

Attachment 4B(1)

Explanatory Note for Department of Defense Army Corps of Engineers (USACE-CW) Report November 2, 2011

Enclosed is the U.S. Army Corps of Engineers Civil Works Program information for the Council on Environmental Quality report to Congress, as outlined by section 1609 of the American Recovery and Reinvestment Act (ARRA), through September 30, 2011. Also enclosed are examples of benefits resulting from National Environmental Policy Act (NEPA) actions.

This submission covers 801 ARRA projects, of which 60 are not subject to NEPA requirements. The remaining 741 ARRA projects are covered by 2091 NEPA actions. Only 21 NEPA actions remain pending.

USACE July 2010 submission reported on 804 projects. During the September 2010 reporting period, USACE determined that several projects were not ready to proceed to contract award (before September 30, 2010) and removed them from the tally of projects on page 1. As a result, the total number of ARRA projects/activities was reduced to 801.

The total of 60 projects that are not subject to NEPA is less than the 62 reported prior to the November 2010 report as the seven MR&T projects were previously reported in error (page 1 of Spreadsheet, row 1) and eight construction actions were deemed not to be subjected to NEPA (row 3). The ten ARRA projects under the program "Formerly Utilized Sites Remedial Action Program" are excluded under the Comprehensive Environmental Response, Compensation and Liability Act. NEPA is not required for the Planning Assistance to States Program or the Floodplain Management Services Program. These programs, funded under the Investigations appropriation, provide informational services to local communities or a state with no requirement for further Corps involvement. Some projects under the Operation and Maintenance appropriations are for analysis only, and require no NEPA action.

ARRA projects vs. NEPA actions:

As previously reported, there are instances where multiple NEPA actions apply to a single Civil Works project or program. For example, a program could involve numerous sub-projects, or a project could involve numerous phases or sub-projects subject to NEPA.

Withdrawn Actions:

During this reporting period, 2 additional projects were withdrawn increasing the total number of withdrawn ARRA actions to 41.

Row 4 – ALASKA ENVIRONMENTAL INFRASTRUCTURE, ARRA project cancelled due to the lack of authority.

Row 20 - THE ARGOSY ROAD BRIDGE, RIVERSIDE, MO project was withdrawn as it was determined the work exceeded the project authority and the sponsor lacked sufficient funds to cost share the project.

Row 68 - LOWER COLUMBIA RIVER ECOSYSTEM RESTORATION, OR & WA: Unable to secure local sponsor funding.

Row 101 - WILLAMETTE RIVER BANK PROTECTION, OR: No physical site work funded or planned. Future non-ARRA funding will be needed to develop and pursue any recommended actions.

Row 104 - DUWAMISH AND GREEN RIVER BASIN, WA: Actions changed from 7 to 2. One action was completed and five are not applicable because no final NEPA action is required. One EA/FONSI is complete however, final routing and approval are pending as changes to the authorized project now requires additional reevaluation. This project no longer meets the ARRA timelines and the remaining ARRA funds were moved to other ARRA projects.

Row 123 – THE WALLA WALLA RIVER SECTION 1135, OR project was withdrawn because the project will proceed under the regular Continuing Authorities Program funds rather than with ARRA funds.

Row 486 - THE LONG ISLAND SOUND, NY: Project was withdrawn at the request of the local sponsor who no longer wishes to pursue the project.

Row 519 - THE SOUTHEASTERN PENNSYLVANIA, PA (Cobbs Fish Passage): Project was withdrawn because ARRA funds will not be utilized in FY 2010. This project will be completed in FY 2011 with regular funds.

Row 521 - THE SOUTHEASTERN PENNSYLVANIA, PA (MILL CREEK): Project was withdrawn because ARRA funds will not be utilized.

Row 613 - MISSISSIPPI ENVIRONMENTAL INFRASTRUCTURE, MS PROGRAM: Withdrawn. Due to a lack of sponsor funds, the City of Greenwood infrastructure project was cancelled.

