DEPARTMENT OF THE ARMY EC 11-2-216
U.S. Army Corps of Engineers
CECW-IP Washington, D. C. 20314-1000

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Army Programs

CIVIL WORKS DIRECT PROGRAM DEVELOPMENT POLICY GUIDANCE
FISCAL YEAR 2020

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1. Purpose. This Engineer Circular (EC) provides policy guidance for the development and submission of the Corps of Engineers direct Civil Works (CW) Budget for Fiscal Year 2020 (FY20) and Allocation Strategy for Fiscal Year 2019. In addition to this EC, the U.S. Army Corps of Engineers Civil Works Annual Program Development Manual, CECW-PDM will provide specific guidance for how project data is developed and managed for use in developing the CW Program. The Program Development Manual (PDM) will be available at the following link: https://intranet.usace.army.mil/hq/cecw/Pages/Progam%20Development%20Manual%20(Draft).aspx

2. Applicability. This EC applies to all Corps of Engineers Headquarters (HQUSACE) elements, Major Subordinate Commands (MSCs), districts and field operating activities (FOAs) having Civil Works Program responsibilities. Specifically excluded from this guidance are mandatory program activities, such as those funded by Permanent Appropriations and the Coastal Wetlands Restoration Trust Fund.

3. Distribution Statement. This information is approved for public release, see: http://www.publications.usace.army.mil/USACE-Publications/Engineers-Circulars/

4. References. See Appendix A for the list of related publications, Appendix B for Acronyms and Appendix K for the Glossary.

5. Conventions. The following conventions are used for selected one-year periods. When a new Budget is released then all years advance by one.

- BY = Budget Year (the fiscal year of the Budget to be released next) = FY20
- BY-1 = the fiscal year of the most recently released Budget = FY19
- BY-2 = 2 yrs before BY = the fiscal year of the current fiscal year = FY18
- BY+1 to BY+4 = FY21 to FY24

6. General Guidance. Work packages and the management of those work packages over time will be the basis for Annual Budget Development, making Annual Allocation Strategy funding decisions and developing an Allocation Plan for emergency work. Development and communication of complete, accurate information on capabilities is an important part of budget development and defense. Capability information assists in the formulation of budget recommendations that use funding effectively and efficiently, and assists the Appropriations Committees of Congress in their decisions on allocations of funding. Capabilities also are of interest to non-Federal entities, who use them to help establish their own annual program recommendations. Therefore, providing realistic, defensible estimates of capabilities is an important responsibility of the U.S. Army Corps of Engineers during budget and allocation plan development and defense.

a. Annual Budget. The process for developing the annual budget is performance-based and reflects USACE's compliance with the requirements of the Government Performance and Results Act of 1993 (GPRA). Therefore, the budget is developed in a manner that reflects the primary business processes functions established for the Civil Works mission. The overall budget development process follows specific guidance based on the types of appropriation, and the business lines and business programs. In addition, each business line and business program has specific business performance and facility level data requirements. Transparency in the Budget Submission is also ensured by complying with the Digital Accountability Transparency Act of 2014 and signed by the President on May 9, 2014.

b. Annual BY-1 Funds Allocation Strategy. The process for developing the annual BY-1 Funds Allocation Strategy is performance-based, resembles the process for the annual budget, and uses the same Civil Works Integrated Funding Database (CW-IFD) dataset (for the fiscal year preceding the annual budget). Depending on the timing of Congressional appropriations, the annual BY-1 Funds Allocation Strategy is usually developed prior to or concurrently with the annual budget for the budget year.

(1) Annual Appropriations Act. Congress provides guidance and direction for funding in the Statement of Managers accompanying annual Energy and Water Development Appropriations Act for budgeted projects and may include additional funding line items for "Additional Funding for Ongoing Work".

(a) Budgeted Projects, Programs, and Activities will be allocated funds according to the line items in the Statement of Managers. Funds will be allocated based on the current capability listed at the work package level.

(b) Additional Funding for Ongoing Work will be allocated to projects, programs, and activities in line with the Statement of Managers direction on work or activities qualifying for funding from those line items.

(2) Full Year Continuing Resolution Act. Congress may enact a full-year continuing appropriations act applicable to Energy and Water Development, with no accompanying Statement of Managers. Funds will be allocated according to the continuing appropriations act and based on the current project capability listed at the work package level.

c. Allocation Strategy for emergency work. The process for developing the emergency allocation plan is event-based, resembles the process for the annual BY-1 Funds Allocation Strategy, and uses the CW-IFD dataset. Even if there are not supplemental appropriations, the emergency allocation strategy will specially fund work packages developed as a result of a storm event. The MSC Repair Classification, Declaration Type and Number, and Storm Event data fields used for post event damage repairs/dredging work are identified in the Program Development Manual.

7. Program Development Timeline. The FY20 Civil Works Budget and Allocation Strategy will be developed based on the following process and schedule. The schedule is based on the key assumption that decision making on the FY19 Allocation Strategy and the final FY20 Budget will be simultaneous, and will occur following “Passback” and enactment of FY2019 Appropriations. The following in Figure 1 depicts the sequence of activities accomplished in development of the annual program and budget of the Corps’ Civil Works Program. Figure 1A contains details on submittal due dates for the FY20 budget data.

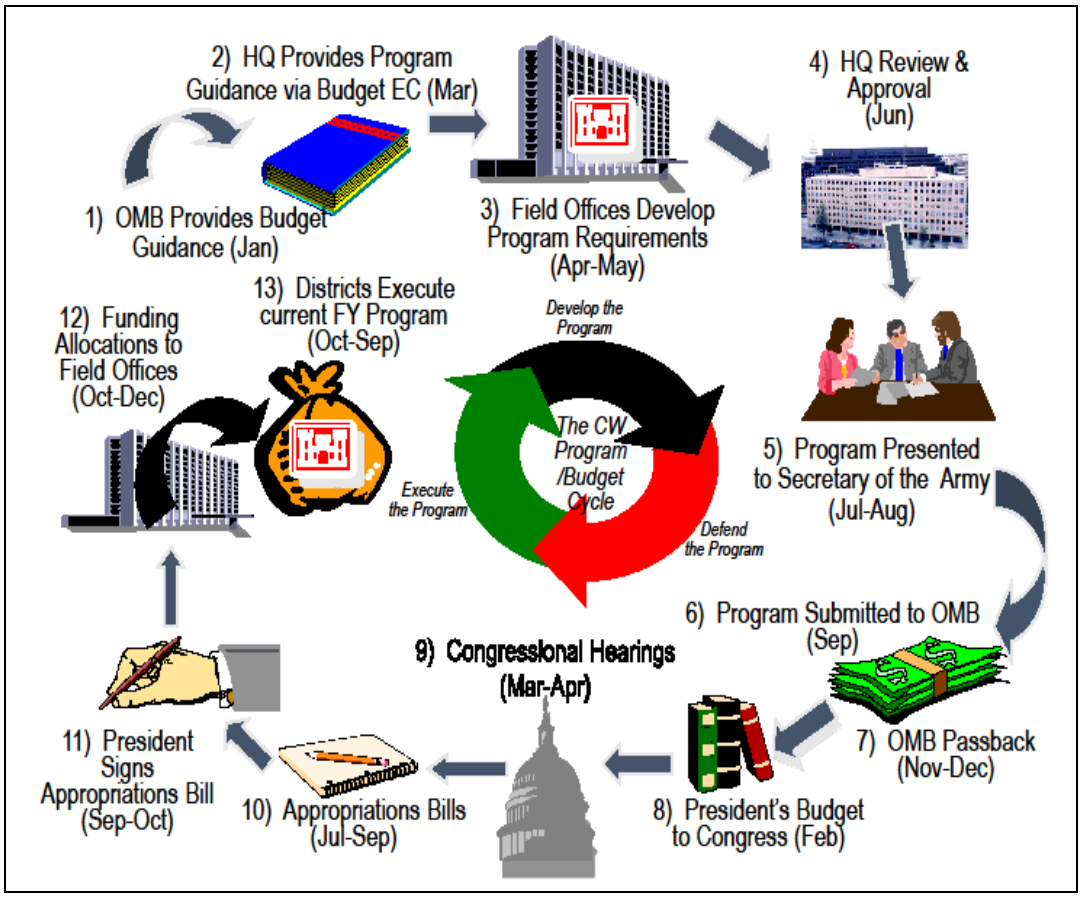

Figure 1. The Civil Works Program/Budget Cycle

Below is the overall Program Development Battle Rhythm and Integrated Schedule. Submission dates are set by HQ to control the budget development workload and to enable the Chief of Engineers to brief the ASA(CW) on a pre-determined schedule.

Initiate Working Draft – Program Development Guidance	Aug BY-2
Working Draft – Program Development Guidance	Dec BY-2
Begin Budget development and Work Package data entry	Dec BY-2
Final Program Development Guidance issued	Mar BY-2
MSC complete data entry, QA, and ranking	Apr BY-2
Draft J-Sheets, initial meetings with SACW on continuing work	Jun-BY-2
Work package allocation decision for Chief Of Engineers recommendation	Jun BY-2
New starts and new funding decisions for I & C accounts	Jun BY-2
ASA(CW) briefings	Jul BY-2
Army Budget submittal	Sep BY-2
Passback	Dec BY-1
Pbud & hearing allocation decision/Lock for internal & external use	Jan BY-1
Congressional Submittal for Pbud & J sheets	Feb BY-1
Answer QFRs and RFIs using Locked data	Feb-May BY-1
Unlock - Districts and MSCs update work package capabilities	Sep BY-1
Conference allocation decision for BY-1 Allocation Strategy (do not lock)	TBD on CR
Conference	TBD
Answer RFIs using Conference snapshot	Oct-Dec BY
BY-1 Allocation Strategy cleared	Conf + 45
Work allowances issued	Conf + 60

Figure 1A Submittal Due Dates for FY20 Budget

8. Organization and Management of the Budget and Allocation Strategy Data. This guidance develops the CW Budget and Allocation Strategy around the following key components. For program development there are two levels of data – the program code level and the work package level.

a. The CW-IFD Program and Project Management Information System (P2) – Civil Works Integrated Funding Database module is the authoritative Automated Information System (AIS) to be used in the development of the Civil Works Program.

b. Program Code: The term Program Code is used to identify the top level element that is identified by a unique code. See current EC for Civil Works Execution of the Annual Civil Works Program Management for use of Program Codes. For Budget development and Allocation Strategy development, a Program Code is the summation level used to submit budget capabilities, it is the level identified within the President's budget, Appropriation bills, reports and acts and it is the level where allocations are issued through the Allocation Strategy process.

c. Appropriations: There are eight appropriation accounts in the Civil Works program: Investigations (I), Construction (C), Operation & Maintenance (O&M), Mississippi River and Tributaries (MR&T), Regulatory, Expenses, Formerly Utilized Sites Remedial Action Program (FUSRAP) and Flood Control and Coastal Emergencies (FCCE). Four of the accounts Investigations, Construction, O&M, and MR&T are further defined by business lines. The remaining accounts relate to a single project purpose. Further information and guidance for each appropriation can be found in Appendix C-J.

(1) Investigations The Investigations account is used to fund studies for water resource projects authorized by general or specific Congressional legislation. This account is also used to fund preconstruction preliminary engineering and design work leading up to development of the plans and specifications for the first significant construction contract. Budget and Allocation Strategy information for projects/studies developed under the Investigation Account are identified under a primary Business Line. This account is also used to fund planning assistance to states, coordination with other Federal agencies and other Federal public interests, research and development activities, collection of study data not chargeable to authorized projects, performed by other Federal agencies and transferred by the Corps of Engineers under cooperative programs for observing and compiling basic data on streamflow, rainfall and other remaining items. Specific information regarding the Investigations program development can be found in Appendix C and Remaining Items information in Appendix J.

(2) Construction The Construction account is used to fund the implementation, including detailed plans and specifications for new and continuing construction,

reconstruction, major rehabilitation, dam safety assurance, dredge material disposal facilities (DMDFs), deficiency correction of projects specifically authorized by Congress, and specifically authorized post-construction modifications. Budget and Allocation Strategy information developed for projects under the Construction Account are identified under a primary Business Line. Specific information regarding the Construction program development can be found in Appendix D and Remaining Items information in Appendix J.

(3) Operation and Maintenance. The Operation and Maintenance account funds operation, maintenance, and related activities at the water resources projects that the Corps operates and maintains. It also includes some activities at non-Federally owned/operated projects (levee safety activities). Work to be accomplished consists of dredging, maintenance, repair, and operation of structures and other facilities, as authorized in the various River and Harbor, Flood Control, and Water Resources Development Acts. Budget and Allocation Strategy information developed under the O&M Account are broken out as either 'O' or 'M' and further identified by Business Line (s). Specific information regarding the O&M program development can be found in Appendix E and Remaining Items information in Appendix J.

(4) The Mississippi River and Tributaries account funds projects or programs on the Mississippi River main stem and its tributaries. Funding in the MR&T account combines with the Investigations, Construction, and O&M accounts. All guidance that pertains to Investigations, Construction, and Operation & Maintenance also applies to the applicable portion of the MR&T appropriation.

(5) Expenses. The Expenses account funds program development, defense and execution of the Civil Works program, as well as oversight of the Civil Works program missions. Expenses are submitted as labor and non-labor capabilities. Specific information regarding the Expenses program development can be found in Appendix F.

(6) Regulatory: The Regulatory account funds labor and non-labor activities which will improve protection of the Nation's waters and wetlands and provide greater efficiency of permit processing. Specific information regarding the Regulatory program development can be found in Appendix G.

(7) The FUSRAP account funds remedial activities at sites contaminated as a result of the Nation's early atomic weapons development program. Specific information regarding the FUSRAP program development can be found in Appendix H.

(8) The FCCE account funds activities under the Robert T. Stafford Disaster Relief and Recovery Assistance Act (42 USC 5121 et seq.), Homeland Security/Emergency Operations, Rehabilitation of Flood Control Works and federally authorized and

Constructed Hurricane/Shore Protection Projects damaged or destroyed by wind, wave or water action of other than ordinary nature, provision of Emergency Water, Advance Measures to prevent or reduce flood damage when there is an imminent threat of unusual flooding, and participation in the Hazard Mitigation Program. Specific information regarding the FCCE program development can be found in Section 5 of the PDM.

d. Functional Programs: In addition to the appropriation accounts, there are two functional programs which require budget development information and Allocation Strategy allocations:

(1) Revolving Fund - Plant Replacement and Improvement Program (PRIP) and Automation Program. Specific information regarding the PRIP can be found in Appendix I.

(2) Remaining Items (RI) development can be found in Appendix J.

e. Business Lines: The business lines categorize work according to its primary purpose. There are seven business lines in the Civil Works program and the business lines are managed through a matrixed organization of subject matter experts, (Business Line Managers), who coordinate budget development and Allocation Strategy development with the Civil Works Integration Division, Program Development Branch.

(1) Emergency Management (EM): Emergency management continues to be an important part of the Civil Works Program, which directly supports the Department of Homeland Security in carrying out the National Response Framework. It does this by providing emergency support in public works and engineering and by conducting emergency response and recovery activities under authority of P.L. 84-99. Funding for this program comes primarily through budget and supplemental appropriations to the FCCE account. In addition, O&M funds are used to maintain highly-trained workforce to deal with both man-made and natural disasters under the National Emergency Preparedness Program (NEPP).

(2) Environment (AER, ENS, ENF): The Corps has three distinct areas that are focused on the environment: (1) AER - Aquatic Ecosystem Restoration; (2) ENS – Environmental Stewardship of Corps-owned lands; and, (3) ENF - the FUSRAP is located in APPENDIX H. The Corps' mission in Aquatic Ecosystem Restoration is to help restore aquatic habitat to a more natural condition in ecosystems in which structure, function, and dynamic processes have become degraded. The emphasis is on restoration of nationally or regionally significant habitats where the solution primarily involves modifying the hydrology and geomorphology. Environmental Stewardship focuses on managing, conserving, and preserving natural resources on 11.5 million

acres of land and water at 456 multipurpose Corps projects. Corps personnel monitor water quality at the Corps' dams in cooperation with state wildlife agencies. This business line encompasses compliance measures to ensure Corps projects: (1) meet Federal, state and local environmental requirements; (2) sustain environmental quality; and, (3) conserve natural and cultural resources. Under the FUSRAP, the Corps investigates and cleans up former Manhattan Project and Atomic Energy Commission sites.

(3) Flood Risk Management (FRM): The Corps of Engineers reduces the risk to human safety and property damage in the event of floods and coastal storms through its Flood Risk Management business line. The Corps has constructed 13,600 miles of levees and dikes, 383 reservoirs, and more than 90 storm damage reduction projects along 240 miles of the Nation's 2,700 miles of shoreline. Upon completion, the sponsoring cities, towns, and special use districts assume responsibility to operate and maintain most of the infrastructure built under the auspices of FRM. Over the years, the Corps' mission of addressing the causes and impacts of flooding has evolved from flood control and prevention to more comprehensive FRM. These changes reflect a greater appreciation for the complexity and dynamics of flood problems -- the interaction of natural forces and human development -- as well as for the Federal, state, local, and individual partnerships needed to thoroughly manage the risks caused by coastal storms and heavy rains.

(4) Hydropower (HYD): The Corps' multipurpose authorities provide hydroelectric power as an additional benefit of projects built for navigation and flood risk management. The Corps is the largest owner-operator of hydroelectric power plants in the United States, and one of the largest in the world. The Corps operates 353 generating units at 75 multipurpose reservoirs, mostly in the Pacific Northwest; they account for about 24 percent of America's hydroelectric power and approximately 3 percent of the country's total electric-generating capacity.

(5) Navigation (NAV): The Corps of Engineers helps facilitate commercial navigation by providing safe, reliable, highly cost-effective, and environmentally sustainable waterborne transportation systems for the movement of commercial goods. The Corps fulfills this responsibility through a combination of capital improvements and the operation and maintenance of existing infrastructure projects. The Navigation business line contributes to the Nation's economy; nearly 80 percent of international trade passes through our ports. The Corps' Navigation program includes Corps-maintained navigable channels, waterways, and infrastructure, which are part of a larger transportation network that also includes publicly- and privately- owned vessels, marine terminals, intermodal connections, shipyards, and repair facilities. The Corps maintains approximately 12,000 miles of inland waterways with 229 locks at 187 sites; and approximately 300 deep-draft and over 600 shallow-draft coastal channels and harbors

(including on the Great Lakes), which extends 13,000 miles, and includes 12 locks, more than 900 other coastal navigation structures, and 800 coastal and inland bridges.

(6) Recreation. The Corps is the largest provider of water-based outdoor recreation in the nation. The Corps' multipurpose authorities provide recreation as an additional benefit of projects built for navigation and flood risk management. The Corps' Recreation business line provides quality outdoor public recreation experiences at 402 recreation projects that offer camping, picnicking, swimming, boat ramps, etc., in 44 states. The recreation program manages 54,000 miles of shoreline, 10,200 miles of trails, and 3,760 boat ramps. Ninety percent of these sites are within 50 miles of a metropolitan area.

(7) Water Supply (WTR): The Corps has authority for water supply in connection with construction, operation and modification of Federal navigation, flood risk management, and multipurpose projects. Management of the Nation's water supply is critical to limiting water shortages and lessening the impact of droughts.

f. Work Package: A work package represents an increment of work that can be considered for inclusion in the Budget or Allocation Strategy or for funding with supplemental appropriations. All the work in a work package must share the same appropriation, Program Activity code, business line (including joint use), program code, and Engineer Reporting Organization Code (EROC). Details for work package development for each business line are in the Program Development Manual. A work package should provide a useful increment of work that, if funded, can be executed without any other work package being funded, or linked to the other required packages if the work is broken out to meet the O&M 20/20 Framework (see Appendix E). It must be developed so that the work represented is not overly granular or too aggregated. The scope of a work package does not change from fiscal year to fiscal year, though capabilities may vary with improved information on costs and schedules. In particular, the scope of a work package, once budgeted, does not change except in extraordinary cases.

g. Capability:

(1) Capability is defined as the amount of additional, new funding (over and above projected or actual unobligated carry-in from prior fiscal years) that, if provided in the applicable fiscal year, can be obligated, or can be committed for a contract solicitation, effectively and efficiently in that fiscal year, consistent with law and contracting and execution policy, assuming that all projected or actual uncommitted carry-in to that fiscal year is obligated or committed first. However, in the case of a MIPR or continuing contract, the estimate for the amount that can be obligated or committed for the MIPR or contract is limited to the amount that can be expended in the applicable fiscal year.

Furthermore, capability does not include the amount of new funding that would be committed for a contract solicitation in September of the applicable FY. In that case, the contract amount should be included in the capability for the next FY and, if the contract is included in the President's Budget for the next FY, the solicitation could be issued in the first quarter if approved according to the Execution EC.

(2) Capability on a contract work package proposed for funding in the Budget includes BY costs of engineering and design (E&D), supervision and administration (S&A), and contingencies on the contract, but does not include out-year costs of E&D, S&A, and contingencies. The exception is that out-year costs of E&D, S&A, and contingencies should be included if the BY is the last year that contracts are planned to be funded on the project or the study phase, since in this case including them would enable full funding of the project or phase. The estimate for contingencies for a project or study phase to be fully funded should be sufficient to avoid having to seek additional, "recompletion" funding through a future budget or Allocation Strategy.

