
| Ecosystems/Fisheries Program | 4 | 4 | 4 | 4 | 4 | 4 |
| Ecosystems/Environments Program | 1 | 1 | 1 | 1 | 1 | 1 |
| Ecosystems/Invasive Species Program (Asian Carp) | 0 | 3 | 3 | 3 | 4 | 4 |
| Natural Hazards/Coastal and Marine Geology | 1 | 1 | 1 | 0 | 0 | 0 |
| National Water Quality Assessment Program ² | 3 | 3 | 2 | 1 | 1 | N/A |
| National Streamflow Information Program ² | 1 | 1 | 1 | 1 | 1 | N/A |
| Cooperative Water Program ² | 3 | 3 | 3 | 3 | 3 | N/A |
| Water Availability and Use Science Program ³ | N/A | N/A | N/A | N/A | N/A | 1 |
| Groundwater and Streamflow Information Program ³ | N/A | N/A | N/A | N/A | N/A | 1 |
| National Water Quality Program ³ | N/A | N/A | N/A | N/A | N/A | 2 |
| Total, USGS | 15 | 18 | 17 | 16 | 17 | 17 |
| Fish and Wildlife Service | | | | | | |
| Clean Vessel Grant Program | 1 | 1 | 1 | 1 | 1 | 1 |
| Coastal Wetlands Grant Program | 3 | 3 | 0 | 2 | 2 | 2 |
| Ecological Services | 3 | 3 | 10 | 10 | 10 | 10 |
| Fire Management/Roads | 2 | 2 | 2 | 2 | 2 | 2 |
| Fish and Wildlife Management | 4 | 4 | 4 | 4 | 4 | 4 |
| Fish Hatcheries | 5 | 4 | 4 | 4 | 4 | 4 |
| Aquatic Invasive Species (Asian Carp) | 0 | 2 | 3 | 3 | 3 | 5 |
| Habitat Conservation (FY 2013 through FY 2015 in Ecol. Serv.) | 8 | 8 | 0 | 0 | 0 | 0 |
| Law Enforcement | 2 | 2 | 2 | 2 | 2 | 2 |
| National Wildlife Refuge System | 13 | 13 | 11 | 11 | 11 | 12 |
| Total, USFWS | 41 | 42 | 36 | 38 | 38 | 41 |
| National Park Service | | | | | | |
| Competitive Park Projects (Water Management Plans) | 0 | 0 | 0 | 1 | 0 | 0 |
| Operating Program | 7 | 7 | 7 | 7 | 7 | 8 |
| Total, NPS | 7 | 7 | 7 | 8 | 8 | 8 |
| Total, Department of the Interior | 64 | 68 | 60 | 61 | 62 | 65 |

¹ In 2016, the USGS plans to realign the Water Resources Mission Area budget structure to better reflect the priorities established in the USGS Water Science Strategy (Circular 1383-G).

 $^{^{2}}$ Figures reflect the Water Resources Mission Area prior to a planned realignment in the 2016 Budget.

³ Figures reflect the planned restructuring, with resources consolidated into four major program areas.

Table 12--Department of the Interior, Great Lakes Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Fish and Wildlife Service | | | | | | |
| Great Lakes Consent Decree | 1 | 1 | 1 | 1 | 1 | 1 |
| Great Lakes Fish and Wildlife Restoration | 1 | 1 | 0 | 0 | 0 | 0 |
| Total, Department of the Interior | 2 | 2 | 2 | 2 | 2 | 2 |

Table 13--Department of State, Great Lakes Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|--------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Great Lakes Fishery Commission | 24 | 24 | 21 | 24 | 25 | 20 |
| International Joint Commission | 3 | 2 | 2 | 2 | 2 | 2 |
| Total, Department of State | 27 | 26 | 23 | 26 | 27 | 22 |

Table 14--Department of Transportation, National Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Department of Transportation ¹ | 4 | 4 | 4 | 4 | 4 | 4 |
| Total, Department of Transportation | 4 | 4 | 4 | 4 | 4 | 4 |

¹ While DOT does not make any direct programmatic funding contributions to Great Lakes Restoration, States use DOT funds for a variety of environmental mitigation activities that have undoubtedly contributed to restoration efforts. DOT funding amounts are estimates and are not based on reported data.

Table 15--Environmental Protection Agency, National Programs

| (Budget authority in millions) | FY 2011 Enacted | FY 2012 Enacted | FY 2013 Enacted | FY 2014 Enacted | FY 2015 Enacted | FY 2016 Budget |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|
| Clean Water State Revolving Fund ¹ | 175 | 169 | 157 | 164 | 164 | 126 |
| Section 105 Clean Air Grants ¹ | 1 | 1 | 1 | 1 | 1 | 1 |
| Section 106 Clean Water Grants ¹ | 17 | 17 | 17 | 16 | 16 | 18 |
| Section 319 Nonpoint Source Grants ¹ | 2 | 4 | 3 | 3 | 5 | 5 |
| Superfund Remedial 1, 2, 3 | 39 | 27 | 23 | 31 | TBD | TBD |
| Wetlands State Grants ¹ | 1 | 2 | 2 | 2 | 1 | 1 |
| Total, Environmental Protection Agency | 235 | 220 | 202 | 217 | 187 | 151 |

 $^{^{}m 1}$ FY 2015 and FY 2016 represent estimates based on previous allocations. Final amounts may differ.

² FY 2013 through FY 2014 numbers have been updated to reflect actual obligations. Obligation data do not signify investment or disinvestment trends in cleanups in the Great Lakes Watershed, but rather annual resource use at individual sites as they move through the Superfund cleanup process.

³ FY 2015 and FY 2016 data are not provided as they are enforcement confidential and do not reflect "approved" plans.