Row 663 – ARRA funds were used for contracts to collect critical Economic, Geotechnical and Hydrology data during the study. Those specific actions did not require a NEPA assessment. However, the study itself does require the completion of an EIS. The Draft EIS was distributed for public review and a Notice of Availability published in the Federal Register on 11 June 2010. The comment period closed 9 August 2010. In light of downstream impacts of a diversion greater than first anticipated, it was determined that a supplemental draft environmental impact statement was necessary. The Supplemental Draft EIS was distributed for public review and a Notice of Availability published in the Federal Register on 6 May 2011. The Final EIS was distributed to the public for review and comment in October 2011. The Record of Decision is scheduled for signature in January.

All remaining actions to complete NEPA compliance will be completed with regular funds. Project is withdrawn.

Row 691 & 694 - CARPINTERIA SHORELINE STUDY, CA & MATILJA DAM, CA (Meiner's Oaks & Live Oak Levees): These are completed investigation studies that do not have associated NEPA actions

Row 706 – SANTA ANA RIVER MAINSTEM, CA (Reach 9 improvements 2a): This project is not funded by ARRA and is therefore withdrawn.

Row 707 - LOS ANGELES COUNTY DRAINAGE AREA, CA (Vegetation Removal): This project was cancelled and all ARRA funds reprogrammed to other ARRA work

Row 726 - SAN JOAQUIN RIVER BASIN WEST STANISLAUS, ORESTIMBA, CA: Unable to complete the EA due to the sponsor's inability to cost share the project.

Row 729 - GUADALUPE RIVER, CA: ARRA funds withdrawn due to unresolved issues with the Regional Water Quality Control Boards.

Row 737 – FARMINGTON RECHARGE (SEC 502): Withdrawn. At this time, and in accordance with the wishes of the non-federal sponsor, the project will be suspended for lack of funds. This environmental assistance project received no appropriation in FY 11 and is not in the President's Budget for FY 12. There is no money to start design of the three sites for the EA contract. PDT will continue to focus on groundwater recharge program and complete the Programmatic EIS with remaining funds.

Row 765 - PAJARO RIVER, CA: Withdrawn. ARRA-funded work on the EIS document was discontinued at the end of FY10. Remaining work necessary to complete the EIS will be funded with regular funds. Expected completion of the EIS is December 2011.

Row 769 - COYOTE VALLEY DAM, LAKE MENDOCINO, CA: No NEPA action required as a change in scope for one project made an EA unnecessary and the other project is on hold until further notice. When reactivated, USACE will use regular funds.

Row 771 - DRY CREEK (WARM SPRINGS) LAKE & CHANNEL, CA: Project is not expected to be performed with ARRA funds as complex issues caused a slippage in the schedule.

Row 777 - SAN FRANCISCO HARBOR AND BAY, CA (DRIFT REMOVAL): This project, previously reported, is not active and no NEPA actions are underway. This project is also listed below under reporting error heading.

Row 827 - APALACHICOLA, CHATTAHOOCHEE AND FLINT RIVERS, GA, AL & FL (LN2 project 10973): The project/activity and ARRA funding is for preparation of an EIS to support an update of a Water Control Manual that is a multiyear in-progress task. ROD is

scheduled for 2014. Project withdrawn as the remaining NEPA actions will be funded with O&M funds.

Row 846 - JIM WOODRUFF LOCK AND DAM, LAKE SEMINOLE, FL, AL & GA (LN2 project 11009): Extensive coordination is required with other permitting and regulatory agencies. Required field hydro-geophysical studies are underway, the scope of effort has been reduced, and completion of the NEPA work is anticipated within 6 months. NEPA compliance satisfied for ongoing geophysical/engineering studies (CE), with possible EA, WQC, etc. needed for remedial actions to “plug” the underseepage pathways in open waters of Lake Seminole. This was an evaluation of the upstream water losses at Woodruff. No action resulted from the evaluation, nor will an action be executed using ARRA funds. This project is withdrawn.