(3) Once the allocations in the President's Budget for a given FY (which becomes BY-1) have been finalized, the capability estimate for an unbudgeted, fully funded contract work package should be adjusted to include out-year costs of E&D, S&A, and contingencies, among other adjustments, because out-year funding is not certain if the unbudgeted work package is funded in a BY-1 Allocation Strategy.

(4) Capability and "Amount That Could Be Used" are identical. Project capability for a FY is the sum of its work package capabilities for that FY.

h. Enterprise-Wide Capability for Allocation Strategy: Enterprise-wide capability, or execution capacity, is the maximum amount of project capabilities that the MSC or FOA can execute in the applicable fiscal year. It is recognized that each enterprise, while it can execute the project capabilities on some of its projects, cannot execute the project capabilities on all of its projects. Enterprise-wide capability is less than the sum of project capabilities. Appropriations Committee staffs are interested in USACE enterprise-wide capabilities, particularly by business line or line item of additional funding, for the Allocation Strategy (BY-1). This paragraph provides guidance on how each MSC or FOA states its enterprise-wide capability in the Allocation Strategy.

(1) The Explanatory Statements accompanying recent energy and water development appropriations acts have provided line items of additional funding that span all authorized business lines and functions, including those of lower budget priority such as bank protection and environmental infrastructure. Accordingly, enterprise-wide capability should represent a balanced mix of business lines and functions. In other words, within each business line or function a reasonable portion of work packages should be within enterprise-wide capability, and others should be beyond enterprise-

wide capability. The mix is more or less governed by expectations (based on recent Explanatory Statements and House and Senate Reports) for funding of budgeted work and the line items of additional funding.

(2). The MSC or FOA should use performance metrics to determine, within each business line or function, which work packages are within enterprise capability, and which are not. All budgeted work packages should be first-added within enterprise capability, and unbudgeted work packages should be next-added.

(3). The MSC or FOA should signify which work packages are within enterprise-wide capability by checking the "Funding Pot" box, in the "Recommended for Funding" field under the “Funding” tab in the CW-IFD. To respond to Congressional inquiries for USACE-wide enterprise capability for a business line or function, HQUSACE will aggregate across USACE the capabilities of work packages in that business line or function that have the “Funding Pot” box checked.

9. Roles and Responsibilities.

a. Districts. The district engineer through the Programs and Project Management Division along with the Operations and Regulatory Division are responsible for initial data entry, quality control, completeness, and overall management of the Budget and Allocation Strategy data.

b. MSCs and Labs. The MSC’s role with regard to data submission is quality assurance, i.e., to verify adherence to guidance in this document and the Program Development Manual. The MSC and Labs will also have data entry responsibility for specific remaining items as well as for the consolidated MSC ranking. Required MSC submissions, recipients, means of data input and due dates are summarized in TABLE 2.

c. Functional Area Proponents. The Functional area proponents are responsible for coordinating guidance within their functional area. This includes Planning, Engineering and Construction, O&M, EM, Regulatory, General Expenses, PRIP, and RI

d. HQ RITs. The RITs are responsible coordinating all J-Sheet submittals with MSC and District personnel.

e. HQ BL Managers (BLM). The BLMs are responsible for coordinating specific business line guidance contained in the Program Development Manual, the Program Development Policy Guidance, reviewing/verifying Budget and Allocation Strategy data, developing the HQ ranking all work within their business line, negotiate and balance

crosswalk tables, and identify work packages to fund in the Allocation Strategy or with supplemental funding.

f. HQ Civil Works Program Integration Division (CECW-I). The CECW-I has overall responsibility for developing, defending and execution the Civil Works Program. The Program Development Branch (CECW-ID) is responsible for finalizing the Budget submittal and allocating funds from the Budget and the Allocation Strategy. The Project Programs Branch (CECW-IP) is responsible for this EC as well as for preparing annual execution guidance. The National Programs Branch is responsible for the managing the CW-IFD and the Program Development Manual.

10. Budget Policy.

a. Presidential Office of Management and Budget (OMB) Policy.

(1) Economic Assumptions. OMB provides the economic assumptions underlying Presidential policy to the agencies as a basis for budget development. These will typically be shown in the Analytical Perspectives section of the Budget of the United States Government. These assumptions, along with related factors from the Civil Service Retirement System (CSRS), the Federal Employees Retirement System (FERS) and workforce conversion data from HQUSACE Human Resources Office, are shown for BY-3 through BY+19 in TABLE 1. The assumptions and related data cover: (1) base rates for Federal, civilian, permanent workers (includes pay and burden factors); (2) pay raises for these workers applicable to both changing and fixed base rates and; (3) inflation for "goods and services" of Federal civilian temporary and non-Federal workers, and non-pay items.

(a) Pay and Burden Rates. Base rates (against which pay raises apply) reflect assumed pre-raise pay and burden rates. Pre-raise pay rates are 1.000, by definition, for regular pay, and assumed to be 0.02 for awards. Assumed burden rates reflect assumed government contributions for worker benefits. The rates comprise two parts - one part for government contributions under the CSRS; the other, under the FERS. The first part (including contributions for retirement, health insurance, Medicare, and life insurance) is shrinking, while the second part (including contributions for regular, “Thrift Savings,” and Old Age Survivors Disability Insurance retirement; health insurance; Medicare; and life insurance) is growing. This results from permanent force “attrition” and subsequent “turnover” through the hiring of more workers under FERS. The Board of Actuaries of the CSRS and the FERS recommended changes to long term economic and demographic assumptions and as a result normal cost percentages have increased for FERS retirement groups. The normal cost is an actuarially determined percentage which represents the amount that must be saved each pay period over an employee’s entire working career to fully finance, with interest, the cost of the employee’s

retirement. The percentage for employing agency and employee contributions in the CSRS is set in law (at 7% each for most employees) and has not changed. The Middle Class Tax Relief and Job Creation Act of 2012 increased FERS Revised Annuity Employee (RAE) employee contributions for regular employees hired after December 30, 2012 with less than five years of prior creditable service to a rate of 3.1%. The Bipartisan Budget act of 2013 reduced FERS further reduced annuitant employee (FREA) employee contributions for regular employees hired after December 31, 2013 with less than five years of prior creditable service to a rate of 4.4%. The FERS regular contributions remain at 0.8%. The employer contribution for FERS, FERS RAE and FERS FRAE employees is the difference between the employee contribution and the actuarial normal cost. These reduced employer contributions are phased in over a similar timeframe as the CSRS to FERS transition Class 1 “updating factors” reflect the year-over-year change in base (resulting from change in burden), the associated year-over-year raises, and whatever raise absorption may pertain.

(b) Pay Raise Assumptions. Pay raise assumptions for Federal, civilian, permanent workers in the past have been shown in the OMB document Analytical Perspectives, Budget of the United States Government. Prior to its release, OMB provides guidance to the agencies in the annual baseline adjustment factors for personnel/pay related costs for discretionary programs. Future projections are developed using rates in this guidance. Assumed pay raise rates include base and locality components. (The base component is different from the base rate, discussed above, against which the base component applies). Base components, reflecting the Employment Cost Index, apply nationally. For BY- 2 (2018) the President’s alternative pay adjustment for both base and locality pay is 2.1 percent. For BY-1 (2019) the factor is adjusted for the same raise as in 2018 at 2.1 percent. For future years the formulas established in law along with information in the OMB guidance are used to complete Table 1. Prior year budget guidance gave information on the allocation of pay raise rates to base and locality components based on the number and distribution of workers eligible for locality pay. Class 1 rates in TABLE 1 are based on composite raises for all years. TABLE 1 assumes that there will be no increase in outlays because of grade and step increases as the mean Federal grade and step have remained relatively constant, reflecting the fact that as some Federal workers are being promoted others are leaving the Federal service altogether. For this reason, grade and step increases have virtually no net effect on the annual change in the Federal payroll.

(c) Inflation Rates Inflation rates reflect assumed price increases for "goods and services" of temporary Federal and non-Federal workers, and for non-pay items. Public Law 105-33, entitled Balanced Budget Act of 1997, requires that the Gross Domestic Product percent change, year-over-year chained price index (1996 = 100) rates be used to develop “baseline estimates” reflecting, instead of Presidential policy, continued operations under current law and current year appropriations. The baseline program

based on these estimates is discussed in OMB's Circular A-11, "Preparation, Submission and Execution of the Budget". At the recommendation of OMB, these rates were used as Class 2 rates of TABLE 1. Class 2 "updating factors" reflect the year-over-year inflation and whatever inflation absorption may pertain.

(2) OMB Out-year Ceilings. OMB maintains out-year planning estimates, or ceilings, for the Investigations, Construction and Operation and Maintenance appropriation accounts in the Civil Works Program. These ceilings (1) define the President's long-term resource requirements, (2) reflect the long-term effects of the President's policies on various programs, projects, and activities (PPAs) funded by each account and (3) serve as benchmarks for use in evaluating Congressional appropriations. See Glossary for definition of PPA. These ceilings are presented, for all accounts, in TABLE 5.2 of the Historical Tables appendix of the Budget.

b. Army Budget Policy. The primary goal for formulating the Army's 2020 Civil Works budget recommendation to OMB is to clearly demonstrate and defend that the Army's recommendation represents wise use of limited Federal resources. Specific policy guidance for each appropriation is provided in the Appendices.

c. Corps Budget and Allocation Strategy Policies.

(1) Budget Funding Levels. The budget formulation process in any given BY includes the development of multiple funding scenarios (funding levels) that provide Army with a decision matrix for funding the Civil Works Program. Budget funding levels enable HQ and Army to evaluate additional workload against incremental funding increases and are also used to help justify recommended levels above the ceiling level to Army and OMB.

(a) Budget Funding Level. The following represent the potential funding levels in an Army budget submission to OMB. Each level is an incremental increase in funding in the budget. The number of funding levels varies in any BY based on Army budget guidance.

(b) Low Level of Funding. For Investigations, assumes optimal funding for all ongoing 3x3x3 compliant projects and minimal funding for ongoing projects that are not 3x3x3 compliant (i.e., required a waiver). For Construction, assumes the smallest useful increment of work for ongoing Construction projects, except for DSAC I and II construction, which will receive optimal funding. For Operation and Maintenance, allows the Corps to maintain its level of performance on a majority of performance metrics. For Harbor Maintenance Trust Fund (HMTF), maintain parity on a performance basis with inland navigation but does not exceed $950 million. Allow any New Starts that are demonstrably affordable and will not adversely impact ongoing work. (Note that

this is not the same program represented by “baseline estimates” required by PL 101-508 or discussed in OMB’s Circular A -11).

(c) High Level of Funding. For Investigations and Construction, assumes optimal funding for all ongoing projects. For Operation & Maintenance, allows the Corps to maintain or improve performance as measured by performance metrics. For HMTF, maintain parity on a performance basis with inland navigation, allowing the level to exceed $950 million if merited by performance increases.

(d) Chief’s Recommendation. This level of funding will be no more than the High Level of Funding. It will represent the amount of funding that HQs determines can be effectively and efficiently executed in the BY.

(2) Allocation Strategy Guidance. The Allocation Strategy will be developed to distribute available funding. The annual funds will either be provided from a Conference Report, possibly with “funding pots,” for additional funding for ongoing work or from a year-long continuing resolution without funding pots. In either case allocations will be made based on work package information which is prioritized by District, MSC/Labs and HQ Business Line Managers. All allocated amounts (including funding-pot amounts) become project funds in the FY once distributed.

(3) Environmental Operating Principles (EOPs). These principles apply across all business lines and accounts and must be given appropriate consideration when formulating the BY budget. See http://www.usace.army.mil/Missions/Environmental.aspx for the Corps EOPs at the Corps website.

11. Special Policy, Guidance and Initiatives for FY20.

a. Impacts to the FY20 Budget Submittal. In addition to OMB budget guidance which is normally received in the June BY-2 timeframe for the BY President’s Budget, field units must consider the outcome of the BY-1 President’s Budget when developing the program for submission to HQUSACE. It is anticipated that the BY-1 Allocation Strategy will be developed at the same time as the BY Budget. If this occurs, then allocation decisions for BY-1 will also need to be taken into account as the final budget documents are developed.

b. Transforming the Civil Works Budget Process. Civil Works Transformation in the budget process includes improved management of the budget processes associated with through Smart Use of Systems, systems-based budgeting, O&M 20/20, asset management, and the expenses program.

(1) The Smart Use of Systems. The overall objective of the Smart Use of Systems is to make efficient and consistent use of the various tools currently being used within

the Corps of Engineers Civil Works program for project and program data. CW-IFD is the tool that will be used to collect project/program data from the various other data sources within the Corps and then provide an intuitive and user friendly platform for users to enter and manage the project and program data needed for budget and Allocation Strategy development.

(2) Systems-Based Budgeting. Systems-Based Budgeting (SBB) explicitly acknowledges that the projects and work packages included in each year's budget submission are interconnected, within the context of systems and watersheds in which they operate. As such, the decision to fund (or not to fund) any given project or work package influences both the stand-alone project and system as a whole. Systems-based budgeting accounts for the interconnected performance of projects within watersheds and systems, in order to provide decision makers with a more clearly articulated description of work packages and project Value to Nation. For program development, the outcome of SBB will be an improved alignment of budgeting with national and system objectives by directing resources to reduce risk of loss of services and enhance service expressed in economic, social and environmental terms across missions. The USACE strategic outcome is that we will provide a better informed budget recommendation to Congress for Civil Works by project, based upon each project's actual Value to Nation. SBB will recognize priorities and challenges of water resource management issues in and across water resource systems, of which watersheds are one example. The full implementation of SBB will improve upon the existing budgeting process in three ways. First, it explicitly links all projects performance with the broad set of national goals and objectives of interest to decision makers. Second, it objectively accounts for influence that each project has on the performance of other related projects and the system as a whole. Finally, it captures the unique role some Corps projects play in aiding the performance of other Federal and non-Federal projects within a system. As a result, system-based budgeting provides a more complete account of the value associated with each item in the budget submission.

(3) Operation & Maintenance 20/20 Framework (O&M 20/20). O&M 20/20 is a national effort to simplify and improve the O&M budget development process by requiring consistent definitions of activities and costs related to mission performance across the Civil Works enterprise. It is a significant part of Budget Transformation and Civil Works Transformation, and is composed of three integrated yet distinct efforts: 1) the development and implementation of improved, consistent business rules and reporting mechanisms with which to monitor the results of those rules; 2) the continued development and implementation of risk-informed portfolio analytics and budget prioritization through the Asset Management effort; and 3) the continued refinement of Resource Codes (RC) and WCCs WCCs with which to characterize both budget development and execution. Among other things, this effort redefines the legacy terms

'Increment', 'Routine', and 'Non-routine' for the O&M budget development process, or removes them entirely.

(4) Asset Management. The USACE Asset Management effort is an integral part of the overall USACE Infrastructure Strategy, which is itself one of the 4 pillars of Civil Works Transformation. Asset Management tools and processes specifically link to and support the Budget Transformation pillar of Civil Works Transformation through identification of maintenance activities, Operational Condition Assessments, Operational Risk Assessments, and budget prioritization based on the risk-informed data produced by those tools and processes. Specific guidance for FY20 implementation is contained in this document, the business line appendices of the Program Development Manual, and Appendix E Operation and Maintenance. New or additional terms are referenced in the Glossary of this EC.

(5) Digital Accountability Transparency Act. The Digital Accountability and Transparency Act of 2014 was signed by the President on May 9, 2014. It is designed to expand the Federal Funding Accountability and Transparency Act of 2006 which increases accountability and transparency in Federal spending. It establishes Government-wide data standards for financial data, simplifies reporting for entities receiving Federal funds, improves the quality of data submitted to USA Spending.gov, and applies approaches developed by the Recovery Accountability and Transparency board to spending across the Federal Government.

c. Accountability in Budgeting for Civil Works Mitigation. USACE is required to budget for (and implement) environmental mitigation concurrent with or prior to construction of the project. Section 906(b) of WRDA 1986 as amended (33 USC §2283) requires that for all water resources development projects, on which construction had not started as of November 1986 and which necessitates mitigation for losses to ecological resources (including the acquisition of lands or interest in lands to mitigate losses) will be undertaken prior to or concurrent with construction of the project. USACE is assessing the status of all outstanding mitigation prior to preparing its 2017 Annual Report to Congress on Mitigation as required by WRDA 2007 Sec 2036.

All construction projects seeking funding in the FY20 budget must have:

(1) an updated response in the "MITIGATION REQUIREMENT CODE" field in CW-IFD (at the Program code level) . Update the database to include mitigation progress to date within current budget year. ALL entries must be updated per guidance issued by CECW-P, including, but not limited to: (1) "Barriers to Progress Analysis" and associated notes, and (2) the FUNDING STATUS in the "Mitigation Accomplishments Abstract" field (which identifies mitigation work packages in CWIFD) so that BLMs can identify any funding needs in the program year.

(2) During the May/June, HQUSACE will be conducting MSC line item reviews of all ongoing construction projects to assess the status of mitigation requirements, ensure proper entry in the database, gain clarity on FY20 funding requirements for mitigation, and identify any impediments to compliance with WRDA Section 906(b). See Section II-2-2.k. of the Construction Appendix for additional guidance on database entry requirements, work packages, and increments for mitigation. Prior Annual Mitigation Reports to Congress can be found at: http://www.usace.army.mil/Missions/Civil-Works/Project-Planning/Products/MitigationStatus/.

d. Alternative Financing for P3/P4 Pilot Studies. ASA(CW) has requested that all study like activities that occur outside of the investigations account be readily identified. In order to maintain transparency for the study like activities, such as P3/P4 pilot studies, Phase Activity Codes and Category-Class-Subclass (CCS) codes will be established and applied to appropriate P3/P4 work packages by the HQ USACE business line manager subject to issuance and approval of a USACE P3 policy prior to the FY2020 budget submission.

e. Study Like Activities. ASA(CW) has requested that all study like activities that occur outside of the Investigations account be readily identified. In order to maintain transparency for the study like activities, Phase Activity CCS codes have been identified and will be used during FY20 Program Development. See Phase Activity Codes and CCS codes in TABLE 3.

f. Funding Derived from Harbor Maintenance and Inland Waterways Trust Funds. Beginning in FY 2018, the line of accounting for each work allowance and FAD in the C, O&M, and MR&T appropriations will include FAD Type (General Fund (G), Inland Waterways Trust Fund (IWTF), or HMTF. Changes in FAD Type are not permitted without reapportionment. Category-Class-Subclass is mapped to the applicable FAD Type. See table 3 for a list of active CCS.

NOTE: In order to ensure that Civil Works funding is ultimately derived from the correct FAD Type, it is necessary that work packages for budget and work plan development use the correct CCS. See the Construction Appendix for guidance on Construction CCS. See the O&M Appendix for guidance on O&M and MR&T (Maintenance) CCS.

12. Performance Based Budgeting.

a. The "Government Performance and Results Act of 1993" or GPRA, is the foundation for present-day budget development within the Federal government. GPRA requires that government agencies develop strategic and annual performance plans for serving the Nation, and produce reports on how effective and efficient performance actually was for a given period. This law has led to the establishment of results-oriented

performance planning, measurement, and reporting throughout the Federal government. In the GPRA Mod Act, Congress called for a performance management framework that shifts emphasis to the use of goals and measures to improve outcomes, not just the production of plans and reports. Civil Works performance measures are tied to the Civil Works Strategic Plan goals. A summary of the current Civil Works strategic goals are as follows:

(1) Transform the Civil Works Program to deliver water resources solutions through Integrated Water Resources Management.

(2) Improve the safety and resilience of communities and water resources infrastructure.

(3) Ensure the Nation's waterways are available for economic and national security purposes.

(4) Restore, protect, and manage aquatic ecosystems to benefit the Nation.

(5) Manage the life-cycle of water resources infrastructure systems in order to consistently deliver sustainable services.

b. Performance-based program development assures Army that only those programs, and only those parts of those programs, which can be justified by the results produced or expected to be produced will be included in the budget. Results may be in the form of outputs or outcomes. Performance-based program development is designed to ensure execution of only clearly justified programs and to allow increments to be added such that the first-added increment provides the best results or returns, the second-added increment provides the second-best results or returns, etc. The increments are added in order of priority, both within and across Business Lines, to build a total program whose size ultimately depends on available funding. The program development procedures and guidelines for all business lines are contained in the Program Development Manual.

(1) Performance measures are written criteria by which to gauge progress in accomplishing any particular performance objectives, goals, and missions. For the Civil Works Program, the Corps has performance measures for each business line. They are used, not only as standards by which to judge performance based on project or program results, but also to forecast performance contributions of investment increments that are prioritized and evaluated for budget and Allocation Strategy development.

(2) Performance results are products of operating the Projects. They are determined through collection of data, by performance measure, describing the extent to which performance objectives, goals, or missions, were met through operating the project. They are used, not only to evaluate program performance and judge program worthiness after the fact, but also to evaluate the reasonableness of performance measures.

13. New Starts, New Investment Decisions, and Continuing Studies and Projects.

a. New Start. A new start is the provision of funding in the I or C appropriation or in the Investigation or Construction sub-account of the MR&T appropriation (MR&T (I) or MR&T (C)), or as a Remaining Item in the O&M appropriation, of a PPA (see definition) that never has received an initial work allowance in that appropriation or sub-account, and for which any broader project or program of which it is a component has never received an initial work allowance in that appropriation or sub-account. However, with respect to the O&M appropriation or the MR&T (O&M) sub-account, a new start excludes the first-time funding of a completed construction project or separable element migrating from the C appropriation or the MR&T (C) sub-account.

b. Continuing Study or Construction Project. A continuing study or construction project is a study or construction project that has been funded already as a new start, or, in the case of a construction project, for which the project or program of which it is a component has been funded already as a new start. A continuing study includes a sub-basin study that is “spun off” from a previously funded basin-wide or comprehensive study and that is funded for the first time in its own right. A continuing construction project includes a separable element that is a component of a previously funded construction project and that is funded for the first time in its own right. However, certain types of continuing study or construction projects may require new investment decisions, as discussed below.

c. New Investment Decision. A New Investment Decision is a decision by the Executive Branch to support funding for a PPA heretofore not supported. A new start requires a new investment decision, as do some types of continuing studies and construction projects. The following involve a new investment decision:

(1) A new start.

(2) A new phase of study funded previously in the applicable account

(3) A resumption.

(a) A study resumption is the renewal of study activities on a study that has not been funded in any of the three most recent fiscal years before the fiscal year in question.

(b) A construction resumption is renewal of physical construction activities on a project or separable element on which physical construction under a construction contract has not been performed in any of the three most recent fiscal years before the fiscal year in question. However, in the case of a construction project with intermittent construction activities, such as phases, levee lifts, or renourishment cycles, initiation of the next intermittent construction activity is not a resumption. Note that funding of continuing planning, engineering and design, and real estate activities does not require a new investment decision because they are not physical construction.

(4) A separable element that has not been funded previously in the C appropriation or the MR&T (C) sub-account, and that is a component of a specifically authorized, continuing construction project previously funded in that appropriation or sub-account.

(5) A deficiency correction project or a major rehabilitation project (other than for seepage control or static instability correction) funded for the first time in the C account or the MR&T (C) sub-account.

(6) Any study, study phase, project, element, major rehabilitation, or deficiency correction project that has been funded previously in the applicable account, but that has never been funded in a President's Budget or cleared “BY-1 Allocation Strategy” for that account. Note that, for a construction project already funded in the C appropriation or the MR&T (C) sub-account but not heretofore supported, funding of continuing planning, engineering, and design does not require a new investment decision because they are not physical construction.

d. A construction project with intermittent construction activities or a dredged material disposal facility at an operating Federal project does not require a new investment decision.

e. For a dam safety assurance project or a major rehabilitation project for seepage control or static instability correction that migrates from programmatic to line item funding, the new investment decision is by the ASA(CW).

f. The Executive Branch may elect to treat certain types of new investment decisions as “new starts” for budget scoring purposes; nonetheless, a true “new start” is as defined in paragraph above.

14. Contracts and Budget Development.

a. Following the guidance in the latest Engineer Circular EC 11-2-215, an acquisition plan will be developed for evaluating potential contract alternatives for each proposed contract.

b. Use of Continuing Contracts.

(1) Based on ASA guidance, no new contracts with a value of less than $20 million will be planned as continuing contracts in the BY. However, HQUSACE will consider including new continuing contracts with a value greater than $10 million, with compelling justification. Coordination and approval must occur according to the latest Engineer Circular.

(2) Contracts proposed for inclusion in the Budget or the Allocation Strategy as continuing contracts will use the Primary clause.

(3) By 31 July 2018, any contract planned for the FY20 budget as a continuing contract will be submitted for approval according to the latest Engineer Circular.

(4) Continuing contracts may be considered where earnings span more than one fiscal year.

c. Contract Type/Conditions. Specific contract type and conditions can be identified in TABLE 1a. The table applies only to construction and O&M of specifically authorized projects and defines approval level and the timeframe of the request for each type of contract.

15. Five Year Funding Streams for Civil Works Programs.

a. Introduction. OMB BY ceilings (estimated budget authority) reflect the intent of the President's Five-year programs from a national perspective. However, Army recommends the distribution of funding within the ceiling for Civil Works to OMB and may elect to recommend alternative funding levels as well. To this end, Army can elect alternative work mixes and associated incremental funding levels, by functional account, that best meet scheduled commitments, Army priorities, and project capabilities. Emphasis or de-emphasis of programs, projects, and activities should always provide for the most efficient and productive use of funds.

b. Five-Year Funding Stream. Five-year capability (BY through BY+4) estimates the long-term resource requirements for the Investigations, Construction and Operation and Maintenance accounts. CW-IFD out-year data fields will be populated by districts

and MSCs to allow MSCs to input out-year capability data. These capability amounts provide a 5-year portfolio management tool for all accounts. For clarity, the five-year funding stream is different than what is submitted annually to (OMB) by the PID, which is known as the Five-Year Development Plan (FYDP). See the business line sections in the FY20 PDM for additional information as it relates to how the 5-year funding stream should be developed by business line.

c. Submission Requirements for the MSCs and HQ Business Line Managers. MSCs will complete data input for five-year capability according to the guidance presented in the Program Policy Appendix for Investigations, Construction and Operation and Maintenance. For example: the funding stream for Investigations for feasibility and General Evaluation Report (GRR) studies states the following: A study specific funding stream will be identified by the Alternatives Milestone and will receive vertical alignment. Studies identified in the BY-1 or BY-2 that have not reached the Alternatives Milestone so a specific funding stream has not yet been aligned, will continue to be supported in the budget at the Standard Funding Stream of 36 months over 4 fiscal years $200,000 for year 1, $600,000 for year 2, $600,000 for year 3, and $100,000 for year 4. Given the unique nature of watershed assessment studies we expect a variety in cost, scope, schedule and complexity. The out-year estimates need to assume efficient funding to complete the assessment. For Planning, Engineering and Design (PED) studies, the PED estimates in out-years need to include useful increments of work that results in the first set of Plans and Specs.

- For the Construction projects, use the last 3-year average budget years such as; BY-1, BY-2 and BY-3 plus the inclusion of the project acquisition contract strategy and or continuing contracts to get your upper limits of your 5-year funding streams. This information can be found in the Construction Appendix II-4-1e which states; it is extremely important that schedules and capabilities be realistic and risk-based. Project capabilities are used in formulating the President's Budget and the Five-Year Development Plan, and overly optimistic schedules, or capabilities that ignore carry-in or fund out-year obligations, lead to a misallocation of funding.

- For Operation and Maintenance projects, if a Specific Work Activity (SWA) package submitted for the budget will require follow-on funding in future years, ensure those funding requirements are reflected in the out-year funding stream in CW-IFD. This ensures the Business Line Managers is aware of the total funding requirements before selecting the package to be funded. This requirement does not include regular recurring packages, such as annual or cyclical dredging or cyclical inspections. For additional guidance, see Appendix E, paragraph E-1-4.

- In addition, 5-year capability serves as the basis for the (FYDP). The FYDP is a stand-alone document prepared by HQUSACE, which provides a five-year look at the

funding needs for each Corps business line. Specific data requirements are identified in the Program Development Manual. The FYDP is submitted annually to the Office of Management and Budget (OMB) and the Congress along with the Budget submission.

16. Cost Estimating for Civil Works Studies/Projects.

a. Economic Assumptions. The Administration's economic assumptions address inflation and adjustments. Table 1 provides cost estimate updating rates based on these assumptions, extrapolated through BY+19. These rates may be extended beyond BY+19 using the procedures described in Footnote 16 of Table 1. The rates are used, as explained below, to update all study and project cost estimates.

b. Updating. As shown in Table 1, all costs of Corps work are grouped into two "classes" - Class 1 and Class 2. Class 1 includes only costs of Corps civilian permanent workers. Class 2 includes all other costs, including costs of Corps civilian temporary workers. Each class has its own set of rates for cost estimate updating. Nevertheless, each set is used in the same way - through execution of the "algorithm" described in the table. The two cost classes and their rates are discussed below.

(1) Corps Civilian Permanent Worker Cost. The Class 1 rates in Table 1 are applicable to the BY-1 pay raise base. They derive from “updating factors” incorporating effects of then-year pay raises and a changing pay raise base. The pay raises reflect standard nationwide pay raises and locality pay increments. The breakdown between the two is based on local pay gaps and must be determined each year. These rates should be used to update Corps civilian permanent worker cost estimates for all budgeted work of all studies, projects, and activities.

(2) Corps Civilian Temporary and Non-Corps Worker and Non-Pay Cost. The Class 2 rates of Table are applicable to the BY-1 base of all costs other than those for Corps civilian permanent workers, ranging from costs of Corps civilian temporary workers, and consultants and Architect Engineers used in the various preconstruction planning and construction stages of work, to real estate costs. They derive from “updating factors” reflecting standard nationwide inflation. Use these rates to update Corps civilian temporary and non-Corps worker and non-pay cost estimates for all budgeted work of all studies, projects, and activities.

c. Microcomputer Assisted Cost Estimating System (MCACES). A complete and reliable MCACES baseline cost estimate and realistic workflow and funding schedule are essential in preparing out-year programs. Projections of work and funding requirements will be consistent with the President’s BY-1 budget, as modified by any Congressional action. The funding schedules should be reviewed and adjusted continuously to reflect the sponsor's financial capability and project progress.

17. Project Economics.

a. Economic Updates. Economic updates will be according to ER 1105-2-100, ER 1110-2-1302 and Civil Works Policy Memorandum (CWPM) #12-001 entitled: "Methodology for Updating Benefit-to-Cost Ratios (BCR) for Budget Development". See https://planning.erdc.dren.mil/toolbox/library/EGMs/EGM18-03.pdf

b. Benefit /Cost Ratios (BCRs).

(1) The purpose of Table 1 is to ensure the currency of economic updates and BCRs for those construction and PED projects included in the BY budget and to outline compliance with the final Engineer Inspector General (EIG) BCR Inspection Report recommendations dated 2 August 2011.

(2) Updated BCRs of new start and continuing PED or construction projects proposed for the BY budget are required as follows:

(a) New PEDs or Construction Projects. For new PEDs, construction projects or construction project elements proposed in a MSC budget submission, the approval date of the latest economic analysis must not precede the date of the MSC budget submission date by more than 3 years. For example, for a new construction project for the FY2020 budget (initial submission due to HQ by May of 2018), the approval date of the document containing the most recent economic analysis can be no older than 1 May 2015.

(b) Continuing PEDs or Construction Projects. For continuing PEDs or construction projects proposed in a MSC budget submission, the date of approval of the latest economic analysis must not precede the MSC budget submission date by more than 5 years. For example, for any continuing construction project recommended for the FY2020 budget (initial submission due to HQ by May of 2018), the economic analysis can be no older than 1 May 2013.

(c) Exception. If a project is scheduled for completion in the BY with no major changes anticipated in the project's costs or benefits between the budget submission date and the project completion date, an exception to updating the BCR can be requested from CECW-ID. If the project completion date moves beyond 30 September of the BY subsequent to approval of the exception, an economic update of the BCR will be required before the project is included in any future budget or Allocation Strategy.

(d) Discount Rates. A discount rate of 2.750% will be used to determine the "current" economics of any project. For CECW-P Memorandum, 17-01, dated 20 November 2017,see https://planning.erdc.dren.mil/toolbox/library/EGMs/EGM18-03.pdf

- For projects funded for construction, the "applicable" rate is the one in effect when construction funds were first appropriated.

- For projects never funded for construction, the applicable rate is the "current" rate, unless the project qualifies for the 3 1/4% rate under the "grandfather" clause in Section 80 of the Water Resource Development Act of 1974, PL 93-251. Even if “grandfathered” for budgetary purposes the actual current rate should be also used and results shown.

- In addition, costs and benefits, and remaining costs and benefits must be computed and displayed at a 7% discount rate for consistent evaluation according to Executive Order 12893, “Principles for Federal Infrastructure Investment”. This E.O. requires that benefits, costs, and benefit-cost ratios for new infrastructure investments of all Federal agencies be evaluated at a discount rate of 7% to facilitate comparison and decision making. The total benefit/cost ratios BCR and remaining benefit / remaining cost ratios (RBRCRs) for all continuing and new construction projects, each based on a 7% discount rate, will be input into the CW-IFD database. RBRCRs are required when updating Justification Sheets. Specifics on computing RBRCRs are included in Appendix D Sub-Appendix D-4.

(3) Verification of BCR Updates. According to implementing guidance contained in the EIG report cited above, District Commanders are required to provide CECW-ID a signed “Verification of Compliance with Engineer Regulation (ER) 1105-2-100 for BCR Updates” as shown in ILLUSTRATION 5A with their BY budget submission. As part of their Quality Assurance Program, MSCs are required to ensure that this illustration is signed by all District Commanders and submitted to HQ. See TABLE 2 for submission dates.

18. Ranking Work Packages. Levels of Performance in O&M, increments, where applicable, along with Ranks will be used in conjunction by HQ to make Budget and BY-1 Allocation Strategy funding decisions within each Account. However, Rankings should cross all business lines. MSCs rank all work packages, across all business lines, against each other. See specific guidance in the Investigation, Construction and O&M Appendices. This approach is not necessary for increment 1 and increment 2 work packages.

a. Generally, Increments 1 and 2 represent critical construction work on budgeted projects. Common O&M and to some degree Specific Work Activities represent critical O&M work for efficient, effective and safe operation of priority projects. For Construction, work packages in Increments 1 and 2 are intended to fall within the Decrement funding level and do not need to be further ranked. Work packages falling in Increments 3 through 9 must be further ranked. O&M ranks all work packages using

the methods described in Appendix E-4 and the PDM business line sections. Investigations ranks all work packages using methods described in Appendix C and the PDM business line sections.

b. The Ranks span fiscal years and apply to budget, Allocation Strategy, and supplemental applications. Accordingly, there will not be separate Ranks for the different applications or for different fiscal years. All work packages entered in CW-IFD and displaying a capability for the BY-1 or thereafter must be given Ranks, if applicable. However, Ranks will be "versioned" at various key points in the program development time line or cycle.

c. The District and MSC/Lab Ranks are across Business Lines and independent of Increments or Level of performance; that is, work packages in higher increments or LOPs are not necessarily ranked higher than other work packages. Once the work packages have been ranked, work packages that are added due to newly arising requirements may be assigned duplicate rankings based on their relative priority, without necessitating re-ranking of all work packages.

d. HQ ranks are across Business Lines and independent of Increments or LOP. HQ Ranks are in tranches. Army ranks cross business lines and Increments/LOP and are also in tranches.

e. District, MSC, and HQ Ranks should be developed in consideration of the performance information available in CW-IFD and policy stated in this EC. Information on District, MSC, and HQ Ranks can be found in the PDM.

f. Details on Increments for Construction, and Levels of Performance for O&M along with Ranks are found in the PDM.

19. Justification Materials.

a. Justification Sheet Management. ASA(CW) guidance issued 30 June 2017 for formulating the FY19 Civil Works Budget remains in effect for Justification Sheets (J-sheets) developed for the FY20 Civil Works Budget recommendation. Specifically, this guidance states, "Justification Sheets should focus on justifying the work that is being presented for funding in the Budget. Any part of a project that is not part of the budgeted work should be identified as un-programmed and footnoted with an explanation accordingly. All J-sheets should be posted in MAX Community."

(1) HQUSACE application of ASA(CW) guidance for FY20 budget development follows:

(a) Only HQUSACE Account Managers will post J-sheets in MAX, the OMB-managed Federal community enterprise database system. All other HQ Proponents, MSCs, FOAs and Centers will save J-sheets on USACE intranet sharepoint site at a specific address provided separate from this EC.

(b) HQUSACE Account Managers will post in MAX only final version J-sheets that have received the endorsement of the Chief, Program Integration Division or his designated representative and have completed staffing between HQ Business Line Managers, HQ Proponents, RITs, and MSC/Center/FOAs. There may be follow-on questions and concerns to address once the ASA(CW) and/or OMB reviews J-sheets in MAX. The result of these reviews may require updates or corrections to J-sheets and re-posting revised version J-sheets in MAX.

(2) J-sheets will undergo an iterative review and authentication process to ensure a complete and accurate document. The expectations at each level of the Civil Works Program development follows:

(a) District level

- Review and authenticate the annual updated project cost estimate and schedule based on OMB price level and inflation indices provided in this EC.

- Update of project schedule in P2 to identify work that could be accomplished in the Budget Year (this identifies the work packages and becomes the capability amount).

- Validate that economics and environmental compliance is current.

- Update CW-IFD with work packages that match activities identified in P2 schedule (capability level).

- Update Justification Sheet with new cost estimate and listing of actions that could be accomplished in Budget Year.

(b) The MSCs, FOAs, and Centers are responsible for overseeing district data submission quality, verify adherence to this EC and the PDM. The MSCs, FOAs, and Centers also have data entry responsibility for specific remaining items and providing a consolidated MSC level ranking. At the MSC, the CWID Chiefs perform the following actions:

- Review and approve updated cost estimate.

- Validate economics and environmental data.

- Review and authenticate J-Sheets to ensure they follow format in this EC and define work activities based on CW-IFD.

- Obtain MSC review by RE, E&C and Planning.

- Transmit the J-Sheets to the HQs RIT Program Managers.

(c) RIT Program Managers are responsible for reviewing, coordinating changes/updates, and authenticating J-Sheet submittals in coordination with their MSC and District personnel. RIT Program Managers provide the J-sheets to HQ Account Managers for further processing and consideration in the Chief of Engineer's budget recommendation.

(d) HQ Account Managers within Program Development Branch, in coordination with HQ BLMs, have the responsibility for overseeing the development of J-Sheets. This includes reviewing, coordinating, collaborating and performing quality assurance of the J-Sheet development process. The final approved J-sheet that aligns with the Chief of Engineers FY20 budget recommendation will be provided via MAX to OASA(CW) for Army endorsement. Once approved at OASA(CW) level, the J-sheet is promoted in MAX to OMB for their review, approval, and clearance for consideration in the President's budget submission for the Civil Works Program.

(e) HQ BLMs in coordination with CECW-ID Account/Program Managers are responsible to coordinate specific business line guidance contained in their respective appendices; review, verify, and authenticate the J-Sheet data entry process; develop business line specific data entry requirements; and manage the overall consistency of the J-Sheet. They have the responsibility to perform headquarters level BLM rankings in support of the Chief of Engineers budget recommendation.

b. Document Restrictions and Marking. All submissions required by this EC are NOT TO BE RELEASED outside the Department of the Army until after the BY President's Budget is released to the public. See ER 11-2-240, "Civil Works Activities - Construction & Design," for instructions regarding the marking of documents for restricted distribution.

c. Justification Sheets (J-sheets).

(1) Schedule. See TABLE 2 for J-sheet submission requirements.

(2) J-sheet Guidelines. J-sheets authors will develop documentation using

Microsoft Word and must be consistent with the J-sheet requirements provided in this document. DO NOT deviate from the formatting outlined below without first contacting your RIT programmer for guidance. RIT programmers are responsible for coordinating J-sheets with MSCs.

(a) General Instructions

- The project name provided on J-sheets is not to change from prior year budgets unless specific concurrence is sought and received from CECW-ID.

- Where a project has a certified total project cost estimate (TPCE), include language in the J-sheet stating this fact and the timeline for planned resolution of the TPCE exceeding the Section 902 limit (if applicable).

- MSCs will submit final J-sheets via email with track changes to associated RITs for review. See TABLE 2 for submission dates. Use the Checklist, TABLE 2a, during the development of your J-sheets and submit signed checklist along with your Final J-sheets.

- For projects whose BCR has changed since lasted submitted to Congress, highlight the change on the J-sheet. (changed since FY 2019 Budget)

- Completion Dates. Completion dates should only be included on activities that are being funded to completion in the BY. Use “TBD” (To Be Determined) on ALL J-sheets requiring completion dates beyond the Budget Year EXCEPT for beach nourishment projects. See Illustration II-4.2, JUSTIFICATION section for additional justification information required for beach nourishment projects.

- For all FRM J-sheets, remove any and all references to “Risk Index” or “Basis of Risk Index”.

- Justification paragraphs must clearly state what risks will occur and/or what project benefits will not be realized if the BY funds are not received.

- Wherever projected Study or PED completion dates are used in the J-sheet, use a FY rather than “month and year” to allow for slippages.

- Acronyms must be defined when used throughout the J-sheet or not introduced. Acronyms must be spelled out the first time and immediately followed with the abbreviation in ( ).

- J-sheets are required on all budgeted work submitted by the MSC.

- Show funding for "operation" and "maintenance" work separately on O&M J-sheets. Ensure the total amount for O and M match your division's total.

- Identify States for each of the following items Scheduling Reservoir Operations, Inspection of Completed Works, Project Condition Surveys, Inspection of Completed Environmental projects, and Surveillance of Northern Boundary Waters. Refer to Appendix E.

- Develop project completion schedules for Construction projects consistent with the President's budget funding amounts. Do not show future advanced appropriations in the summarized financial data on your justification sheets. Prepare the summarized financial data according to the examples in ILLUSTRATION II-4.2 of Appendix D.

- For all J-sheets where Dam Safety (DS) wedge funds have been used for PED (post-Dam Safety Modification Study) costs, include the DS wedge sunk PED costs in the Total Project Costs for the project.

(b) General Notes on Formatting

- Normal rules of grammar apply to all J-sheets.

- All numbers must be shown in whole numbers that have been rounded to the nearest thousand (Example $23,567,541 show as $23,568,000).

- All narrative text is to be left justified on the page.
- All negative amounts on J-sheets must be in parentheses “( )”.

- Where templates show “FY (BY) the J-sheets should show “FY 2020”. Where templates show FY (BY-1) J-sheets should show FY 2019, etc.