Row 852 – TENNESSEE – TOMBIGBEE WATERWAY, AL & MS (LN2 project 11042): Environmental review/documentation awaiting detailed project description/design. Draft engineering report has only conceptual measures identified. NEPA compliance satisfied for ongoing engineering studies (CE), with possible EA, WQC, etc. needed for remedial actions to remove sediment accumulations or construct sedimentation reduction structures. NEPA documentation, if required, anticipated within 6 months. This is the Aberdeen sedimentation evaluation. This project was an evaluation of volume and source of sediment in the Aberdeen impoundment. No action resulted from the evaluation, nor will an action be executed using ARRA funds. This project is withdrawn.

Rows 891, 893 and 894 - The three Regulatory projects were withdrawn as they are no longer being pursued.

The following projects were withdrawn because ARRA funds were not provided:

Row 52 - CHERRY CREEK LAKE, CO

Rows 107 and 110 - ALBENI FALLS DAM, ID

Row 116 - HOWARD HANSON DAM, WA

Row 119 - LAKE WASHINGTON SHIP CANAL, WA

Pending Actions:

During the reporting period, 5 NEPA actions were completed and 2 were withdrawn, reducing the number of pending actions from 28 as of June 30, 2011 to 21 as of September 30, 2011. Pending actions include projects with issues such as scope changes, site selection delays, extensive coordination with other agencies, and sponsor delays that will take multiple reporting cycles to complete. In USACE’s first submission of funded projects in June 2009, all funded projects were marked as pending even if the ARRA project had not started. Because of this decision, these actions are identified as pending on multiple reports. These remaining 21

pending actions are progressing to completion. Recovery Act funds for the US Army Corps of Engineers will cancel on 30 September 2015. We have 21 NEPA actions pending for the 11th and final report and we expect these actions will be completed before this date. Recovery Act funds for the US Army Corps of Engineers will cancel on 30 September 2015. The few that might extend beyond will be completed with our regular appropriations.

Row 103 - PUGET SOUND AND ADJACENT WATERS RESTORATION, WA: The final NEPA document is awaiting the final Water Quality Certification from the State. We are expecting Certification of compliance documents in October 2011. Receipt of Water Quality Certification is entirely dependent upon the Washington State Department of Ecology addressing their pending certification requests. They are actively working on certification requests and will address the Seahurst request as it comes up in their queue.

Row 269 - ECORSE CREEK, MI: The local sponsor is preparing the NEPA documentation for District review. The draft EIS is currently being reviewed in-house and undergoing a limited ATR due to funding. The reviews are scheduled to be completed by mid-October. Since, there is no additional funding anticipated in FY12, the draft EIS mail out is TBD.

Rows 304, 309, 404, 411, 417 and 419 - R D BAILEY LAKE, WV (Master Plan Update, pending for 10 quarters) YATESVILLE LAKE, KY (Master Plan Update, pending for 10 quarters), ALUM CREEK LAKE, OH (Master Plan Update, pending for 9 quarters), DELAWARE LAKE, OH (Master Plan Update, pending for 9 quarters), FISHTRAP LAKE, KY (Master Plan Update, pending for 10 quarters) & GRAYSON LAKE, KY (Master Plan Update, pending for 10 quarters): the EAs are being completed as the Master Plan is being completed. Completion dates have been updated based on Contractor status updates. The current scheduled date for completion for all of the actions is 31 October 2011.

Rows 395 and 396 - CENTRAL WEST VIRGINIA, WV: The EA for the PUTNAM Project (pending for 10 quarters) is being completed by the Sponsor's contractor after reviews by USACE and is scheduled to be complete 15 December 2011. The EA for the ROSEDALE Project (pending for 10 quarters) is being prepared by the sponsors' contractors and NEPA is scheduled to be complete 1 February 2012.

Row 481 - SOUTH SHORE OF STATEN ISLAND, NY: With renewed Sponsor support, ARRA funds were used to award the 24 September 2010 A-E task order which is expected to be completed by April 2012. Analysis is underway. A draft EIS will be prepared within the same timeframe.