(c) Formatting Investigations & Construction (C) Account J-sheets

- Use regular Arial 10 font, automatic line height, line spacing of 1, and margins of 1 inch top and bottom, 0.5 inch left and right, 1inch header/0.8 inch footer.

- Footers for I & C Account J-sheets:

  - Use only the Microsoft Word Standard Blank (Three Columns) footer option.

  - No page numbers and no date in footers.

- Use regular Arial 10 font, automatic line height, line spacing of 1, and margins of 1 inch top and bottom, 0.5 inch left and right, 1 inch header/0.8 inch footer. Left Column should be left justified with “Division (spell out fully)”, e.g. Division: Southwestern. Center Column should be center justified with “District (spell out fully)”, e.g. District: Mobile. Right Column should be right justified with “Project Name, State (two letter state abbreviation only- do not spell out). Use the “Wrap Text” formatting feature within the footer cell if all text does not fit on a single line.

- Tables for I & C Account J-sheets

- If there is a need for columns, use the table option and center justify on the page.

- Column headings (if applicable) are to be center justified within the column.

- Financial data is to be formatted as currency with comma separator, $ symbol and no decimals.

- Numerical data is to be right justified horizontally and bottom justified vertically within the cell.

- Alphabetical data cells should be left justified within the column horizontally, center justified vertically within the cell.

- Benefit values are to be formatted as currency with the comma separator, $ symbol and no decimals.

- A separate left justified small column within the table should be used for the footnote designator adjacent to the numeric data cells (i.e., 1).

- If a footnote designator is needed within the text column, the designator should be the last item within the text.

- The actual footnote(s) should be incorporated as the last lines of the table with the horizontal cells merged into a single cell to allow text wrapping.

- Only one footnote per horizontal line of table.

- Embedded tables within a table are NOT allowed.

(d) Formatting O&M J-sheets:

- Use regular Arial 10 font, automatic line height, line spacing of 1, and margins of 1 inch top and bottom and 1 inch side margins.

- Footers for O&M J-sheets Same as for I & C Account J-sheets above.

(e) Formatting Maps and Illustrations: Follow the guidance in Appendix D, Illustration D-4-4 for map content EXCEPT that for margins and font size use the guidance above for I, C and O&M Account J-sheets.

20. Certification and Verification of Compliance Requirements.

a. Required by Law or Executive Order. At least two, and possibly four, certifications are required with the BY Budget submission to attest that MSC Budgets comply with applicable laws and Executive Orders. The two certifications always required by HQ (CECW-I) include one by district commanders regarding compliance with an Executive Order on data sharing, and one by the MSC directors of programs management regarding compliance with use of management controls. The remaining two Certifications of Compliance that may be required are both for signature by district commanders - both regarding compliance with coastal barrier laws. Each Certification is discussed below.

(1) Executive Order on Geospatial Data. Reference ER 1110-1-8156, "Policies, Guidance, and Requirements for Geospatial Data and Systems," and EM 1110-1-2909, "Geospatial Data and Systems," assist USACE in protecting its investment in geospatial data and systems and in complying with Executive Order 12906, "Coordinating Geographic Data Acquisition and Access - The National Spatial Data Infrastructure." USACE collects a variety of geospatial data to produce products such as river and harbor maps, charts, and drawings; real estate maps; environmental and economic studies; and engineering studies and drawings. Paragraph 7.g.(4) of the ER explains that, each district commander will submit a certification, modeled after Figure 1, certifying that his command has documented new geospatial data that it has created and made this documentation (metadata) available via the National Geospatial Data Clearinghouse on the Internet. The certification is due by the date shown in Table 2.

(2) Coastal Barrier Laws. OMB's Circular A-11, Section 12.5(s) states that estimates must not include any new Federal expenditures or financial assistance prohibited by the “Coastal Barrier Resources Act” (CBRA), PL 97-348. In addition, the ”Coastal Barrier Improvement Act of 1990,” PL 101-591, amending CBRA, requires that the Corps certify annually to Congress and the Secretary of Interior that it was in compliance with the provisions of CBRA, as amended, during the previous fiscal year. Therefore, each District Commander whose district includes areas covered by the Coastal Barrier Resources System will submit two certifications -- one modeled after

each Figures 2A and 2B certifying, respectively, that this “FY18 Work Package Capability" is in compliance with these laws and that no funds were obligated in the past fiscal year (BY-2) for purposes prohibited by them. Note that PL 101-591 added new units to the Coastal Barrier Resources System. The certifications are due by dates shown in Table 2.

(3) Management Control Law. Federal agencies are required by law to establish "management controls" for the activities they manage, and to provide assessments of their effectiveness to the President and Congress, annually. To this end, functional proponents identify requirements for compliance with law, including safeguarding assets, ensuring adequate records, and promoting efficiency and effectiveness of program accomplishment and reflect them in checklists. Army's management control effort, implemented by AR 11-2, “Manager’s Internal Control Program” specifically includes the Civil Works Program. The Management Control Evaluation Checklist for Civil Works Program Development is provided in Figure 3 of this section of the EC. A sample of a completed checklist is available for illustration purposes only in Figure 6 of this section of the EC. This is for use by programs management organizations in MSCs and districts, as explained below:

(a) Use the checklist during development of your Budget submission. District commands will use it first; then MSCs when reviewing and modifying district submissions.

(b) A "no" response to a checklist question suggests a potential management weakness. However, if the potential management weakness is the result of a special case or specific exception, then there may be no management weakness. Those signing the Certification are the judge. If it is determined that a weakness exists, the weakness must be corrected as quickly as resources and essential mission priorities allow. No upward reporting is required.

(c) If a management weakness requires the attention or awareness of the next higher level of management, it is either a “notable weakness” or "material weakness" - a material weakness being more serious of the two. This is a judgment call on the relative seriousness of the problem. It is made at each progressive echelon, based on each manager's professional judgment. Weaknesses discovered by districts are reported to the MSCs, which determine whether to report them to CECW-ID. The reports must specify corrective actions taken or planned. The highest echelon receiving the report will evaluate the corrective actions, provide assistance if needed, and track progress. Consult AR 11-2 to determine whether a weakness is “notable” or "material". In general terms, if there has been no potential or actual loss of resources, adverse publicity, diminished credibility or violation of statutory or regulatory requirements, this reportable

weakness would be considered a “notable” weakness for the purpose of the management control program for the Civil Works Program.

(d) Do not send program management checklists to HQUSACE unless there is a "no" response to a checklist question or there is additional guidance requiring submission of information. Each MSC CW or CW Integration Division Chief will submit a signed Certification modeled after Figure 4, certifying that a program management checklist was used by the MSC districts, and as applicable, the MSC. The check list must be signed by either a general officer or SES. The certification must be submitted according to Table 2.

b. Required by Engineer Regulation. See Figure 5a for Verification of Compliance with ER 1105-2-100 for BCR Updates.

21. Change Management.

a. To ensure consistency among this EC and its successors, the Program Development Manual and CW-IFD, a Change Management Committee has been established. The Change Management Committee will review and approve or disapprove all proposed changes to the Program Development Manual, User Guide, and CW-IFD, as they relate to program development.

b. Users of this EC are strongly encouraged to bring all errors, omissions, and inconsistencies found in this document to the attention of CECW-IP at the earliest possible date. Recommended or suggested improvements to this EC are also strongly encouraged.

c. Any and all deviations from the guidance in this program development EC in the preparation or submission of the BY Budget and BY-1 Allocation Strategy, whether intentional or not, must be brought to the attention of the Chief, CECW-ID and CECW-IP at the earliest possible date. All MSC Budget submissions are expected to be according to the guidance and the intent of the guidance provided herein.

FOR THE COMMANDER:

11 Appendices
(See Table of Contents)

JAMES C. DALTON. P.E.
Director of Civil Works

TABLE 1 and TABLE 1a

Cost Estimate Update Rates and Contract Type and Conditions

FY20 Cost Estimate Updating Rate Table

Table 1 a Contract Type and Conditions.x

TABLE 2

Summary of FY20 Submission Requirements and Shared FY19 Allocation Strategy

FY20ec- TABLE 2 Submission Require

TABLE 2a Final I, C, O&M Checklist Template

FY20ec- Table 2a Final I, C, O&M Che

TABLE 3 –CCS Codes and Phase Codes

FY20 Table 3 CCS Codes.xlsx

FY20 Table 3 Phase Codes.xlsx

TABLE 4 - J-Sheet Naming Convention and
TABLE-5 - J-Sheet Parent Child Workflow


FY20ec-Table 4 FY20
J-sheet Namaing Co


FY20ec-Table 5
J-Sheet Workflow St

DATE: _____

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

Certification of Compliance with Section 3(D) Of Executive Order 12906

and Paragraph 8 of ER 1110-1-8156, *as amended by E.O. 13286 in 2003*

I hereby certify that the BY budget for the _____ (district, division, or laboratory name) Civil Works Program does not include an implicit or explicit request for funds to collect, produce, or acquire Geospatial data that is available through the National Geospatial Data Clearinghouse and that all possible data collection partnerships identified through the Clearinghouse were investigated. The _____ (district, division, or laboratory name) has also contributed metadata to the National Geospatial Data Clearinghouse according to ER 1110-1-8156.

_____

Colonel, Corps of Engineers
Commanding

Figure 2 Certification of Compliance with Section 3(D) Of Executive Order 12906 and Paragraph 8 of ER 1110-1-8156

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

DATE_____

Certification of Compliance with Coastal Barrier Resources Act

I hereby certify that the BY budget for the _____ (district name) District Civil Works Program does not include a request for funds which would result in any new Federal expenditures or financial assistance prohibited by the Coastal Barrier Resources Act (PL 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591).

_____

Colonel, Corps of Engineers
Commanding

Figure 2A Certification of Compliance with Coastal Barrier Resources Act

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

DATE_____

Certification of Compliance with Coastal Barrier Resources Act

I hereby certify that no Civil Works Budget funds were obligated in BY-2 by the _____ (district name) District for any new Federal expenditures or financial assistance prohibited by the Coastal Barrier Resources Act (PL 97-348), as amended by the Coastal Barrier Improvement Act of 1990 (PL 101-591).

_____

Colonel, Corps of Engineers
Commanding

Figure 2B Certification of Compliance with Coastal Barrier Resources Act

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

Management Control Evaluation Checklist

FUNCTION. The function covered by this checklist is Civil Works Budget Development.

PURPOSE. The purpose of this checklist is to assist Programs management organizations in USACE major subordinate commands (MSC) and districts in evaluating key management controls in development of their annual budget requests. It is not intended to cover all controls.

INSTRUCTIONS. Become thoroughly familiar with the contents of the Budget EC and read paragraph 16 of this EC before completing the checklist. Answers must be based on the actual testing of key management controls (such as document analysis, direct observation, sampling, simulation, other). Answers which indicate deficiencies must be explained and corrective actions indicated in support documentation. A sample of Figure 3 is provided below.

TEST QUESTIONS:

1. Are funding schedules continuously reviewed and adjusted to reflect Congressional actions, the local sponsors' financial capability, and project progress?
Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

2. Does development of the multi-year programs follow the guidance included in the applicable Appendices of the Budget EC?
Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

3. Are alternative multi-year program proposals fully documented?
Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

Figure 3
Management Control Evaluation Checklist

4. Is the multi-year Capability program independent of the other programs, yet consistent with Army policy and approved project cooperation agreements?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

5. Have the "Class 1" rates of TABLE 1, “BY Program, Cost Estimate Updating,” been applied to the pay-related costs for Civilian employees when preparing PB3a’s and PB6’s?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

6. Have the "Class 2" rates of TABLE 1, “BY Program, Cost Estimate Updating,” been used to update costs for consultants and AEs used in the various preconstruction planning and construction stages of work when preparing PB3a’s and PB6’s?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

7. Have the "Class 1" and “Class 2" rates of TABLE 1, “BY Program, Cost Estimate Updating,” been used for the period BY-1 through BY+19 for all PPAs when preparing PB3a’s and PB6’s?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

8. Has the procedure in Footnote 8 of TABLE 1, “BY Program, Cost Estimate Updating,” been used to determine rates for use in updating cost estimates beyond BY+19?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

Figure 3 (Continued)

9. Are the appropriate discount rates being used to compute the benefit-cost ratios of projects?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

10. Is the approval date of the latest economic analysis according to the Budget EC?

a. For construction and PED new starts - not more than three years older than the date of the budget submission to HQUSACE?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

b. For continuing construction and PEDs - not more than five years older than the date of the budget submission to HQUSACE?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

11. Were benefit-cost ratio computations based on benefits in the latest approved economic analyses, were current project costs deflated to the price levels of such benefits, and were all review and certification requirements met?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

12. Are new start recommendations justified based on NED benefits, or responsive to restoration and protection of environmental resources, including fish and wildlife habitat, i.e., inland and coastal wetlands, other aquatic and riparian habitat?

Tested by:
Response: YES_____ NO_____ NA_____

Remarks:

Figure 3 (Continued)

13. Do recommended new construction starts have firm M-CACES baseline cost estimates?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

14. Have new start recommendations been screened according to the criteria established in the Budget EC?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

15. Are data in the Construction and Investigations illustrations compatible, showing that:

a. Construction capability is shown for the fiscal year following PED completion?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

b. Project cost estimates are identical?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

16. Is the “Estimated Total Carry-In” included in all applicable budget justification sheets (Investigations, Construction and O&M)?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

17. Are the latest (most current) cost estimates for BY budgeted projects, through project completion, within the project 902 cost limit established in law? If not, provide project details in the remarks below.

Figure 3 (Continued)

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

18. Were Section 902 cost limit calculations performed by District economists according to ER 1105-2-100, Appendix G, Table G-4 Note that use of the Section 902 Analysis Certified Tool is acceptable in lieu of Table G-4.

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

19. Were the (most current) cost estimates developed by the district (or region) cost estimating personnel according to the following standards: (1) ER 1110-2-1302, Civil Works Cost Engineering, (2) EC 1165-2-214, Water Resources Policies and Authorities - Civil Works Review and (3) ETL 1110-2-573, Engineering and Design: Construction Cost Estimating Guide for Civil Works?

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

20. Does the “Total Allocation to Date” for any budgeted project exceed 80% of the current “Total Project Cost Estimate” (See ER 1110-2-1302, paragraph 11. k. (3)) for the project? If so, provide project details in the remarks section below and to the MSC Commander, Chief, CECW-ID, and DCG, C+EO at the earliest possible date.

Tested by:
Response: YES_____ NO_____NA_____
Remarks:

21. Where “Total Allocation to Date” for any budgeted project exceeds 80% of the authorized “Total Project Cost Estimate”, the following has been verified:

a. The most recent Total Project Cost Estimate and associated products were developed according to the following standards: (1) ER 1110-2-1302, Civil Works Cost Engineering, (2) EC 1165-2-214, Water Resources Policies and Authorities - Civil Works Review and (3) ETL 1110-2-573, Engineering and Design Construction Cost Estimating Guide for Civil Works.

Figure 3 (Continued)

Tested by:
Response: YES_____ NO_____NA_____
Remarks:

b. The most recent Total Project Cost Estimate, construction schedule and risk-based analysis were developed by the district (or region) cost personnel with support from the (PDT).

Tested by:
Response: YES_____ NO_____NA_____
Remarks:

c. Where the risk-based analysis indicates the most recent Total Project Cost Estimate will exceed the 902 limit, a District Quality Control/Quality Assurance (DQC) review and a Cost Agency Technical Review (Cost ATR) Certification have been obtained from the Cost Engineering Mandatory Center of Expertise (MCX).

Tested by:
Response: YES_____ NO_____NA_____
Remarks:

DATE PREPARED: _____

[NOTE Help make this a better tool for evaluating management controls. Submit suggestions for improvement to HQUSACE CECW-ID, Washington, D. C. 20314-1000.]

DATE: _____

Figure 3 (Continued)

Certification of Use of Management Control Evaluation Checklist

I hereby certify that in the BY, (major subordinate command name) Division's Civil Works Budget was developed making full use of the Management Control Evaluation Checklist.

_____

Director of Civil Works Programs Management

Figure 4 Certification of Use of Management Control Evaluation Checklist

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

DATE: _____

Verification of Compliance with ER 1105-2-100 for BCR Updates

I hereby verify that the BCRs for projects submitted for the Civil Works BY budget submission from the _____(district) were:

1. Developed in strict accordance with ER 1105-2-100 or an approved economic update based on the Methodology for Updating BCR for Budget Development dated March 8, 2012.

2. That the CW-IFD and Primavera 2v3 system data accurately reflects these economic updates.

3. If P2 / CW-IFD does NOT accurately reflect these economic updates, the updates are accurately reflected in the Construction Project-level Data Sheet attached.

Check here ___ if there is an attachment (ILLUSTRATION 5B).

_____

Colonel/Lt. Colonel, Corps of Engineers

Commanding

Figure 5A Verification of Compliance with ER 1105-2-100 for BCR Updates

FOR ILLUSTRATION PURPOSES ONLY

Figure 6
Management Checklis

Figure 6
Sample Management Control Evaluation Checklist

APPENDIX A
References

Section I - Required Publications.

1. Public Laws (PL):

PL 93-251
Water Resources Development Act of 1974 (Cited in para 17 (2) d)
https://planning.erdc.dren.mil/toolbox/library/PL/WRDA1974.pdf

PL 94-273
Reimbursements Payments of 2000 to Department of Labor (Cited in J-3-5a)
http://uscode.house.gov/statutes/pl/94/273.pdf

PL 95-502
Act to amend the Internal Revenue Code of 1954
https://www.gpo.gov/fdsys/pkg/STATUTE-92/pdf/STATUTE-92-Pg1693.pdf

PL 97-348 (Cited in para 20-2)
Coastal Barrier Resources Act, Oct 18, 1982
http://uscode.house.gov/statutes/pl/97/348.pdf

PL 99-662
Water Resources Development Act of 1986 (Cited in para 5 (c) pg 18)
https://www.revolvy.com/page/Water%20Resources%20Development%20Act%20of%201986?stype=topics&cmd=list

PL 100-707 (Cited in para c (8) pg 7)
Robert T. Stafford Disaster Relief and Emergency Assistance Act
https://emilms.fema.gov/IS230c/FEM0101180.htm

PL 101-508 (Cited in para 2 c (b) pg 15)
Revenue Reconciliation Act of 1990
http://psychrights.org/education/ModelQuiTam/Legislation/OBRA1990-PL101-508.pdf

PL 101-591
Coastal Barrier Improvement Act of 1990 (Cited in page 40)
https://www.govtrack.us/congress/bills/101/hr2840

PL 101-601
Native American Graves Protection and Repatriation Act, Nov 16, 1990
https://www.nps.gov/archeology/tools/Laws/nagpra.htm

PL 101-640
Water Resources Development Act of 1990
https://www.gpo.gov/fdsys/pkg/STATUTE-104/pdf/STATUTE-104-Pg4604.pdf

PL 101-646
Coastal Wetlands Planning, Protection and Restoration Act of 1990
https://www.govtrack.us/congress/bills/101/hr2840

PL 102-580
Water Resources Development Act of 1992 (Cited in D-2-2 f)
https://www.govtrack.us/congress/bills/101/s2740

PL 103-62
Government Performance and Results Act of 1993 (Cited in para 12a. pg 19)
https://obamawhitehouse.archives.gov/omb/mgmt-gpra/gplaw2m

PL 104-46
Energy and Water Development Appropriations Act, 1994 (Cited in para 6b (1) pg 2)
https://www.congress.gov/bill/103rd-congress/house-bill/2445

PL 104-303
Water Resources Development Act of 1996 (Cited in J-2-6-c 6)
https://www.fws.gov/habitatconservation/Omnibus/WRDA1996.pdf

PL 105-33
Balanced Budget Act of 1997 (Cited in para 10 (1) c page 14)
https://www.gpo.gov/fdsys/pkg/BILLS-105hr2015enr/pdf/BILLS-105hr2015enr.pdf

PL 106-541
Water Resources Development Act of 2000 (Cited in J-4-33 c)
https://www.revolvy.com/page/Water%20Resources%20Development%20Act%20of%202000?stype=topics&cmd=list

PL 109-58
Energy Policy Act, 2005 (Cited in para E-5-9 pg E-5-10)
https://www.congress.gov/bill/109th-congress/house-bill/6

PL 110-114
Water Resources Development Act, 2007 (Cited in J-2-8 a)
https://www.congress.gov/bill/110th-congress/house-bill/1495

PL 110-140
Energy Independence and Security Act, 2007
https://www.congress.gov/bill/109th-congress/house-bill/6

PL 113-121
Water Resources Reform and Development Act, 2014 (Cited in para C-3)
https://www.congress.gov/bill/113th-congress/house-bill/3080

2. Executive Orders (EO):

EO 11514
Protection and Enhancement of Environmental Quality. March 5, 1970 (Available at https://www.fsa.usda.gov/Internet/FSA_File/eo11514.pdf)

EO 12088
Federal Compliance with Pollution Control Standards, 1978 (Available at https://www.fedcenter.gov/Bookmarks/index.cfm?id=685)

EO 12322
Water Resources Projects, 1981 (Available at https://www.reaganlibrary.gov/sites/default/files/archives/speeches/1981/91781c.htm)

EO 12512
Federal Real Property Management, 1985 (Available at https://www.reaganlibrary.gov/sites/default/files/archives/speeches/1985/42985h.htm)

EO 12893
Principles for Federal Infrastructure Investment, 1994 (Available at https://www.archives.gov/files/federal-register/executive-orders/pdf/12893.pdf)