Row 721 - CAMBRIA SEAWATER DESALINATION, CA: EIS delays result from continuing push back from California Coastal Commission (CCC) and other state agencies relative to Coastal Consistency Determination (CCD) and clearances required for geotechnical borings. Continued right-of-entry issues with CA State Parks due to newly identified State Marine Park in project vicinity. At one point agreed and contracted to import draft horses from Iowa to move drill rig on site, 2 drill two test holes, but resource agencies concluded at last minute would be as impactful as drill rig mounted on pick-up

truck. Contract for EIS awarded 15 September 2010. Have EA for geotech investigations, but await CCD for borings, and completion of EIS for water supply.

Current schedule:

For Geotechnical Borings (EA Complete)

1. Sep 2011 Submitted revised CCD to CCC
2. 30 Sep 2011 Received response from CCC on CCD
3. 04 Oct 2011 Corps Response provided back to CCC
4. 27 Oct 2011 State Lands Commission Meeting
5. 3 Nov 2011 CA Coastal Commission Hearing
6. Nov 2011 Monterey Bay National Marine Sanctuary permit
7. Nov 2011 to Nov 2012 Geotech Implementation

For Water Supply EIS (including desalinization)

1. 24 Oct 2011 ESA Section 7 Coordination Meeting [Consultation on 2 taxa from NMFS; 3 taxa from FWS/Ventura]
2. Oct 2011 (?) NOI
3. Nov 2011 (?) Public scoping meeting

Row 789 - JACKSONVILLE HARBOR, FL: The draft report is scheduled for submission to SAD in November 2012. FY11 activities include ship simulation testing, widening alternatives and turning basin optimization, deepening evaluation of preferred alternative, salinity impacts for wetland mitigation. Efforts will continue into FY12 for selection of the TSP, final design, disposal options, cost estimating, mitigation plan, and compilation into the draft report. The contracts for environmental resource surveys of future upland disposal site and for geotechnical resistivity to define top of rock and core borings for calibration are complete. The contract for cultural resource investigations in widening and turning basins is ongoing. The signing of the ROD by ASA is expected by 12 Oct 2015. This will conclude the NEPA process. NEPA has been pending for 9 quarters.

Row 790 - MILE POINT, FL: The revised draft report was completed and submitted to the PCX for review in December 2010. Report submitted to SAD 4 April 2011 and the AFB occurred on 25 May 2011. Draft report/EA approved for public and agency coordination on 25 May 2011 with minor revisions. Released to the public and agencies on 7 July 2011. Activities for FY12 include response to comments and completion of Final report/EA/FONSI for ATR and SAD and HQ review. Final Report submission to SAD in October 2011. NEPA has been pending for 9 quarters.

Row 791 - PORT EVERGLADES HARBOR, FL: The draft EIS was completed in September 2011. Submission to SAD and AFB scheduling will slip accordingly to Fall 2011. The Draft report/EIS is expected to be released to the public and agencies (along with initiation of IEPR) following AFB and approval by SAD/HQ in March 2012. After the Final report/EIS is prepared, ATRed, reviewed/approved by SAD/HQ, and released to the public, a ROD would be signed by ASA which would conclude the NEPA process in FY14. NEPA has been pending for 9 quarters.

Row 792 - ST JOHNS COUNTY, FL: The FSM package was submitted from SAD to HQ on October 25, 2010 and HQ comments were received in January 2011. The FSM was held

March 15, 2011. Completion of FSM activities occurred in September 2011. Further alternative development will be delayed until new funding is received in FY12. The signing of the ROD by ASA is expected by 13 November 2015. This will conclude the NEPA process. NEPA has been pending for 9 quarters.

Row 822 - ALABAMA RIVER LAKES, AL: The project/activity and ARRA funding are for preparation of an EIS supporting update of a Water Control Manual, which is a multiyear task now in progress. The ROD is scheduled for July 2012. Work beyond September 2011 will be funded with other O&M funds. ACT WCM EIS. The project is pending, with anticipated completion in July 2012. NEPA has been pending for 9 quarters.

Row 856 - WALTER F GEORGE LOCK AND DAM, AL & GA: EA/SMP update in progress. Public meetings scheduled for March 2011 did not occur. NEPA has been pending for 9 quarters.