EO 12906
Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure, 1994 (Available at http://govinfo.library.unt.edu/npr/library/direct/orders/20fa.html)

EO 13450
Improving Government Program Performance, 2007 (Available at https://www.federalregister.gov/documents/2007/11/15/07-5726/improving-government-program-performance)

EO 13693
Planning for Federal Sustainability in the Next Decade, 2015 (Available at https://www.federalregister.gov/documents/2015/03/25/2015-07016/planning-for-federal-sustainability-in-the-next-decade)

3. Office of Management and Budget (OMB) documents:

Budget of the United States Government, Analytical Perspectives

OMB Circular A-11 Preparation, Submission and Execution of the Budget

4. Corps of Engineers Publications -- Engineer Circulars (EC), Regulations (ER), Manuals (EM), Engineering Technical Letters (ETL): (Available at http://www.publications.usace.army.mil)

ER 1110-2-1302
Civil Works Cost Engineering

EC 1165-2-214
Water Resources Policies and Authorities - Civil Works Review

EC 11-2-215 Corps of Engineers Civil Works Program Management, Execution of the Army Civil Works Program

ER 5-1-11
USACE Business Process

ER 1105-2-100
Planning Guidance Notebook

ER 1110-1-8156
Policies, Guidance, and Requirements for Geospatial Data and Systems

ETL 1110-2-573
Engineering and Design: Construction Cost Estimating Guide for Civil Works

Section II - Related Publications. Army Regulations (AR) are available at http://armypubs.army.mil/ProductMaps/PubForm/AR.aspx

1. Department of the Army Regulations (AR):

AR 11-2
Managers' Internal Control Program

AR 385-10
The Army Safety Program

AR 420-1
Army Facilities Management

2. Corps of Engineers Publications -- Engineer Circulars (EC), Regulations (ER), Manuals (EM), Pamphlets (EP), and Civil Works Policy Memorandums (CWPM): (Available at http://www.publications.usace.army.mil)

EM 1110-1-2909
Geospatial Data and Systems

ER 11-1-320
Civil Works Emergency Management Programs

ER 11-2-220
Civil Works Activities General Investigation

ER 11-2-240
Civil Works Activities - Construction & Design

ER 11-2-290
Civil Works Activities, General Expenses

ER 11-2-292
Capability Estimates During Defense of Civil Works Program

ER 25-1-106
Information Technology Capital Planning and Investment Management

ER 37-1-29
Financial Administration – Financial Management of Capital Investments

ER 37-1-30
Financial Administration – Accounting and Reporting

ER 200-1-4
Environmental Compliance Policies-Formerly Utilized Sites Remedial Action Program (FUSRAP) - Site Designation, Remediation Scope, and Recovering Costs

ER 200-2-3
Environmental Compliance Policies

ER 500-1-1
Emergency Employment of Army and Other Resources - Civil Emergency Management Program

ER 1110-2-111
Engineering and Design - USACE Bridge Safety Program

ER 1110-2-1156
Engineering and Design - Safety of Dams – Policy and Procedures

ER 1130-2-500
Partners and Support (Work Management Policies)

ER 1130-2-510
Hydroelectric Power Operations and Maintenance Policies

ER 1130-2-540
Environmental Stewardship Operations and Maintenance Guidance and Procedures

ER 1130-2-550
Recreation Operations and Maintenance Policies

ER 1165-2-119
Modifications to Completed Projects

ER 1165-2-131
Local Cooperation Agreements for New Start Construction Projects

ER 1165-2-400
Recreational Planning, Development, and Management Policies

EP 1130-2-500
Partners and Support (Work Management Guidance and Procedures)

EP 1130-2-540
Environmental Stewardship and Maintenance Guidance and Procedures

EP 1130-2-550
Recreation Operations and Maintenance Guidance and Procedures

CECW-P
Memorandum for Planning Community of Practice, 24 May 2013

CWPM-12-001
Methodology for Updating BCR for Budget Development

APPENDIX B
Acronyms

AETAFV	Army Corps of Engineers - Information Technology
AET	Automated Engineering Tools
AFV	Alternate Fuel Vehicles
AMSCO	
AIS	Automated Information System
AMSCO	Army Management Structure Code
APA	American Planning Association
AP	Automation Program
AR	Army Regulation
ARPA	Archeological Resources Protection Act
ASA(CW)	Assistant Secretary of the Army for Civil Works
ASCE	American Society of Civil Engineers
ASDSO	Association of State Dam Safety Officials
BDA	Blast Damage Assessments
BFE	Base Flood Elevation used in FIRM mapping
BPA	Bridge Inspections
BL	Business Line
BLMs	Business Line Managers
BoR	Bureau of Reclamation
BPA	Bonneville Power Administration
BY	Budget Year
C	Construction Account
CAD	Computer Aided Design
CAP	Continuing Authorities Program
CBRA	Coastal Barrier Resources Act
CCG	Consolidated Command Guidance (USACE)
CCS	Category/Class/Subclass
CEBIS	Corps of Engineers Bridge Information System
CECW-I	Civil Works Integration Division
CECW-ID	Program Development Branch
CECW-IN	National Programs Branch
CECW-IP	Project Programs Branch
CEFMS	Corps of Engineers Financial Management System
CEI	Continuing Eligibility Inspections
CEM	Civil Emergency Management
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFM	Certified Floodplain Manager
CFR	Code of Federal Regulations
CICSCX	Cyber Security Center of Expertise

CIPR	Critical Infrastructure Protection and Resilience
CISP	Critical Infrastructure Security Program
CLS	Common Level of Service
CNMS	Coordinated Needs Management Strategy
CNS	Coastal Navigation Structures
COBRA	Coastal Barrier Resources Act
COG	Continuity of Government
COLA	Cost of Living Adjustment
COOP	Continuity of Operations
CoP	Community of Practice
CPIM	Capital Planning and Investment Management
CRA	Continuing Resolution Act
CRM-D	Common Risk Model for Dams
CRS	Community Rating System
CSRS	Civil Service Retirement System
CTS	Consequence-Based Top Screen
CTS	Dams Consequence-Based Top Screen Methodology
CW	Civil Works Directorate (USACE)
CWBI	Civil Works Business Information System
CWIS	Civil Works Information System
CWID	Civil Works Integration Division (CWID)
CW-IFD	Civil Work Integrated Funding Database
CWMS	Civil Works Water Management System
CWP	Civil Works Program
CWPM	Civil Works Program Memo
DA	Design Agreement
DD	Day (two digits)
DEF	Data Entry Form
DHS	Department of Homeland Security
DM	Deferred Maintenance
DMDF	Dredged Material Disposal Facility
DMMP	Dredged Material Management Program
DOD	Department of Defense
DSA	Dam Safety Assurance
DSAC	Dam Safety Action Classification
DSO	Dam Safety Officer
E	Expenses (Program)
E&D	Engineering and Design
E.O.	Executive Order
EAP	Emergency Action Plan
EC	Engineering Circular
ECI	Employment Cost Index
ED&M	Executive Direction and Management
EDR	Engineering Documentation Report
EIG	Engineer Inspector General

EIS	Environmental Impact Statement
EISA	Energy Independence Security Act
EM	Emergency Management or Engineering Manual
EMI	Emergency Management Institute
EN	Environment (BL)
ENF	Environmental FUSRAP
ENG	Engineering
ENR	Aquatic Ecosystem Restoration
ENS	Environmental Stewardship
EOC	Emergency Operations Center
EOC or EO	Executive Order
EOP	Environmental Operating Principals
EP	Engineering Pamphlet
EPA	Environmental Protection Agency
EPAct	Energy Policy Act
ER	Engineering Regulation
ERDC	Engineer Research and Development Center (USACE)
ERGO	Environmental Review Guide for Operations
EROC	Engineer Reporting Organization Code
ERR	Economic Reevaluation
ESA	Endangered Species Act
ESPC	Energy Savings Performance Contract
ETL	Engineering Technical Letter
F	Feasibility
FAD	Funding Authorization Document
FCCE	Flood Control and Coastal Emergency
FCSA	Feasibility Cost Sharing Agreement
FEM	Facilities and Equipment Maintenance
FEMA	Federal Emergency Management Agency
FEMP	Federal Energy Management Program
FERC	Federal Energy Regulatory Commission
FERS	Federal Employees Retirement System
FIFM-TF	Federal Interagency Floodplain Management Task Force
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FloodSAFE	California’s Floodplain Management Program
FMA	Flood Mitigation Assistant
FOA	Field Operating Activity (e.g., Districts)
FPM	Flood Plain Management
FPMS	Flood Plain Management Services
FRM	Flood Risk Management (BL)
FTE	Full Time Equivalents
FUSRAP	Formerly Utilized Sites Remedial Action Program
FY	Fiscal Year
FYDP	Five Year Development Plan

GIS	Geographic Information System
GPRA	Government Performance and Results Act of 1993
GRR	General Reevaluation Report
H	Hydropower (BL)
HECSA	Humphrey's Engineer Center Support Activity (USACE)
HMTF	Harbor Maintenance Trust Fund
HPG	Headquarters Priority Group
HQ	Headquarters (USACE)
HQUSACE	US Army Corps of Engineers Headquarters
HUC	Hydrological Unit Code
I	Investigation Account
ICS	Industrial Control System
ICW	Inspection of Completed Works
IENC	Inland Electronic Navigation Charts
IES	Issue Evaluation Studies
IMA	Individual Mobilization Augmentee
IMP	Infrastructure Management Plan
IRRM	Interim Risk Reduction Measures
IT	Information Technology
IWR	Institute of Water Resources
IWTF	Inland Waterways Trust Fund
LOMR	Letter of Map Revision
LOP	Letters of Permission
LoP	Levels of Performance (LoP)
LSAC	Levee Safety Action Classification
LSO	Levee Safety Officer
LY	Last Year
M	Maintenance
M-CACES	Micro-computer Assisted Cost Estimating System
MCX	Mandatory Center of Expertise
MM	Major Maintenance (O&M)
MMIP	Maintenance Management Improvement Plan
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MR	Major Rehabilitation
MR&T	Mississippi River and Tributaries
MSC	Major Support Command (Division)
MW	Megawatt
N	Navigation (BL)
NAGPRA	National American Graves Protection and Repatriation Act
NCLS	National Committee on Levee Safety
NEPA	National Environmental Policy Act
NEPP	National Emergency Preparedness Program

NFRMP	National Flood Risk Management Program
NGO	Non-Governmental Organization
NLD	National Levee Database
NOAA	National Oceanographic and Atmospheric Administration
NS	New Start
O	Operations
O&M	Operations and Maintenance
OASA (CW)	Office of Assistant Secretary (Civil Works)
OCA	Operational Condition Assessments (OCAs)
OMB	Office of Management and Budget
OMBIL	Operation and Maintenance Information Link
OMP	Operations Management Plan
OPORD	Operations Order
OPS	Operations
ORA	Operational Risk Assessments (ORAs)
P3	Public Private Partnership
P4	Public-Public-Private-Partnership
PA	Periodic Assessments
PAC	Post Authorization Change
PACR	Post Authorization Change Report
PAR	Population At Risk
PAS	Planning Assistance to States
PBUD	President Budget
PCS	Permanent Change of Station
PCS	Project Condition Survey
PED	Planning, Engineering and Design
PFMA	Potential Failure Mode Analysis
PGL	Planning Guidance Letter
PI	Periodic Inspections
PID	Program Integration Division
PIO	Performance Improvement Officer
PIR	Project Information Report
PL	Public Law
PM	FEMA Procedure Memorandum
PM	Project Manager
PMAC	Program Management Advisory Committee
PMP	Project Management Plan
PPA	Programs, Projects and Activities
PR&C	Purchase, Request and Commitment
PRIP	Plant Replacement and Improvement Program
PSI	Physical Security Inspections
PY	Program Year
QFR	Questions For The Record
RCO	Readiness and Contingency Operations

RC	Recreation (Program)
RCRA	Resource Conservation and Recovery Act
REG	Regulatory (BL)
RFI	Request For Information
RG	Regulatory (BL)
RIP	Rehabilitation and Inspection Program
RIT	Regional Integration Team
RM	Resource Management
RRP	Rapid Recovery Plan
RSM	Regional Sediment Management
RRM	Relative Risk Matrix
S&A	Supervision and Administration
S&E	Science and Engineering
SACW	Secretary of Army for Civil Works
SBA	Small Business Administration
SBB	Systems Based Budgeting
SCADA	Supervisory Control and Data Acquisition
SP	Sustainability Plan
SPBAC	Senior Program Budget Advisory Committee
SRA	Security Risk Assessments
SSP	Site-Specific Security Plan
TA	Threat Assessment
TPC	Total Project Cost
UESC	Utility Energy Services Contract
ULA	USACE Logistics Activity
UPI	Unique Performance Identifier
USACE	US Army Corps of Engineers
USDA	U.S. Department of Agriculture
USGS	U.S. Geological survey
VTN	Value to the Nation (VTN)
WAD	Work Allocation Document
WBS	Work Breakdown Structure
WCC	Work Category Codes
WI	Work Item
WIB	Watershed Informed Budget
WISDM	Water Infrastructure Data Manager (WISDM)
WRDA	Water Resources Development Act
WRRDA	Water Resources Reform and Development Act
WS	Water Supply (BL)
ZEV	Zero Emission Vehicles

APPENDIX C

Specifically Authorized Investigations and MR&T Investigations

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APPENDIX C

Investigations and MR&T Investigations

General

C-1. Applicability. This appendix provides Program guidance and procedures for specifically authorized activities in the Investigations appropriation title and comparable ones from the Flood Control, MR&T appropriation title, where appropriate. The appropriation titles provide funds for: Investigations authorized by general or specific Congressional legislation or by resolution of the Committee on Environment and Public Works of the U.S. Senate or the Committee on Public Works and Transportation of the House of Representatives, including interim reports thereon.

C-2. Types of Studies.

a. General. The following definitions are provided to assist in identifying studies to be included in the investigations program budget submission. The code in ( ) immediately following the type of study in this section represents the Phase Activity Code for the study in CW-IFD.

(1) Special Studies (IZ). Studies to be used only in special cases, where the study or project has a National perspective and is not tied to one project purpose or business line. Most often these will be HQ funded items.

(2) Feasibility Study (FS). This is a study leading to either 1) a recommendation for authorization of improvements where there is no existing authorization or recommendation for authorization; or 2) a determination of a lack of Federal interest. Improvements include addition of unauthorized separable element(s) or separately implementable features to a project that does not require reformulation. The cost of a Feasibility Study is shared 50% Federal and 50% non-Federal under the terms of a Feasibility Cost Sharing Agreement (FCSA), unless otherwise authorized.

(3) Watershed Study (FW). Section 729 of WRDA of 1986 authorizes the Corps of Engineers to study the water needs of river basins and regions of the United States, in consultation with State, interstate and local governmental entities. Results of the Section 729 studies are documented in a Watershed Management Plan, which may recommend more detailed feasibility studies; feasibility studies may not be conducted under the authority of Section 729. Section 729 studies are cost -shared 75% Federal and 25% non-Federal using the watershed Cost Sharing Agreement. Reference ER 1105-2-411. Watershed studies:

(a) Require consideration about water resources development and management in the context of multiple purposes rather than single purposes, and, thus, facilitates the search for comprehensive and integrated solutions.

(b) Improve opportunities for public and private groups to identify and achieve common goals by unifying on-going efforts and leveraging resources.

(c) Identify a combination of recommended actions (Watershed Management Plan) to be undertaken by various partners and stakeholders in order to achieve local, tribal, regional, and national water resources management goals identified in the study and may or may not identify further budgetable Corps studies or implementation projects.

(d) Leverage resources, including cost shared collaboration, and integrate programs and activities within and among Civil Works programs, and with other Federal, tribal, state and non-governmental organizations, to improve consistency and cost effectiveness.

(4) Comprehensive or Basin-wide Study (FC). The work that can be done under a comprehensive or basin-wide study will depend on the specific authority. HQUSACE implementation guidance is required before proceeding on a comprehensive or basin-wide study. Comprehensive or basin-wide studies require a Cost Sharing Agreement and the costs are shared as per the specific authority.

(5) Spin-off Studies (SF). A Feasibility Study that is specifically identified in a final report from a Comprehensive or Basin-wide study and that would be carried out under the same study authority as the Comprehensive or Basin-wide study, if provided for by that authority, is termed a Spin-off Study. This study may start the feasibility phase without competing as a New Start. Each Spin-off Study is considered a new investment decision, and should be categorized as New Phase (NP).

(a) A Feasibility study resulting from Watershed Study and Comprehensive or Basin-wide Study that is identified in the final watershed study report or in the comprehensive or basin-wide study's final plan, but that would be carried out under a different study authority, is not a Spin-off study and must compete as a New Start Study.

(6) Continuing Authorities Program (CC) Conversion Study. CAP projects that are being converted to Investigations are considered new Starts because they have never received Investigation funding. A conversion will follow the New Start process outlined in section C-9. Corps policy for CAP Conversion Studies is captured in Appendix F of the Planning Guidance Notebook (PGN), reference ER 1105-2-100.

(7) A study where a Dam Safety Action Classification (DSAC) 1, 2, or 3 is currently assigned to the dam, levees, dikes, or an appurtenant structure requires approval of the USACE Dam Safety Officer (DSO prior to signing the FCSA, reference ER 1110-2-1156, Chapter 24. All proposed New Start studies for projects under the purview of the Dam Safety Program must include in the J-Sheet the assigned DSAC of the project. Further, for DSAC 1, 2, or 3 projects, initial coordination among the District, MSC, HQ DSOs, Planning Divisions, Water Management and Reallocation Studies Planning Center of Expertise must occur with an indication of the likelihood of obtaining the DSO's approval.

(8) Post-Feasibility Studies. These types of studies involve reformulation of alternatives and project justification via economics and/or environmental effects.

(a) General Reevaluation Study (GR). This is a study that involves reformulation of alternatives from a previously completed Feasibility Study. The addition of separable element(s) or separable implementable features may be included in a General Reevaluation Study so long as reformulation of the already-recommended or already-authorized alternative is included. A General Reevaluation Study is cost shared 50/50 under a Feasibility Cost Sharing Agreement, will follow the Specifically Authorized Study process, will be considered a new investment decision (not a new start), and will be categorized as a New Phase (NP).

(b) Validation Study (VS). This is a reexamination of project justification, including the economics and/or environmental effects, which does not require reformulation of alternatives. A Validation Study may be carried out using any funds appropriated for the project and the cost of the Validation Study is shared under the applicable Design Agreement or Project Partnership Agreement. Validation Reports, except those for Section 902 increases, are approved by the Division Commander, reference the Planning Guidance Notebook or additional guidance. If reformulation is required, a Validation Study must convert to

a General Reevaluation Study, sign a Feasibility Cost Sharing Agreement and follow the Feasibility study process.

(c) Section 902 Post Authorization Study. This is a type of Validation Study. Section 902 Post Authorization Reports are reviewed and approved at HQUSACE and may require additional Authorization.

(d) Beach Renourishment Evaluation Study (BR). Section 1037 of WRRDA 2014 authorizes the Corps of Engineers to participate in a determination of Federal participation in cost shared renourishment of a project for an additional 15 years if technically sound, economically justified, and environmentally acceptable. Upon request of the non-Federal sponsor the District Engineer may request funding in the Investigations account. A Beach Renourishment Evaluation Study is cost shared 50/50 under a Feasibility Cost Sharing Agreement, will be considered a new investment decision (not a new start), and will be categorized as a New Phase (NP).

C-3. Types of Phases. The following descriptions of phases are provided to assist in identifying phases in the investigations program.

Specifically Authorized Study Phase. The Water Resources Reform and Development Act (WRRDA) 2014 Section 1002 removed the authority for the Corps of Engineers to conduct a Federally-funded reconnaissance study prior to initiating a feasibility study. Feasibility starts with the signed FCSA and ends with the signing of the Chief's Report. The Corps of Engineers has fully implemented SMART (Specific, Measurable, Attainable, Risk informed, Timely) Planning and is committed to efficiently funding the feasibility phase continuously to completion. It is anticipated that all active studies will be included in the budget submission.

a. Feasibility Phase.

- Specifically Authorized Study, including a GRR, with a signed FCSA. These studies must follow SMART Planning principles and must have support documentation, vertically aligned memo or exemption approval memo, with a vertically aligned scope, schedule and funding stream, before the MSC submits the FY20 budget to HQUSACE.

- New Start, Specifically Authorized Study or New Phase GRR. These studies will follow a single phase feasibility process. Once funds are identified or allocated in a Statement of Managers or a cleared work plan for a study, the FCSA may be executed. Once the FCSA is signed, HQ will release the funding to initiate the single phase study. For these studies, vertical team alignment will occur once the study is initiated. A study specific funding stream and schedule will be identified as soon as possible and will receive vertical team concurrence. Studies identified in BY-1 or BY-2 that have not held an initial team meeting and therefore a specific funding stream has not yet been aligned, will continue to be supported in the budget at the Standard Funding Stream of 36 months over 4 fiscal years $200,000 for year 1, $600,000 for year 2, and $600,000 for year 3 and $100,000 for year 4. The 3 years, 36 months, spans over four fiscal years because once the funding is allocated in a Statement of Managers or a cleared work plan for a study then a study does not start until the cost sharing agreement is signed which is usually signed within 4 months.

- New Start Watershed Study or Comprehensive Study. These studies follow a single phase process. While these studies follow a different set of milestones than feasibility studies, the policy that provided the initial study at 100% Federal cost was based on Section 905(b) of WRDA 1986. Therefore, the removal of this section by Section 1002 of WRRDA 2014 results in the requirement that all watershed

study or comprehensive study work be cost shared. Once funds are allocated in a Statement of Managers or a cleared work plan for a study, the Cost Sharing Agreement (CSA) may be executed. Once the CSA is signed, HQUSACE will release the funding to initiate the single phase study. These studies must follow SMART Planning principles and have support documentation with a vertically aligned scope, schedule and funding stream, before the MSC submits the FY20 budget to HQUSACE.

b. Preconstruction Engineering and Design (PED) Phase.

- The PED Phase begins when Federal funds are allocated to initiate PED. The decision to include funds to initiate PED will be an explicit decision to be made in development of the Army Civil Works budget or Work Plan. The PED phase ends after completing the first set of plans and specifications for the first significant construction contract.

- A VS performed in the PED phase requires an explicit decision to include funds to initiate the study during the development of the Army Civil Works budget or Work Plan.

C-4. Descriptions of Status. Planning modernization revised the way the Corps manages its Investigations portfolio. The 8 February 2012 Memorandum: USACE Feasibility Study Program Execution and Delivery established a disciplined and methodical approach to improve program management, performance, execution and delivery. It is the intent of USACE to prioritize and to optimally fund studies to completion. The study portfolio was diligently reviewed to ensure that USACE focused its efforts on the highest performing studies within the primary water resources missions of the Corps. The studies identified to continue were re-scoped and mandated to follow 3x3x3 rule: complete in no longer than three years, 36 months; cost not greater than $3M total study cost; and engage throughout the study with the vertical team. Studies that did not comply were to be reclassified as inactive or terminated.

USACE is committed to continue this disciplined and rigorous approach to managing the investigation program ensuring the focus of the studies are on the highest priorities of our Nation. This commitment to support efficiently funding studies to completion, coupled with WRRDA 2014 schedule reporting requirements, requires a disciplined use of the study classification process. The following describes the meaning of each status and provides the re-classification process.

The terms Active and Inactive in this ER and the PGN are for study classification purposes and are not intended to replace the definitions provided for the CEFMS Financial database or P2.

a. Active: Active studies are defined as authorized studies that have received a Federal allocation; have a commitment from HQUSACE to support continued sequential Federal study funding; have a non-federal sponsor committed to funding their share; have Federal interest; have reasonable prospects for a Federal project or watershed study; and are proceeding according to a vertical team aligned scope, schedule and budget. The exemption process is part of the study process so the need to obtain an exemption decision does not in and of itself determine the status of a study.

b. Inactive: If a study does not meet the definition of Active (C-4.a.) then no funding may be reprogrammed to, allocated to, reallocated to, obligated or expended on the study. The USACE Chief of Planning and Policy may grant an exception to this rule on a case-by-case basis. Inactive studies fall into two categories:

(1) Inactive Awaiting Reclassification. These are authorized studies that do not currently meet the definition of an Active study. The study may be reclassified to Inactive Pending Funding or Terminated.

(2) Inactive Pending Funding. These are authorized studies that have an approved reclassification memorandum from the MSC Commander but are not actively being studied due to a lack of Federal funding. These studies qualify to be submitted for funding but are not "Active" until a funding decision by HQUSACE has been made to support the study and funding is received.

(a) Reclassification process from Inactive Awaiting Reclassification to Inactive Pending Funding. Inactive studies can be reclassified to Inactive Pending Funding if certain conditions are met. The District is the start of the reclassification process. Districts must provide to the MSC Planning and Policy Chief a draft Reclassification Memo requesting reclassification of a qualifying study from Terminated or Inactive Awaiting Reclassification to Inactive Pending Funding which includes the following:

- Describes the reason(s) why this study was made Inactive or terminated;
- Verifies there are no outstanding policy issues or if there are any outstanding policy issues what is the strategy for their resolution;
- Explains why it should be activated at this time;
- Confirms Federal interest;
- Describes the anticipated funding stream and schedule to completion; and
- Provides a current sponsor Letter of Intent.

The MSC Planning Chief must validate the information provided to reclassify the study according to the reclassification process and finalize the reclassification memorandum for the MSC Commander to concur and sign.

Once the Reclassification Memo is approved by the MSC Commander a copy of the memo is sent to the RIT and forwarded to CECW-P. At this point the study is classified as Inactive – Reclassified Pending Funding. <u>For funding purposes the status of this study is a resumption</u>.

(b) Terminated – If a study is classified as Inactive Awaiting Reclassification and there is no explicit request or reason to pause the study then it should be terminated and fiscally closed out. An inactive study must be terminated and fiscally closed out if it has been five fiscal years since the last appropriation of funding.

c. Phase Status: The proper identification of the phase status of each study is fundamental in the budget process.

(1) New Start Studies (NS): A New Start study is a study that has never been funded in Investigations or in Investigations MR&T. Each new start study will have its own program code/AMSCO and is categorized as New Start (NS).

(2) New Phase (NP): A cost-shared study or project is considered to be in a New Phase once it has completed the current (funded) phase and is ready for budgeting in the follow-on phase. This also includes a new GRR or Beach Renourishment Evaluation Study, and a Spin-off Study. If a study is completing one phase and starting a new phase in the BY (e.g., finish Feasibility and start PED), each should be a separate work package with the ending study having a Phase Status of LY and the new phase

having a Phase Status of NP. After completion of the Feasibility Phase a request for a new economic update is a new funding decision and should be captured as a NP in PED.

(3) Resumption (RZ): A study resumption is the renewal of PED or study activities. The MSC Commander must reclassify the study to Inactive Pending Funding prior to the MSC submitting a funding request, reference paragraph I-1-4.(b)(1)(A).

(4) Continuing (CN): A previously funded phase that is neither a New Start, New Phase, Last Year nor a Resumption.

(5) Last Year (LY): A previously funded phase that will complete with the funds requested that is neither a New Start, New Phase, Continuing nor a Resumption.

(6) Previously Last Year (PL): A study that has been previously last year funded in a President's Budget or Work Plan.

NOTE: (1) New Start (2) New Phase and (3) Resumption are considered New Investment Decisions. These types of studies are required to receive ASA(CW) and OMB budget or work plan approval before any funding can be allocated and used for the requested work.

C-5. Performance Based Budget Requirements.

a. Eligibility and Ranking criteria for studies. To be considered for inclusion in the BY program, each study must meet the following criteria prior to applying the business line performance / ranking criteria:

(1) Be conducted using SMART Planning principles

(2) Have support documentation, a vertically aligned memo, exemption approval memo, or be a study that has not yet initiated or held an initial vertical team meeting.

(3) Have Federal Corps interest.

(4) Be a matter of urgency for the implementation of the problem solution.

(5) Have non-Federal sponsor and local support for the study, when applicable.

(6) Be in compliance with NEPA and other environmental regulations appropriate for the effort.

b. Eligibility criteria for PED must meet the following selection criteria:

(1) The MSC is scheduled to transmitted the final report submit the report by 15 November 2018 and;

(2) The primary project outputs are commercial navigation; flood or hurricane and storm risk management; or aquatic ecosystem restoration and;

(3) There is no major irresolvable controversy or issue and;

(4) There is an identified and willing sponsor who understands and has the ability to finance PED according to the 24 May 2013 CECW-PC Memorandum, Modification of non-Federal contribution in Design Agreement and has the ability to finance the items of local cooperation for construction; and

(5) The project is in compliance with applicable environmental statutes appropriate to the current stage.

c. Rank will be completed at each level, District, MSC and HQUSACE, across business lines to provide a 1-N priority order. Rank will be based on the criteria for the appropriate business line as discussed in Sections 6-12 and USACE's commitment to optimally fund studies to completion therefore CN and LY studies and PED will be prioritized before the remaining requests.

d. Level of Performance (LOP) is new terminology explained in the O&M Appendix. For consistency across appropriations, Investigations will identify each work package by a LOP according to the following guidance:

(1) All Feasibility studies have one work package that expresses the full capability, that work package will be identified in CWIFD as "Full Mission".

(2) A PED with one work package expressing full capability will be identified in CWIFD as "Full Mission".

(3) A PED with multiple work packages will have the partial work packages identified in CWIFD as "Partial Mission" with the work package that completes the PED capability identified in CWIFD as "Full Mission".

e. CECW Program. HQUSACE will review the Investigations account for the Civil Works Program considering the national criteria applicable guidance from the ASA(CW) and OMB in mid-summer BY-2.

C-6. Allocation Strategy.

a. Eligibility and Ranking criteria for studies, see C-5 a and c.

b. Eligibility criteria for PED are determined on a case by case basis.

C-7. Procedure.

a. Study Development Process. For specifically authorized studies the emphasis is on maintaining continuity in the workflow once a new start decision has been made. With the passage of Section 1002 of WRRDA 2014 there is one new start decision point for all Army proposed cost shared studies: initiation of the feasibility phase. It is the intent of the Corps of Engineers to continuously fund studies to completion. Therefore, it is required that full Federal funding needed in the fiscal year be requested in one work package to ensure efficient completion of the study. Study rank by the field is required in the case that funding is not sufficient to cover all the requirements in the Investigations account. Reasons a continuing study would be left out of the budget submission includes: it has adequate carryover funds to proceed, its path to completion has changed and it no longer has vertical team alignment to continue, or it is no longer viable, i.e. it doesn't have Federal interest or it doesn't have a Sponsor, and it is therefore inactive.

(1) Studies. The feasibility report will be developed according to sections 905 and 105 of the Water Resources Development Act (WRDA) of 1986, as amended. A feasibility report is needed to support

environmental compliance, policy review, engineering and design, and a project partnership agreement (PPA) A feasibility report will be prepared even in those instances where the project or separable element is authorized or funded for construction before completion of the feasibility report. The feasibility phase will be carried out under a FCSA , except for feasibility studies carried out before WRDA 1986 took effect, feasibility studies for inland waterway projects, and studies to dispose of or reduce costs at existing Federal projects.

All studies designated as being in the feasibility phase per this budget guidance per C-3.a, will follow SMART Planning principles. This ability to think critically, identify risks, and move out on decisions allows for efficient execution of our planning program. Obtaining vertical alignment on the scope and schedule is a critical aspect of SMART Planning.

(a) 3x3x3 Rule. Specifically Authorized Feasibility Studies, including GRRs, follow the 3x3x3 rule established by Planning Bulletin 2014-01, Subject: Application and Compliance of SMART Planning and the 3x3x3 Rule, which limits the total study cost (i.e., both the Federal and non-Federal share of costs), to $3 million.

(b) 3x3x3 Rule. The purpose of the 3x3x3 rule is to help focus the planning effort to critically evaluate an appropriate scope and scale of studies. The 3x3x3 rule is defined as follows:

- Maximum total study cost of $3 million, including both the Federal and non-Federal shares. This amount does not include the 100 percent Federal IEPR cost.

- Maximum three-year (36 months) duration for the study, which starts with the signing of the FCSA and ends with signing of the Chief's Report.

- Three levels of USACE vertical team alignment, consisting of the district, division, and headquarters.

(c) Support Documentation for new starts and new phase studies. Once funds are identified or allocated in a Statement of Managers or a cleared work plan for a study the FCSA may be executed. Once the FCSA is signed, HQ will release the funding to initiate the single phase study. The single phase study will follow the established SMART planning process and milestones. Prior to the Alternatives Milestone, the Project Delivery Team (PDT) will verify Federal interest and conduct and document a preliminary analysis of the Federal interest and the rough order of magnitude of costs, benefits, and environmental impacts. For these studies, vertical team alignment will occur throughout the study, but initially at the initial vertical team meeting Documentation of the initial vertical team meeting will record the scope, schedule and funding stream of the study and will be used to support the actual funding stream so the Standard Funding Stream will no longer be used. Studies identified in the BY-1 or BY-2 that have not reached the initial team meeting and therefore a specific funding stream has not yet been aligned, will continue to be supported in the budget at the Standard Funding Stream of 36 months over 4 fiscal years; $200,000 for year 1, $600,000 for year 2, and $600,000 for year 3, and $100,000 for year 4.

(d) Support Documentation for resuming studies. All resumptions must have been reclassified to Inactive Pending Funding, reference paragraph -4, in advance of submitting a budget request. Vertical team alignment is not conducted prior to the receipt of resumption funding. Once resumed, these studies will follow the established SMART planning process.

(e) Changes to Scope, Schedule and/or Funding Stream. As the study progresses, changes in the scope, schedule and budget will be coordinated within the vertical team for alignment and captured in an

updated Project Management Plan and Decision Management Plan. The HQUSACE review manager will brief the Chief of OWPR, who will assess and determine continued compliance with the 3x3x3 rule. The continued 3x3x3 compliance determination will be shared with the district and MSC Chiefs of Planning via email and the HQUSACE review manager will ensure that the Project Delivery team accurately reflects the decision in the Decision Log. The MSC Planning Chief will provide the RIT and CECW-P a signed memo documenting the aligned scope, funding stream and schedule of the study and will either verify the study is within 3x3x3 or explain the need and path ahead for an exemption request.

(2) Review of Completed Projects. Section 216 of the River and Harbor and Flood Control Act of 1970 authorizes investigations for modification of completed projects or their operation when found advisable due to significantly changed physical or economic conditions and for improving the quality of the environment in the overall public interest. Initial appraisal reports are prepared under Section 216 using O&M funds, reference O&M Appendix. The cost of preparing the initial appraisal report is limited to $20,000. Results from this report can be used to support a New Start Feasibility study through the budgetary process. Following the initial appraisal the 216 study process is the same as an investigations specifically authorized feasibility study and competes as a new start feasibility study.
The above guidance is true for all Section 216 studies except for the Remaining Item for the Disposition of Completed Projects. These studies will be identified through the divestiture process using asset management principles, reference the Remaining Item Appendix.

(3) Watershed Study and Comprehensive Study. A Watershed Study is conducted according to Section 729 of the Water Resources Development Act of 1986, as amended, and leads to a Watershed Management Plan. A comprehensive study has specific authorization and is conducted according to the Implementation Guidance. Given the unique nature of watershed studies we expect a variety in cost, scope, schedule and complexity. All watershed studies will use SMART Planning principles and methodologies as stated in Planning Bulletin 2012-2, #2. A watershed memorandum is required within six months of starting a watershed or comprehensive study. The memorandum requires the following:

(a) MSC Planning Chief endorsement of vertical alignment.

(b) Schedule including the scope and funding stream.

All watershed or comprehensive study resumptions must have been reclassified to Inactive - Pending Funding, reference C-1-4, in advance of submitting a budget request. Vertical team alignment is not conducted prior to the receipt of resumption funding.

(4) Preconstruction Engineering and Design (PED). According to Section 1003 of WRRDA 2014, PED can start once the Secretary reviews the completed report and determines the project is justified. PED begins with the issuance of PED funds. No PED work may begin prior to a new investment decision and the issuance of PED funding. As soon as practicable after funds for PED are received, a design agreement will be executed. A design agreement will be executed even in those instances where the first funds received for PED are Construction or MR&T Construction funds. Activities carried out prior to execution of the design agreement will be limited to those necessary for negotiation, processing, and execution of the design agreement, or not to exceed $100,000. The design agreement will provide for concurrent financing of design according to the 24 May 2013 CECW-PC Memorandum Modification of non-Federal contribution in Design Agreement. The budgeted increment to initiate PED phase must be for a useful piece of work and not just enough to sign the design agreement. The Review Plan for the PED phase must have an actualized CW035 Milestone and the Review Plan posted on the Internet prior to receipt of PED funds in excess of $100,000.

(5) Post-Feasibility Modifications. Once the feasibility report has been completed for a project, additional engineering and design, economic and environmental analyses, and evaluations often result in the identification of potential project modifications. Each potential modification that is identified (whether during PED or construction) should be subjected to a screening-level examination to determine whether the modification changes, or would change, project scope or functions beyond the scope and functions described in the completed feasibility report, to the extent that it requires, or would require, additional authorization beyond the current authorization or the authorization contemplated in the completed feasibility report. If reformulation is required the work will be done in Investigations in the Feasibility phase. This study is not considered a new start, but rather a new phase since it has previously been funded in Investigations. Once funded, this study will follow the single phase study processes. See Types of Studies C-1-2.(8). for specific Post-Feasibility studies.

(a) Examination and documentation of a simple cost increase without a change in scope or functions may be undertaken as part of PED or construction. When funded in Investigations this work will be a New Phase PED. If additional authorization is required as a consequence of the simple cost increase, a Post-Authorization Change Report should be prepared.

(b) Examination and documentation of design changes that would not require additional authorization may be undertaken as part of PED or construction. When funded in Investigations this work will be a New Phase PED. However, if such design changes are material changes to the basic project features or output levels and the original project already is covered by a PPA, design of the material changes should be undertaken under a design agreement, and construction of the material changes should not be commenced until the PPA has been amended to reference an approved decision document that incorporates the material changes.

(c) A modification that requires or would require authorization beyond the current authorization or the authorization contemplated in the completed feasibility report, and that extends, expands, or adds functions to the original project described in the completed feasibility report, is beyond the scope of the original project. If such an added function is physically integral to the original project, the modification will be treated as a substitute plan and, if the substitute plan is pursued, work on the original project will be suspended, then concluded in an orderly manner. An extension, expansion, or physically separable added function will be treated as a new project if it is unauthorized or is separately authorized, or it will be treated as a new separable element if it is authorized as a modification to the original project. Following the screening-level examination, the substitute plan, new project, or new separable element will be developed according to the standard project development process discussed above, beginning with its own feasibility study, even in circumstances where it becomes authorized in the meantime without benefit of the feasibility study being completed.

(d) The development of a new project (including a substitute plan) or a new separable element will not be included in the cost of PED or construction for the original project, and should be budgeted in the Investigations account or the MR&T I sub-account. However, once the feasibility report for a new separable element has been completed, the new separable element may be included in PED for the project along with PED for other separable elements.

(6) Budgeting. All studies and PEDs that are consistent with policy will show capability under the Investigations account or the study/design portion of the Flood Control, MR&T account. However, PEDs may be budgeted in the Construction account or the construction portion of the MR&T account if the applicable project or element as authorized is supported by the Administration for construction, and either is budgeted as a new start for construction or has received construction funding.

(7) Study-like activities are traditionally funded in the Construction or Operations and Maintenance appropriations. In FY20 study-like activities will be budgeted in the appropriation(s) identified in the FY19 President's Budget. Until the PBud is published, study-like activities will be developed within their traditional appropriations.

C-8. Program Considerations.

a. All Specifically Authorized studies will follow SMART Planning principles and methodologies as currently stated in Planning Bulletin 2012-2, #2.

b. All vertically aligned studies with support documentation will be considered for inclusion in the budget.

c. Once an initial investment decision is made, studies will be efficiently funded to completion, as funding allows, as long as it maintains Active status. To ensure efficient funding, studies will only include one work package in the budget submission which identifies the optimal funding required to efficiently continue the study toward completion.

d. New Feasibility Studies identified in the BY-1 or BY-2 that have not held an initial vertical team meeting, so a specific funding stream has not been aligned, will continue to be supported in the budget at the Standard Funding Stream of 36 months over 4 fiscal years; $200,000 for year 1, $600,000 for year 2, and $600,000 for year 3 and $100,000 for year 4.

e. New Watershed Studies identified in the BY-1 or BY-2 that have not held an initial vertical team meeting, so a specific funding stream has not been aligned, will continue to be supported in the budget at the Standard Funding Stream of 36 months over 4 fiscal years; $200,000 for year 1, $600,000 for year 2, and $600,000 for year 3 and $100,000 for year 4 or a best estimate of the cost and length of the study accompanied with a justification.

f. PED cost estimates are to include an allowance for inflation according to the instruction in the MAIN section of this EC. The construction project cost estimated displayed in the justification sheet will be based on 1 October of the BY-1 price level. (Do not include an allowance for inflation through the construction period).

g. Annual funding requests. Annual funding requests are to be only for the amount required to carry out the anticipated activities during the requested FY.

C-9. Specific Requirements for New Starts.

(1) Presenting a robust portfolio of new planning starts by integrating the goals of Civil Works Transformation and the Civil Works Strategic plan means proactively reaching out to other Federal and non-Federal agencies and to private sector partners to actively strategize about how we make “Fix it first” a reality for existing Corps infrastructure. At the same time we must continue to pursue adaptation to the global changes in support of climate change adaptation across the Federal family. Our New Starts are the avenue to ensure that the investigations portfolio supports the infrastructure initiative, Civil Works Transformation and the Civil Works Strategic plan. To remain relevant stewards of our Nations’ waterways, the Corps must look 30, 50, and 70+ years into the future and determine what the likely critical impacts will be to our water resources infrastructure. Where will the large population growth likely occur, where are the economic opportunities likely to occur, what environmental issues do we foresee and what can be done to avoid them? These types of water resource opportunities (vulnerabilities) need to be

identified and acted on.

(2) The District will conduct a rigorous screening process to ensure that the most viable studies are recommended as New Start studies. Each District may expend up to $25,000 each year, in the Special Investigations program to assist in the education of the single phase study process and aid in the screening process. The number of potential new start studies varies by district, therefore the MSC CWID Chief has the authority to allocate within the provided funding to ensure the proper level of funding for screening is available to the appropriate Districts. District staff will use the funding to identify appropriate non-Federal sponsors, obtain a Letter of Intent and discuss how to partner with the Corps since the passage of Section 1002 of WRRDA 2014, and ensure that a study authority exists. It is very important to note that no preliminary analysis, i.e. data analysis, will be performed on a study until after the FCSA is signed.