Row 869 - BOGUE BANKS, NC: NEPA is included in a feasibility study report that when approved will be released to the public. The feasibility study and integrated EIS is progressing with completion scheduled for December 2012. This represents a slip in schedule due to some modeling issues for the alternatives analysis which will delay the feasibility report. This project has been pending for 9 quarters.

Row 878 - JOHN H KERR LAKE, VA & NC: There is one NEPA action pending. An EA is integrated into a report that will be released to the public. The Master Plan update with EA is progressing with completion scheduled for December 2012. This project has been pending for 9 quarters.

Row 888 - W KERR SCOTT DAM AND RESERVOIR, NC: NEPA is part of a report that will be released to the public. The Master Plan update is progressing with completion scheduled for September 2012. This completion date is 2 months earlier than previously reported. This project has been pending for 9 quarters.

Reporting Errors:

Row 768 - SAN FRANCISCO HARBOR AND BAY, CA (DRIFT REMOVAL): Reporting error - No project or NEPA action are pending.

Row 123- WALLA WALLA RIVER Section 1135 project, previously withdrawn in June, 2010, had been inadvertently deleted in past reports. This report corrects the error by restoring it to the "Withdrawn" project list.

Special Notes

There are several projects where the NEPA actions were completed many years ago. All these projects are either operation and maintenance repair or dredging work that received funding to analyze the necessity and environmental soundness of the work. However, these projects did

not receive funds to perform the work until ARRA funds were provided. Under today's conditions, the work is still viable and the environmental situation has not changed. Therefore, the NEPA actions undertaken previously are still valid. These are the instructions provided to the districts after having gone through several iterations.

Examples of NEPA Benefits:

Row 247 - Project: LORAIN HARBOR, OHIO

The U.S. Army Corps of Engineers' NEPA process for the Lorain Harbor, Ohio dredging allowed a reiteration and reconsideration of dredged material management alternatives and provided the opportunity for public interest review. Analysis conducted in conjunction with the NEPA action verified that a greater volume of dredged material was suitable for unconfined open-lake placement thereby obviating the need to provide additional confined disposal capacity than was previously planned through the Lorain Harbor Dredged Material Management Plan (DMMP).

Row 513 - Project: WINTER HARBOR, MATHEWS COUNTY, VA

The NEPA process for the Norfolk District, U.S. Army Corps of Engineers (USACE) Winter Harbor, Virginia Federal Navigation Project alerted the District to the potential impacts of depositing channel sediments upon an eroding beach shoreline inhabited by the federally endangered Northeastern Beach Tiger Beetle. The District, during development of the Environmental Assessment and consultation with the FWS, developed conservation and mitigation measures designed to protect the beetle. These measures resulted in maintenance dredging that avoided work during seasons that would impact the beetle, created additional habitat, and completed the maintenance dredging to facilitate navigation.

Row 698 - Project: TRES RIOS, AZ

The Tres Rios project connects Rio Salado and Rio Oeste environmental projects in Phoenix, Arizona, and continues the restoration of the Salt River west to the Agua Fria River. Tres Rios provides a net environmental benefit by maintaining the effluent, thereby enhancing the riparian area in addition to protecting 600 structures from flooding. This project maintains habitat for many species of birds, reptiles and mammals to live, nest and raise young. The NEPA process alerted the agency of the potential impact of placing dredged material in sensitive areas that would have impacted the wildlife and resulted in realigning the dredged material placement areas to maintain the habitat areas.

Row 72 - Project: *Wyeth Treaty Fishing Access Site* – Columbia River Treaty Fishing Access Sites, OR & WA. The project will provide access to usual and accustomed fishing areas and ancillary fishing facilities. The following benefits were realized:

- **Cost and Energy Savings.** The offsetting action completed at the Rufus site was done in cooperation with the Oregon Department of Agriculture and the USFWS. The result of this cooperation was a less costly project to the Corps of Engineers and an overall larger project that provided more environmental benefits.
- **Better Protection of Resources.** The NEPA process helped identify the potential impacts of the site construction and provided input into the design to minimize these effects. The groins were moved away from the shore to provide fish passage and the project footprint was reduced to minimize impacts to benthic habitat. Offsetting actions were developed with the agencies at Gorton Creek and Rufus Island to minimize impacts from the projects. The dock design was also changed to allow light penetration.

- Public Participation and Community Agreements. The NEPA document was reviewed by the federal and state agencies, tribes, and local interest groups. Their input helped formulate the above design features.

Row 173 - Project: *Bolivar Beneficial Use Marsh in Galveston Bay, Texas*

While reviewing the proposal to create a 200-acre Bolivar Beneficial Use Marsh in Galveston Bay, Texas, the U.S. Army Corps of Engineers worked with other agencies to form the Beneficial Use Group to devise a plan to eliminate open bay placement of dredged material and to use dredged material to create environmental features that provide a net benefit to the Bay ecosystem. Historically, deep-draft channel construction and maintenance material had been deposited into unconfined, open bay placement areas in Galveston Bay, which resulted in adverse impacts to bay bottom habitat now designated as essential fish habitat. Further, the loss of intertidal marsh has been identified as one of the critical problems of the Galveston Bay estuary by the Galveston Bay National Estuary Program. As a result of the environmental review for projects including the Bolivar Beneficial Use Marsh, the Group prepared a plan to create intertidal marsh and nesting islands for colonial water birds. The project also provides benefits to important recreationally and commercially valuable fish species.

Row 173 - Project: *88-acre Mitigation Marsh - Houston-Galveston Navigation Channels (HGNC) Project, TX - Army Corps of Engineers, Galveston District - 1995 Supplemental Environmental Impact Statement, 1998 Environmental Assessment, and 2010 Environmental Assessment:*

As noted in the example above, the formation of a Beneficial Use Group (BUG) during the Galveston Bay NEPA process led to a plan to eliminate open bay placement of dredged material and to use dredged material to create environmental features that provide a net benefit to the Galveston Bay ecosystem. As a result of the NEPA process, the BUG came up with a plan to create intertidal marsh and restore and create colonial water bird nesting islands with HGNC new work and maintenance material. This project will result in a net benefit to the Galveston Bay ecosystem by creating 88 acres of intertidal marsh for mitigation of impacts from expansion of PA14/15, that will provide benefits to important recreationally and commercially valuable fish species.

Row 490 - Project: *Maintenance Dredging Arthur Kill Reach of the New York and New Jersey Channels, Federal Navigation Project. Environmental Assessment and FONSI 24 Sep 2008.* The activity consists of maintenance dredging the most critical shoals in the Arthur Kill Reach (from Outerbridge Crossing to Goethals Bridge – approximately 9.5 miles). The dredged material was not suitable for ocean placement and was placed at a suitable contractor-furnished, state-permitted upland disposal site(s) to be approved by the Government.

Environmental Assessment supplements in 1973 EIS and the 2003, 2005, 2007 EAs indicated that maintenance dredging of the Arthur Kill Reach with the placement of the dredged material at an upland beneficial use site/NBCDF has no significant adverse environmental impacts on water quality, marine resources, wildlife, recreation, aesthetics and flood protection. The FY2009 proposed maintenance activity is consistent with the action described in the previous Environmental Assessments.

The following restrictions were implemented for the 2009 maintenance dredging of the Arthur Kill Reach of the New York and New Jersey Channels.

- No dredging from February 1 to May 31 – to avoid disturbance during winter flounder spawning and nursery periods.
- If nesting activity by herons or egrets is confirmed prior to the start of dredging activities on Pralls Island, no dredging is to occur within 1,000 feet of Pralls Island from 1 April – 31 July.
- No dredging activity is to occur within 1,000 feet of Island of Meadow from 1 April – 31 July, for avian protection.
- No dredging activity is to occur under or within ¼ mile of the Outerbridge from 1 March – 31 July, for the protection of Peregrine Falcons.
- Dredging shall be accomplished using a closed environmental bucket. It shall be lifted slowly through the water column, at a rate of 2 feet per second or less.
- Barge overflow is not allowed.