(3) Building on each MSC's strategic assessments and action plans, the MSC will ensure its region is focusing its screening efforts to collaborate with partners that can assist in solving the greatest challenges of its region. The MSC will provide a white paper, Regional Support for New Starts, summarizing its strategic assessment and action plans and describe how the new start feasibility and watershed studies it submitted to HQUSACE fit within the regional plan. This white paper is a coordinated product from the Planning and Program divisions at each MSC. MSC Programs will ensure that the white paper supports the new study portfolio submitted by the MSC (C-10. (4)). The Regional Support for New Starts white paper is due according to Table 2 of the Main EC.

(4) Feasibility New Starts. The MSCs will submit a regional portfolio identifying up to their top 3 studies for each business line for HQUSACE consideration in development of the National New Start Portfolio. The MSC should only include submissions for viable new start studies and are therefore permitted to submit less than 3 submissions for any of the business lines. The MSC should consider including studies that support Civil Works Transformation and the Civil Works Strategic plan as well as studies that would further evaluate the problems, needs and opportunities (vulnerabilities) that could be addressed by either a Corps water resource project. Proposals will be submitted in CWIFD and Justifications Sheets for the New Starts (Figure C.1) are due concurrently according to Table 2 of the MAIN EC. To be considered by HQUSACE the proposal must have a minimum of the following key data points:

(a) MSC Rank relative rank of 1-3 (By BL BL; Phase Status: NS, Phase: F)

(b) Identify an authority for the study

(c) Identify the primary issue to be studied

(d) Enter key BL specific metrics using existing data and professional judgment

(e) Identify the sponsor

(f) Have a signed Letter of Intent from the sponsor

(g) Study cost estimate should be estimated following 3x3x3 requirements using the Standard funding stream of: 36 months over 4 fiscal years; $200,000 for year 1, $600,000 for year 2, and $600,000 for year 3 and $100,000 for year 4.

(h) Include the HUC

(i) Provide the coordinates of a point that represents the approximate center of the study

(j) Include the potential range of benefits

(k) Include the potential range of construction cost

The following cannot be included as a New Start feasibility submission:

(a) A disposition study

(b) A watershed study

(c) A comprehensive or basin-wide study

(d) A GRR

(e) A resumption

(5) Watershed and Comprehensive or Basin-wide New Starts. The MSCs will submit a regional portfolio identifying their top 3 Watershed or Basin-wide New Start studies for HQUSACE consideration in development of the National New Start Portfolio that support Civil Works Transformation and the Civil Works Strategic plan and also studies that would further evaluate the problems, needs and opportunities (vulnerabilities) that could be addressed by either a Corps action (project) or action by others. Proposals will be submitted in CWIFD and Justifications Sheets for the New Starts I-2.1 are due concurrently. To be considered the proposal must have a minimum of the following key data points:

(a) MSC relative rank of 1-3 (Phase Status NS, Phase WF)

(b) Identify an authority for the study

(c) Identify the primary issue to be studied

(d) Enter key BL specific metrics

(e) Identify the sponsor

(f) Have a signed Letter of Intent from the sponsor

(g) Study cost estimate should be estimated following the Standard funding stream of: 36 months over 4 fiscal years; $200,000 for year 1, $600,000 for year 2, and $600,000 for year 3 and $100,000 for year 4 or a best estimate of the cost and length of the study accompanied with a justification.

(h) Include the HUC

(i) Provide the coordinates of a point that represents the approximate center of the study

(j) Include the potential range of benefits

The following cannot be included as a New Start watershed or comprehensive submission:

(a) A disposition study

(b) A feasibility study

(c) A GRR

(d) A resumption

(6) HQUSACE System Study of New Start Study Recommendations. The HQUSACE will further refine the portfolio by using a cross-functional team and tools to assist in evaluating the proposed studies in a system context. The team will use the provided data to develop a strong rationale for supporting a portfolio of New Starts of study recommendations which will be presented as a comprehensive group to address one or more of the Nation's vulnerabilities and provides Value to the Nation:

(a) Support the economy

(b) Develop, restore and protect the environment

(c) Improve quality of life

C-10. Submission Requirements.

a. CW-IFD – All Specifically authorized Investigation work packages will be prioritized 1-N across business-lines by District and by MSC. For additional guidance please see Summary of Submission Requirements which is listed in the MAIN EC and further described in the Program Development Manual.

b. Investigations New Start Meeting with MSCs and HQUSACE – (Date is to be determined) The materials required to be reviewed and posted by the RIT to the SharePoint site https://cops.usace.army.mil/sites/PLAN/pbp/default.aspx one week prior to the meeting are:

(1) Regional Support for New Starts white paper

(2) CW-IFD NS Data Completed

(3) If required per the Business Line program manual, Business Line specific Fact Sheets

c. Justification Sheets - The initial audience for all Justification Sheets (J-sheets) are OASA(CW) and OMB so it is very important that they are written from the Federal perspective. The issues and benefits need to clearly demonstrate the reason for Federal involvement and express the urgency for starting the study now. Furthermore, the authorities must be verified as valid and complete study authorizations before they are submitted to HQUSACE. J-sheets are required to be reviewed and posted by the RIT at https://cops.usace.army.mil/sites/PLAN/pbp/default.aspx at the time of the MSC budget submission or per the Summary of Submission Requirements which is listed in the MAIN EC.

d. Letters of Intent dated within 5 months of the MSC budget submission date stating the Sponsor's intent to partner a study in FY20 are required to be reviewed and posted by the RIT at https://cops.usace.army.mil/sites/PLAN/pbp/default.aspx at the time of the MSC budget submission or per the Summary of Submission Requirements which is listed in the MAIN EC.

e. CN studies will provide the support documentation, vertically aligned memos or exemption approval memos, reviewed and posted by the RIT at https://cops.usace.army.mil/sites/PLAN/pbp/default.aspx at the time of the MSC budget submission or per the Summary of Submission Requirements which is listed in the MAIN EC.

* Note - For those studies that have not held the initial vertical team meeting, support documentation must be submitted as soon as the meeting is held.

f. To ensure efficient funding, all studies will include only one work package in the budget submission. This work package will be for the optimal funding required to efficiently continue the study toward completion. This amount will match the Standard Funding Stream or be supported by the vertically aligned memo or exemption approval memo.

g. PED work packages will be included for useful increments of work. A PED work package will not be included to solely sign an agreement. The following fields must be provided in CW-IFD:

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(NOTE: Development of this Justification Sheet should begin with the last version developed submitted for budgeting, if applicable. Any changes to the previously cleared version should be explained/justified using comments, but should be limited and by exception only.)

APPROPRIATION TITLE: Investigations, Fiscal Year __(BY)___

Study	Total Estimated Federal Cost	Allocations Prior to FY (BY-1)	Allocation in FY (BY-1)	Budgeted Amount for FY (BY)	Additional to Complete After FY (BY)
	$	$	$	$	$
	1,500,000	0	0	200,000	1,300,000

Study Name - Type (Types are: 'Aquatic Ecosystem Restoration'; 'Flood Risk Management'; 'Navigation'; All one line with a return space below the dollars.

(SPELL OUT) District

The study area includes… (Furnish a brief description of the study area, water resource development problems, and principle purposes of the study. For example, for flood risk management studies any information available on recent flood history (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. For ecosystem restoration studies, include information that addresses the performance components in Aquatic Ecosystem Restoration Section of the Program Development Manual (do not enter the scores) and information about the physical area involved.)

The primary issue this study will investigate is… (Include a concise 1-2 sentence write up clearly identifying what problem this study will investigate). The importance of this investigation is… (Include a concise 1-2 sentence selling the importance of this investigation or the "So What" and conveys the urgency as to why it should be studied now).

The general scope of the study includes… (Describe briefly the general scope, intended outcome i.e. Chief's Report and key areas of concern that are to be addressed in the study, probable solutions if this type of information is available, and the work to be performed in the program year. This paragraph should present specific arguments and evidence that it is important to initiate the study in the program year and similar evidence that makes it clear that the study and its anticipated outputs are in accord with Administration policy). The Letter of Intent supporting this study was signed on [INSERT DATE] by [INSERT NAME OF NON-FEDERAL SPONSOR], the non-Federal sponsor. The Feasibility Cost Sharing agreement is scheduled to be signed on [INSERT DATE].

Figure C.1 New Start Study

The following coordination has occurred… (For all purposes, provide any pertinent information concerning coordination with Federal and state resource agencies. Identify relationship to other project purposes if appropriate.) Also cite any matters known to be of concern to the Congress.

NOTE- IEPR Costs are not included in the New Start J-Sheet, those amounts will be better determined after the study has started and will be estimated and included in the Continuing J-Sheet starting in year 2.

Cite study authority. Ensure all study authorities have been cleared by Office of Counsel.

Division: Spell Out District: Spell Out [Study Name:]

Figure C.1 (Continued)

(NOTE: Development of this Justification Sheet should begin with the last version sent to Congress, if applicable. Any changes to the previously cleared version should be explained/justified using comments, but should be limited and by exception only.)

APPROPRIATION TITLE: Investigations, Fiscal Year __(BY)__

Study	Total Estimated Federal Cost	Allocations Prior to FY (BY-3)	Allocation in FY(BY-3)	Allocation in FY(BY-2)	Allocation in FY(BY-1)	Budgeted Amount in FY(BY)	Additional to Complete After FY (BY)
	$ XXX,XXX	$ XX,XXX	$ XX,XXX	$ XX,XXX	$ XX,XXX 2/	$ XX,XXX 1/	$ XX,XXX

Study Name - Type (Types are: 'Aquatic Ecosystem Restoration'; 'Flood Risk Management'; 'Navigation'; Water Supply- All one line with a return space below the dollars.

(SPELL OUT) District

The study area… (Furnish a brief description of the study area).

The purpose of the study is to (Include a concise 1-2 sentence write up clearly identifying water resource development problems the study intends to address and principle purposes of the study. For example, for flood risk management studies any information available on recent flood history (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. For ecosystem restoration studies address the approximate area to be restored to the extent this is known. For all purposes, address the performance criteria for the purpose as described in Sections 7, 9, 11, or 12 of the Program Development Manual . For ecosystem restoration studies do not enter the performance component scores, instead provide data reflecting the basis for the scores. Do not include irrelevant data such as "mild summers or harsh winters"; do include all the data that would tell why this study should be selected out of the many recommended. Also cite any matters known to be of concern to the Congress.) The Letter of Intent supporting this study was signed on [INSERT DATE] by [INSERT NAME OF NON-FEDERAL SPONSOR], the non-Federal sponsor. The Feasibility Cost Sharing agreement was signed on [INSERT DATE].

Fiscal Year _(BY-1)_ funds are being used to (specify what is being done in BY-1). Funds for the Program year (BY) plus any carry-in funds will be used to (initiate, continue, complete, resume) the feasibility phase of the study, including (Describe the work to be performed in the Program year). The preliminary estimated cost of the feasibility phase is $XXX,XXX which is to be shared 50 percent Federal and 50 percent non-Federal. (Where Independent External Review is conducted, the $ amount for the IEPR should be stated and the description should note that it is an exception to the 50-50 cost share as follows: [, except for the Independent External Peer Review, which, if required, would be funded at 100 percent Federal expense].) (Note-Incorporate the best estimate for IEPR starting the second year of budgeting)

Figure C.2 Cost-shared Feasibility Study

Total Estimated Study Cost	$X,XXX,XXX
Initial Study Phase (Federal)	XXX,XXX
Feasibility (or Watershed Study) Phase (Federal)	X,XXX,XXX
Feasibility (or Watershed Study) Phase (Non-Federal)	X,XXX,XXX

Cite study authority. Ensure all study authorities have been cleared by Office of Counsel.

The study is scheduled for completion in (If it is funded to completion put the Year of anticipated Chief's Report or Final Watershed Plan. Do not include if the study is not funded to completion).

1/ Estimated Unobligated Carry-in Funding: The actual unobligated carry-in from FY BY-2 to FY BY-1 was $xx,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY BY from prior appropriations for use on this effort is $x,000.
(NOTE: Unobligated Carry-in amounts should reflect actual unobligated carry-in within USACE; MIPRd funds do not constitute an obligation of funds.)

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY _(BY-1)_.
(NOTE: Remove this footnote and the footnote number in the table if not applicable.)

(NOTE: Where the BY-1 capability is lower than the BY-1 Pres. Bud., state that amount in the table column entitled "Allocation for FY (BY-1)" and include the words "revised FY BY- 1 capability" in lieu of "President's budget amount for FY _(BY-1)_" in footnote 2/.

REQUIRED FOOTNOTES:

(NOTE: if the $ below is less than $500, do not include).

(NOTE: If funds were rescinded/transferred in numerous years, duplicate the statement for each differing amount/year)

$_____rescinded from the study in ___(FY)___. (Example : $XXX rescinded from the study in FY 20XX)
$_____rescinded from the study in ___(FY)___. (Example : $XXX rescinded from the study in FY 20YY)
$_____ transferred to the Flood Control and Coastal Emergencies (FCCE) account in __FY)___. (Similar to example above)

Division: Spell Out District: Spell Out [Study Name:]

Figure C.2 (continued)

(NOTE: Development of this Justification Sheet should begin with the last version sent to Congress, if applicable. Any changes to the previously cleared version should be explained/justified using comments, but should be limited and by exception only.)

APPROPRIATION TITLE: Investigations, Fiscal Year __(BY)__

Study	Total Estimated Federal Cost	Allocations Prior to FY_(BY-3)	Allocation in FY(BY-3)	Allocation in FY(BY-2)	Allocation in FY(BY-1)	Budgeted Amount in FY(BY)	Additional to Complete After FY (BY)
	$	$	$	$	$	$	$
	XXX,XXX	XX,XXX	XX,XXX	XX,XXX	XX,XXX 2/	XX,XXX 1/	XX,XXX

Study Name - Type (Types are: 'Aquatic Ecosystem Restoration'; 'Flood Risk Management'; 'Navigation';Water Supply. All one line with a return space below the dollars.

(SPELL OUT) District

The study area… (Furnish a brief description of the study area).

The purpose of the study is to (Include a concise 1-2 sentence write up clearly identifying water resource development problems the study intends to address and principle purposes of the study. For example, for flood risk management studies any information available on recent flood history (dates, physical and dollar losses, etc), or for navigation studies include information on use (commercial vs. recreation) cargo types and quantities if known. For ecosystem restoration studies address the approximate area to be restored to the extent this is known. For all purposes, address the performance criteria for the purpose as described in Sections 7, 9, 11, or 12 of the Program Development Manual. For ecosystem restoration studies do not enter the performance component scores, instead provide data reflecting the basis for the scores. Do not include irrelevant data such as "mild summers or harsh winters"; do include all the data that would tell why this study should be selected out of the many recommended. Also cite any matters known to be of concern to the Congress.)

Fiscal Year _(BY-1)_ funds are being used to (specify what is being done in BY-1). Funds for the Program year (BY) plus any carry-in funds will be used to (initiate, continue, complete, resume) the feasibility phase of the study, including (Describe the work to be performed in the Program year). The preliminary estimated cost of the feasibility phase is $XXX,XXX which is to being funded at 100 percent Federal expense. (Note-Incorporate the best estimate for IEPR starting the second year of budgeting)

Figure C.3 - Full Federal Expense Study

Cite study authority. Ensure all study authorities have been cleared by Office of Counsel.

1/ Estimated Unobligated Carry-in Funding: The actual unobligated carry-in from FY BY-2 to FY BY-1 was $xx,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY BY from prior appropriations for use on this effort is $x,000.

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY _(BY-1)_.

(NOTE: Unobligated Carry-in amounts should reflect actual unobligated carry-in within USACE; MIPRd funds do not constitute an obligation of funds.)

(NOTE: Remove this footnote and the footnote in the table above if not applicable.)

(NOTE: Where the BY-1 capability is lower than the BY-1 Pres. Bud., state that amount in the table column entitled "Allocation for FY (BY-1)" and include the words "revised FY BY- 1 capability" in lieu of "President's budget amount for FY _(BY-1)_" in footnote 2/.

REQUIRED FOOTNOTES:

(NOTE: if the $ below is less than $500, do not include the footnote).
(NOTE: If funds were rescinded/transferred in numerous years, duplicate the statement for each differing amount/year)

$_____rescinded from the study in ___(FY)___. (Example : $XXX rescinded from the study in FY 20XX)
$_____rescinded from the study in ___(FY)___. (Example : $XXX rescinded from the study in FY 20YY)
$_____ transferred to the Flood Control and Coastal Emergencies (FCCE) account in __FY)___. (Similar to example above)

Division: Spell Out District: Spell Out [Study Name:]

Figure C.3 (continued)

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NOTE: Development of this Justification Sheet should begin with the last version sent to Congress, if applicable. Any changes to the previously cleared version should be explained/justified using comments, but should be limited and by exception only.)

APPROPRIATION TITLE: Investigations, Fiscal Year ____(BY)____

PRECONSTRUCTION ENGINEERING AND DESIGN – New, Continuing, Completion, or Resumption

Total Estimated Federal Cost	Allocations Prior to FY (BY-3)	Allocation in FY(BY-3)	Allocation in FY(BY-2)	Allocation in FY(BY-1)	Budgeted Amount in FY(BY)	Additional to Complete After FY (BY)
$ XXX,XXX	$ XX,XXX	$ XX,XXX	$ XX,XXX	$ XX,XXX 2/	$ XX,XXX 1/	$ XX,XXX

Study Name– (Type) (Types are: 'Aquatic Ecosystem Restoration'; 'Flood Risk Management'; 'Navigation" - All one line with a return space below the dollars.

(SPELL OUT) District

The (Insert Project Name) project area is located (insert description of project area).

Insert Project Description. This is an example of the type of project description data to provide. For an ecosystem restoration project include area to be restored in acres, types of habitat, expected outputs and the data supporting the scores assigned for the performance components. Do not include the scores. XWV River drains an area of about 2,114 square miles in southwest State and empties into Something Harbor. The XYZ flood plain encompasses about 1,560 acres of mostly urban development on the left bank of the XWV River. The maximum flood of record, in December 1933, would have caused an estimated $13.4 million damages to XYZ River under October (BY-1) prices and conditions of development. The project will address (this problem).

A feasibility study was completed in (month and year). The recommended project, estimated to cost $ xxx (x1000) with an estimated Federal cost of $ xxx (x1000) and an estimated non-Federal cost of $ xxx (x1000), includes construction of a levee system to provide flood protection to 1,318 acres in XYZ. Pumping stations and gravity outlets with tide gates would be included to accommodate interior drainage. The average annual benefits amount to $2.7 million, all for flood control. The benefit-cost ratio is 1.2 to 1 at a discount rate of 7 percent based upon the latest economic analysis dated (Month Year). Identify project sponsor and set forth latest evidence of support. Give date of the signed Design Agreement (Sponsors must assure that they understand and are ready to sign a design agreement and have funds available to finance the PED portion of the design of a project.) PED will be cost shared and financed at the rate for the project to be constructed.. Any additional adjustments that may be necessary to bring the non-Federal contribution per the project cost sharing will be accomplished in the first year of construction. State the project cost-sharing percentages…. (i.e.The project cost sharing is 65% Federal and 35% non-Federal.)

Total Estimated Preconstruction Engineering and Design Costs $X,XXX,XXX

Figure C.4 - Preconstruction Engineering and Design

Federal Share	X,XXX,XXX
Non-Federal Share	XXX,XXX

The project is authorized for construction by (Cite the construction authorization and cost sharing requirements. If the project is not yet authorized for construction, say that instead). Fiscal Year (BY-1) funds are being used to (insert description of work). Fiscal Year (BY) funds and any carry-in funds will be used to (insert description of work; if the PED is funded to completion include note identifying when PED is scheduled to complete (Month and Year)).

Study authority: (Cite study authority; ensure all citations are cleared by Counsel)

1/ Estimated Unobligated Carry-in Funding: The actual unobligated carry-in from FY BY-2 to FY BY-1 was $xx,000. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY BY from prior appropriations for use on this effort is $x,000.

2/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is the President's budget amount for FY _(BY-1)_.
(NOTE: Remove this footnote and the footnote in the table above if not applicable.)

(NOTE: Where the BY-1 capability is lower than the BY-1 Pres. Bud., state that amount in the table column entitled "Allocation for FY (BY-1)" and include the words "revised FY BY- 1 capability" in lieu of "President's budget amount for FY _(BY-1)_" in footnote 2/.

(NOTE: Unobligated Carry-in amounts should reflect actual unobligated carry-in within USACE; MIPRd funds do not constitute an obligation of funds.)

REQUIRED FOOTNOTES:

(NOTE: if the $ below is less than $500, do not include the footnote).
(NOTE: If funds were rescinded/transferred in numerous years, duplicate the statement for each differing amount/year)

$_____rescinded from the study in ___(FY)___. (Example : $XXX rescinded from the study in FY 20XX)
$_____rescinded from the study in ___(FY)___. (Example : $XXX rescinded from the study in FY 20YY)
$_____transferred to the Flood Control and Coastal Emergencies (FCCE) account in __FY)___. (Similar to example above)

Division: Spell Out District: Spell Out {Study Name }

Figure C.4 (continued)

APPENDIX D

Construction and MR&T Construction

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TABLES

SUB-APPENDIX D-1

Construction and MR&T Construction

General

D-1-1. Applicability. This appendix provides guidance for preparation of the FY2020 Budget and FY2019 Workplan for all new and continuing projects and programs funded by line item under the Construction (C) appropriation, including the IWTF and HMTF, as applicable, and the Construction portion of the MR&T appropriation. Unless stated otherwise, any reference to the C appropriation also applies to IWTF, HMTF and MR&T. This appendix does not address Continuing Authorities Program (CAP) or RI programs.