Implementation of the above restrictions resulted in the protection of fishery resources, water quality and nesting activity of herons/egrets and Peregrine Falcons.

Row 634 - Project: DES MOINES AND RACCOON RIVERS, IA

Over the years, frequent flooding impacted large numbers of Des Moines, Iowa residential, commercial, and industrial properties. In cooperation with Des Moines, the Rock Island District (District) conducted a flood reduction feasibility study with an integrated environmental assessment. The project's study team evaluated many alternatives involving levee operation and maintenance, improvements, and new alignments that would reduce operation and maintenance costs and improve safety during flood events. Due to the importance and value to the City of Des Moines, the District expedited their report preparation with emphasis on adaptive management. The NEPA process established mitigation requirements and agency coordination pivot points based on the desired final plans. The close project coordination between the District and City of Des Moines resulted with the feasibility report/EA including wetland mitigation based on a series of levee alignment scenarios within the preferred alternative. All the scenarios resulted in no significant impacts.

Row 635 - Project: IOWA RIVER, IOWA CITY, JOHNSON CO., IA

The District COE proposed a project to construct emergency streambank and erosion protection for a major city thoroughfare in Iowa City, IA, along the Iowa River. The original plan and environmental assessment included bank protection encroaching approximately 15 feet into the river. During the NEPA process, the Iowa Department of Natural Resources (IDNR) indicated there was a possibility the project may impact two state threatened mussel species. The District completed the mussel survey, which found 11 native mussel species, including the state endangered Pistolgrip. Based on the mussel survey findings, the District and IDNR worked together to relocate all the recovered mussels to a nearby mussel sanctuary and the District reduced the project footprint in the river to avoid impacts on the mussels.

Rows 266-268 – Project: CHICAGO HARBOR, IL

The project consisted of maintenance repairs to existing breakwaters and replacement of Chicago Harbor lock gates. The NEPA process allowed a reiteration and reconsideration of harbor maintenance and operations alternatives and provided public interest review opportunities. Analysis conducted in conjunction with the NEPA action revealed improved method of repairing and extending the life of existing breakwaters at a fraction of replacement cost. In addition, the NEPA analysis also verified the need for the replacement of the Chicago Harbor lock gates, insuring their flood control reliability.

Row 310 - Project: HOVEY LAKE HABITAT DEVELOPMENT, IN

The U.S. Army Corps of Engineers' NEPA process for the Hovey Lake Habitat Development Project in southwestern Indiana provided for reconsideration of wetland and moist soil management practices at the largest natural lake in the state. About half of the lands that make up the wildlife management area are federally owned and out-granted to the state. This area is a branch of the Mississippi flyway and within a North American Waterfowl Management Plan priority area for restoration. More recent analysis identified the best combination of moist soil management units and bottomland hardwoods restoration.

Row 389 - Project: TENNESSEE RIVER, TN

New Johnsonville and Pickwick Mooring Cell Replacement. This project consisted of replacement of two sets of mooring cells along the Tennessee River. NEPA agency scoping was performed and identified potential for impacts to federally-listed mussels at the New Johnsonville site. Agency scoping was performed for both sites even though the work could be covered by a categorical exclusion. The Pickwick Cells were replaced without additional coordination requirements. This agency scoping did identify potential mussel issues at one site (New Johnsonville) due to federally-listed mussels in the vicinity. The Corps delayed work at the New Johnsonville site until mussel surveys were performed and the results coordinated with the U.S. Fish and Wildlife Service and state agencies. While the mussel survey found no federally-listed species, approximately 400 mussels were relocated from the project footprint prior to construction resulting in less impacts on native mussels. The survey results were coordinated with the Service and other state agencies.

Row 348 – Project: SOUTH CENTRAL PA ENVIRONMENTAL IMPROVEMENT PROGRAM: SOUTHWESTERN PA WATER AUTHORITY

The Pittsburgh District's Southwestern PA Water Authority project consisted of the construction of public water line infrastructure to serve a community with no access to public water supplies. These residents previously relied upon wells, cisterns and springs for drinking water, some of which were shown to be contaminated by fecal coliform and a majority of which dried up during summer months. Originally, the non-federal sponsor was only considering two alternatives for the project, a "no action" alternative and a "recommended project" alternative. The NEPA process for this project was beneficial because it prompted an improvement in the alternatives analysis and evaluated an array of five alternatives. Improved project alternatives formulation allowed for a more comprehensive analysis of impacts; and, ensured that the best alternative was selected to accomplish the project goal while allowing for no significant environmental impacts.

Row 394 - Project: SECTION 571 LAKIN-CAMP CONLEY SEWER PROJECT, MASON COUNTY, WEST VIRGINIA

Currently, there is inadequate treatment of the wastewater in the Lakin area and breakdowns at the Camp Conley plant that may result in the potential release of effluents into the Ohio River. Additional effluents will push the existing facilities beyond their capacity and residences not currently serviced by the existing facilities will continue to release effluents into the Ohio River. The project is expected to have beneficial effects on surface water quality and human health issues that result from unsewered customers and frequent breakdowns of the existing system. The NEPA process alerted the applicant to the existing West Virginia Ordnance Works Red Water Sewer Line within the footprint of the project area and established protocols for protective equipment and necessary precautions to avoid potential contamination and exposure to construction crews.

Row 401 - Project: SECTION 340 MERCER/SUMMERS, PHASE IV-A WATERLINE PROJECT, MERCER COUNTY, WEST VIRGINIA

The project will provide a human health benefit by providing a safe supply of potable drinking water to eliminate a lack of water, high iron content, high sulfur content, as well as high fecal content from current water supplies. A secondary benefit will be the availability of fire protection and improvement in the quality of life for the residents of the Town of Oakvale. The NEPA process identified a wetland adjacent to the proposed alignment and established construction protocols to avoid wetland impacts. A cultural resource analysis identified an archeological site that is potentially eligible for the National Register of Historic Places. The project alignment was adjusted to avoid impacts to this archeological site.

Row 252 - Project: COOK COUNTY INFRASTRUCTURE, IL

Section 219 Automation of antiquated manual water system pumping operations with a computer operated pumping, monitoring and troubleshooting system. Water system extended to homes utilizing private wells.

- Project resulted in increased efficacy at a fraction of the previous cost.
- The removal of private wells benefited the local water table.
- Review of the NEPA documents by federal and state agencies improved the design formulation phase resulting in a better project.

Rows 253-254 - Project: DES PLAINES RIVER, IL

Series of flood control measures along the Des Plaines River designed to both prevent property damage from flooding and restore degraded riverine habitat in an urban area.

- The NEPA process provided the analysis to allow for the most efficient and cost effective designs for each specific locale.
- Incorporating ecological restoration as part of a major flood control project provided major environmental enhancements (including wetland preservation and invasive species controls) to an urban area.
- The NEPA documents provided for local community involvement, as well as state and federal review and allowed their input to help formulate the final designs.

Rows 255-260 - Project: LITTLE CALUMET RIVER, IN

Major Series flood control measures along the Little Calumet River designed to both prevent property damage from flooding and restore degraded riverine habitat in an urban area.

Approximately 23 miles of levees and floodwalls along an 11 mile stretch of river.

- The NEPA process provided the analysis to allow for the most efficient and cost effective project.
- Incorporating ecological restoration as part of a major flood control project provided major environmental enhancements to an urban area.
- The NEPA documents provided for local community involvement, as well as state and federal review, and allowed their input to help formulate the final designs such as the addition of recreation features to the overall design.

Row 261 - Project: NORTH PARK, IL

A Section 14 Emergency Stream Bank Protection project at North Park University to preserve an historic structure threatened by stream bank erosion.

- Working in cooperation with the Chicago Department of Transportation resulted in a major cost savings to the Corps of Engineers.
- NEPA consultations with the State of Illinois helped develop a plan that stabilized the stream bank, enhanced stream flow, and helped historic preservation.
- Not only did federal and state agencies review the NEPA document, but the local community participation, based on concern for their historic resources, helped formulate the final project design.

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