D-1-2. Objective. The overall goal is to develop a construction program BY through BY+3 consisting of projects that are cost effective, performance based and completed as quickly as practicable within program constraints and consistent with current national priorities.

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SUB-APPENDIX D-2

Construction and MR&T Construction

Construction (Except for Dam Safety Assurance,
Seepage Control, and Static Instability Correction Projects)

D-2-1. Applicability. This Sub-Appendix applies to projects and programs funded by line item for construction. For Dam Safety Assurance, Seepage Control, and Static Instability Correction projects see Appendix D-3 except that the guidelines in D-2-2 below apply to all construction projects.

D-2-2. Army Budget Guidelines for Funding Construction Projects. To qualify, a project must be authorized for construction; have an approved Chief's Report, Major Rehabilitation Report, Dam Safety Modification Report, or Deficiency Correction Report that has been submitted to OMB for a determination of budgetability; and, where applicable, successfully completed review from OMB under Executive Order 12322. Other decision documents could be acceptable on a case-by-case basis. Absent specific PY guidance from Army, all construction projects should meet at least one of the Construction Performance Guidelines published in the most recent Budget press book.

a. Project Purpose – Ongoing construction projects, including those funded in the MR&T account, are assigned based on their primary purpose to one of the three main mission areas of the Corps (flood and storm damage reduction, commercial navigation, and aquatic ecosystem restoration) or to a lessor degree hydropower, for consistency with general Construction Performance Guidelines.

b. DSAC Projects – Dam safety assurance, seepage control, and static instability correction projects that address a Dam Safety Action Classification 1 or 2 concern will receive the maximum level of funding that the Corps can efficiently and effectively spend each year, taking into account both budgeted funds and carryover balances.

c. Projects Funded on the Basis of Their Economic Return – Ongoing construction projects that are funded based on their economic return and have a BCR of 2.5 to 1 or higher, calculated at a 7% discount rate, are eligible for funding. Projects with a BCR below this threshold will not be funded unless they are eligible for funding under other criteria of these guidelines. All continuing Construction activities proposed for funding in FY 2020 should have a current BCR calculated at the 7% discount rate within the past five years.

d. New Starts and New Investment Decisions. A new start or new investment decision on a priority project or separable element, will be eligible for funding if the project meets at least one of the most recently approved Construction Performance Guidelines and a programmatic affordability analysis shows that the new work can be accomplished without adversely impacting other ongoing work within the program. See the definitions of new start and investment decision as described in the Main EC Section, paragraph 12.b.

e. Qualifying continuing projects with Continuing Contracts under the alternative Continuing Contract clause. For all planned contract awards with a face value of more than $20 million, identify the acquisition plan. If the plan is to award a new continuing contract in the BY notify CECW-IF to OASA CW not later than July BY-2 with only basic information being submitted at this time. Supporting documentation with additional detail will be required if/when the funding is included in the Budget and there are some assurances of Congress appropriating those funds. Note however, HQUSACE will consider including new continuing contracts with a value greater than $10 million with compelling

justification. Coordination and approval must occur according to the latest Execution EC. No continuing contracts are to be scheduled for award in the last quarter of FY 2020.

f. Major Rehabilitation Projects – The definition of rehabilitation project in Section 205 of P.L. 102-2580 (WRDA 1992), as amended by Section 2006 of P.L. 113-121 (WRRDA 2014), is applied by policy to all business programs. For FY 2019 the rehab cost threshold is $21,499,435 for reliability improvement, $2,082,645 for rehab efficiency improvement and $6,247,936 for major maintenance Work below the cost thresholds is funded in the O&M or MR&T O&M account.

g. Project Completions – Ongoing projects that can complete all remaining construction work during the budget year will be funded at the level needed to complete that work if the project has a BCR of 1.0 to 1 or above, at a 7% discount rate. See also paragraph D-2-10 in this APPENDIX

h. PACRs – Post Authorization Change Reports (PACRs) must meet the following conditions for the project to be eligible for the BY budget:

(1) The PACR must be submitted to CECW-PC (Office of Water Projects Review) NLT 1 March of BY-2 for HQ approval of the language;

(2) PACR must be approved by the OASA(CW) and OMB; unless it qualifies to be delegated to the MSC Commander, reference ER 1165-2-502, 6.

(3) Approved PACR language must be submitted to CECW-ID NLT 1 September of BY-2 for inclusion in the BY appropriations bill and to obtain approval to budget for continuation of the project in the BY.

i. Monitoring Activities for Beach Nourishment projects - caution should be used when budgeting for monitoring of beach nourishment projects. Monitoring for beach nourishment projects must be budgeted in the CG account. Monitoring for channel improvements must be budgeted in the O&M account.

j. Sand Mitigation -

j. Mitigation Concurrent with Construction – As described in EC 11-2-214, Section 10.c, per WRDA 1986 Sec 906(b), USACE must budget for (and implement) environmental mitigation concurrent with or prior to construction of the project. All construction projects seeking funding in the FY19 budget must have:

(1) An updated response in the “MITIGATION REQUIREMENT CODE” field in CWIFD (at program code level)

(2) An updated entry in the Civil Works Mitigation Database as of the time of submission of the MSC budget recommendation to HQUSACE. Mitigation database is located at link: http://mitigationdb.usace.army.mil Note, updated guidance on database entry is forthcoming through Planning and Policy Division.

(3) Mitgation work packages identified separately from the construction package, identified using the Phase Activity Code “MT” and using the incremental definitions contained in section D-2-3.

(4) Insert references to Mitigation-related work in the J-sheet per Figure D-4-2.

D-2-3. Construction and MR&T Construction Increment Definitions.

a. Increment Definitions except for Endangered Species Protection.

(1) Increment 1. Will be used to identify work packages for projects that were included in the BY-1 Budget and are continuing or in the last year. Increment 1 is limited to minimum earnings, EDC, and

S&A for continuing contracts, modifications, EDC and S&A for contracts fully funded in BY-1 or before, mandatory real estate activities required for project LERs, or minimum compliance with the Endangered Species Act.

(2) Increment 2. This increment will include continuing incrementally funded contract requirements for ongoing projects, associated EDC and S&A, new contracts, and associated EDC and S&A (show each significant activity separately). Real estate activities for required project lands, easements and right-of-ways may be included. Increment 2 must be performance based and integral with a study/project with high outputs and consistent with ranking.

(3) Increment 3. Will be used to identify additional work packages for projects that were included in the BY-1 Budget and are continuing or in the last year. Increment 3 will be used for all such work packages that were not included in Increment 1.

(4) Increment 4. Will be used to identify work packages for Construction new investment decisions that meet the requirements defined above.

(5) Increments 5-7. Are not used in the Construction account.

(6) Increment 8. Will be used for work packages that are consistent with Administration policy but are unbudgetable due to the decision document not yet being cleared by the Administration or other milestone-type requirements in the EC not being met.

(7) Increment 9. Will be used for work packages that are inconsistent with Administration policy, such as environmental infrastructure.

b. Increment Definitions for Endangered Species Protection. The budget justification column must include language specific to each package that identifies the name of Biological Opinion (BiOp) and/or court order (including date and reasonable and prudent measure) and brief description of the progress the item makes towards full implementation of the biological opinion requirements. Additional supporting information will be provided by the MSCs in a concurrent data. Note that all packages that fund work required by a biological opinion should use Phase Activity Code “BO” (see paragraph 6.e. in the MAIN part of this EC). Packages that describe work in a recovery plan (not biological opinion) should not use this phase activity code. The increment definitions are as follows:

(1) Increment 1. Must meet the requirements of construction increment 1 of having a continuing contract.

(2) Increment 2. Activities in a reasonable and prudent measure or alternative required to maintain the minimum progress toward legal compliance with the biological opinion(s) in the current budget year. The reference “reasonable and prudent measure” refers to the actions the Fish and Wildlife Service / NOAA National Marine Fisheries Services Director believes necessary or appropriate to minimize the impacts, i.e. amount or extent, of incidental take. [50 CFR §402.2]

(3) Increment 3. Activities required to maintain progress toward legal compliance with the biological opinion(s) according to the schedule described in the biological opinion.

(4) Increment 4. Activities that accelerate the completion of the efforts required to comply with the BiOp beyond the minimum to advance progress towards implementing a biological opinion (including conservation measures contained in a biological opinion); and/or budget packages that enhance Endangered Species Act (ESA) protection as described in an ESA recovery plan. The term "conservation measures" refers to the Fish and Wildlife Service's and NOAA National Marine Fisheries Services non-binding suggestions resulting from formal or informal consultation that: (1) identify discretionary measures a Federal agency can take to minimize or avoid the adverse effects of a proposed action on listed or proposed species, or designated or proposed critical habitat; (2) identify studies, monitoring, or research to develop new information on listed or proposed species, or designated or proposed critical habitat; and (3) include suggestions on how an action agency can assist species conservation as part of their action and in furtherance of their authorities under section 7(a)(1) of the Act. [50 CFR §402.2].

D-2-4. Specifically Authorized Projects and Elements. A Specifically Authorized Project or Program is a project or program with a unique authorization for implementation under the Civil Works program, including any amendment to that authorization.

a. Project Development Cycle. Each specifically authorized project is developed through the normal project development process, including cost-shared feasibility, and PED. Requirements applicable to the normal project development process, including requirements related to design agreements and post-feasibility modifications, are described under Investigations ANNEX and apply even if Construction or MR&T Construction funds are received before feasibility-level and PED work are completed.

b. A Specifically Authorized Project or Program includes work that is to modify a completed Civil Works project and that cannot be implemented without additional authorization, such as a reconstruction or replacement project, or a beneficial use, navigation mitigation, or environmental modification project beyond the scope of the applicable Continuing Authorities Program.

c. A Specifically Authorized Project or Program includes an entire specifically authorized environmental infrastructure assistance program, or an entire specifically authorized environmental infrastructure assistance project (that is, an environmental infrastructure assistance project for which the authorization is limited to that project, such as a "Section 219" project).

d. A Specifically Authorized Project or Program does not include a separable element of such project, nor does it include a component of a specifically authorized environmental infrastructure program or project.

e. A Specifically Authorized Project or Program does not include a maintenance dredged material disposal facility, dam safety assurance project, static instability correction project, seepage control project, major rehabilitation project, or deficiency correction project. Such a project can be carried out within the authority of the original, constructed project and is a part of the original project. However, except for deficiency correction, it has a CCS different from that of the original construction.

f. Separable Element. A separable element is a portion of a specifically authorized project which is physically separable from other portions of the project, and which achieves hydrologic effects or produces physical or economic benefits which are separately identifiable from those produced by other portions of the project.

(1) If an investment increment is part of an authorized project, but is physically separable from other features of the authorized project and is not covered under the already-executed PPA or PPAs for the other features, that increment will be treated as a separable element.

(2) Reimbursable work that is beyond the scope of the work covered under the existing reimbursement PPA will be treated as a new separable element.

(3) If the project already has a cost sharing agreement, recreation facilities requiring a new cost sharing agreement will be treated as a new separable element.

D-2-5. Modifications to Completed Projects under Existing Authority.

a. Modifications under the Continuing Authorities Program. Certain project modifications within project limits may be implemented through the Continuing Authorities Program. These include beneficial uses of dredged material, navigation mitigation, and environmental modifications. Modifications under the CAP authority are included as Remaining Items within the Construction account in the CW Program Development.

b. Rehabilitation, Deficiency Correction, Biological Opinion, and Maintenance Dredged Material Disposal Facility (DMDF) Projects are included under existing authority.

(1) Rehabilitation, deficiency correction, biological opinion, and maintenance DMDF projects may be carried out under the authority of the existing, authorized projects.

(2) Project Report Funding. The Evaluation Report or, in the case of a maintenance DMDF - the Dredged Material Management Plan (DMMP) - will be funded from O&M or MR&T (M) funds. In the case of a non-Federally operated and maintained project, Inspection of Completed Works funding may be used. Once the Evaluation Report (or DMMP) has been approved by HQUSACE or a MSC (if authority is delegated), planning, engineering, and design for construction will be funded from O&M or MR&T M funds until a Construction new start (see paragraph D-2-7) is included in the budget OR construction is specifically funded through appropriations. Note that maintenance DMDFs are not subject to new start requirements; see paragraph D-2-7.

(3) (Major) Rehabilitation Projects. Projects that involve replacing or recapitalizing the principal facility components that enable production of project outputs, e.g. turbines, generators, locks, or gates are considered (major) rehabilitation projects. See paragraph D-2-2.f above.

(4) Deficiency Correction Projects. Design and construction deficiency projects remedy design and construction deficiencies under the following two circumstances: (1) at a non-Federally operated project constructed with Civil Works funds; and (2) at a Federally-operated project, where the cost of the remedy is $5 million or more. Less costly remedies at Federally-operated projects are funded as part of project O&M. Deficiency correction projects are to remedy structural or performance deficiencies, not conditions caused by deferred non-Federal OMRR&R or changed hydrologic and hydraulic conditions. See ER 1165-2-119 Modifications to Completed Projects.

(5) Biological Opinion Projects. These are efforts to avoid jeopardy of ESA listed species at existing projects or systems.

(6) Maintenance DMDFs.

(a) A maintenance DMDF is a DMDF constructed to contain material from maintenance dredging of a completed project. A maintenance DMDF is cost shared as a General Navigation Feature, and is budgeted as a line item in the Construction or MR&T (C) account. A maintenance DMDF is budgeted using the same Program Code as that of the O&M for the completed project. In contrast, a DMDF constructed to contain material from construction dredging at a new harbor project is budgeted as part of the new harbor project.

(b) A dike raise or capacity expansion to contain maintenance material will be treated as a maintenance DMDF and budgeted in the Construction account as discussed above. By contrast, annual operations to manage existing facilities are funded in the O&M account.

(c) Use-fees paid to use non-Federal disposal facilities per section 217 of WRDA 1996, as amended, will be cost shared as DMDFs. The portion of the use-fees allocable to new capacity to contain material from maintenance dredging will be budgeted in the Construction or MR&T (C) account as a maintenance DMDF. The portion of the use-fees allocable to new capacity to contain material from construction of a new harbor project will be budgeted as part of the new harbor construction, and the portion of the use-fees allocable to O&M of the DMDF facility will be budgeted in the O&M account. See Policy Guidance Letter (PGL) No.47 Cost Sharing for Dredged Material Disposal Facilities and Dredged Material Disposal Facility Partnerships.

D-2-6. Modifications to Completed Projects under New Authority.

a. Reconstruction Projects. A reconstruction project will be treated as a new, specifically authorized project under paragraph D-2-4. Guidance on reconstruction of Corps structural Flood Damage Reduction projects for which non-Federal interests are responsible for OMRR&R is contained in memorandum from the Director of Civil Works dated August 16, 2005 (https://planning.erdc.dren.mil/toolbox/library/MemosandLetters/reconstruction.pdf). This document provides a definition of reconstruction and distinguishes reconstruction from design or construction deficiencies. Congressional authorization is required to undertake reconstruction.

b. Project Modifications beyond Continuing Authorities Program Limits.

(1) Beneficial Use of Dredged Material. A beneficial use project may be implemented under the Continuing Authorities Program (section 204, as amended) if the project is of small scale within a total cost limit of $10 million. A project modification for beneficial use that is of a large scale and that is not implemented as part of a navigation construction project following the navigation project authorization or Section 207 of WRDA 1996 must be specifically authorized and will be treated as a separate project. See paragraph D-2-2.

(2) Navigation Mitigation. A navigation mitigation project may be implemented under the Continuing Authorities Program (section 111, as amended) if the Federal cost for the project is within the authorized cost limit of $10 million. Navigation mitigation that exceeds this limit and that is not implemented as part of a navigation construction project following the navigation project authorization must be specifically authorized and will be treated as a separate project. See paragraph D-2-2.

(3) Environmental Modifications. Environmental modifications to a project may be implemented under the Continuing Authorities Program (section 1135, as amended) if the Federal cost for the project is within the authorized cost limit of $10 million. An environmental modification that exceeds this limit and that is not implemented as part of a construction project following the construction project authorization must be specifically authorized and will be treated as a separate project. See D-2-2.

D-2-7. Budgeting for New Construction. New construction includes new starts and new investments decisions, as defined in paragraph 12 of the Main EC. Eligibility criteria are:

a. General. Potential new construction should meet the eligibility criteria shown in TABLE D-2-1 Candidates ranking high using the performance measures under the specific business lines may be recommended.

b. Decision Document. Each recommended new start or resumption requires a decision document to serve as the basis for selection and which is to be approved by OMB or submitted to OMB for a review of budgetability. Any proposed exceptions should be pre-coordinated with Army and OMB in BY-2. The requirement for a decision document can be satisfied by one of the following: 1) an approved feasibility report with engineering annex; 2) an approved General Reevaluation Report (GRR); 3) in some cases, an approved Post-Authorization Change Report (PACR); or 4) for certain rehabilitation or design or construction deficiency correction projects, an approved evaluation report. NOTE 1: An Engineering Documentation Report (EDR) or Limited Reevaluation Report (LRR) is for updating and documenting changes to the project within the scope of a decision document and is not itself a decision document. NOTE 2: Approval dates for decision documents must be prior to the budget submission date (see TABLE 2 in this EC) except when a waiver is obtained from CECW-ID.

c. Economic Analysis. A current economic analysis for each specifically authorized project, separable element, reconstruction project, rehabilitation project, or navigation mitigation project, or resumption thereof, that produces economic outputs and is proposed as new construction must be according to paragraph 16 in the MAIN part of this EC. This analysis will be included in an approved decision document or in a supplemental report such as an EDR, LRR, PACR, or other special study report which must be approved at the appropriate level. A Design Documentation Report (DDR) is a technical document approved by a District and should not include information such as formulation of alternatives or economic analyses. After construction funds have been appropriated for such work, no further update of the economic analysis will be required during the approval process for the non-Federal sponsor's financing plan and execution of the Project Partnership Agreement (PPA) provided the PPA is approved in the BY and no significant changes which may affect economic justification have been made from the latest approved document. The same current economic analysis requirements for PPA projects apply to non-PPA projects.

D-2-8. Budgeting for Continuing Construction Projects. A Continuing construction project is a project that has been funded already as a New Start or, for which the project or program of which it is a component, has been funded already as a New Start. A continuing construction project includes a separable element that is a component of a previously funded construction project and that is funded for the first time in its own right but only if there was an expressed intent in funding the original project that the component was also part of that funding decision (see paragraph 12b of the Main EC for further info). A current economic analysis for each continuing construction project that produces economic outputs must be approved according to referenced Main EC paragraph.

D-2-9. Cost Sharing. Preconstruction engineering and design costs are included in total project costs and cost shared, regardless of the account from which the preconstruction engineering and design costs were funded. Where a Project Partnership Agreement (PPA) is required, once the agreement is signed, Federal and non-Federal funds must be obligated and Federal funds will be programmed, such that cumulative obligations of Federal funds and cumulative obligations of non-Federal funds are in the proper proportion.

a. New Start Channels and Harbor Projects and Separable Elements. Cost sharing and financing provisions must be according to Section 101 of WRDA 1986, as amended.

b. New Start Projects and Separable Elements for Flood Control or Other Specified Purposes. Cost sharing and financing provisions must be according to Section 103 of WRDA 1986, as amended. For costs assigned to flood risk management, the minimum non-Federal share is 25 percent for projects authorized on or prior to 12 October 1996 (the date of WRDA 1996), the minimum non-Federal share is 35 percent for other projects, the maximum non-Federal share is 50 percent, and at least 5 percent of the costs must be in cash.

c. New Start Inland Waterways Projects and Separable Elements. Section 102 of WRDA 1986 authorizes 50 percent of the costs of new construction projects to be funded from the Inland Waterways Trust Fund, subject to appropriations. In addition, new projects authorized since 1986, with limited statutory exceptions have been specifically authorized to be funded at 50 percent from the Inland Waterways Trust Fund. Accordingly, specifically authorized inland waterway projects will be programmed so that cumulative obligations from the General Fund and cumulative obligations from the Inland Waterways Trust Fund are equal.

d. New Start Rehabilitation Projects. Rehabilitation projects will be cost shared in the same proportions as O&M costs. The exception is rehabilitations at inland waterway projects, which are authorized by WRDA 1986 to be cost-shared 50 percent from the Inland Waterways Trust Fund, subject to appropriations, and will be programmed so that cumulative obligations from the General Fund and cumulative obligations from the Inland Waterways Trust Fund are equal.

e. New Start Deficiency Correction Projects.

(1) At non-Federally operated and maintained projects, cost sharing and financing will be the same as for new projects, unless an exception is granted by ASA(CW) during the Evaluation Report review and approval process.

(2) At Corps of Engineers operated and maintained projects, no cost sharing is required unless a non-Federal sponsor has contributed toward the initial construction of the project. Payment may be required of public entities which have signed agreements with the Government, e.g. water supply storage.

f. New Start Biological Opinion Projects. Cost shares for biological opinion projects are determined on a case-specific basis.

g. Maintenance DMDFs. Section 201 of WRDA 1996 amended Section 101 of WRDA 1986 to designate DMDFs a general navigation feature. Accordingly, the cost of construction of a maintenance DMDF will be shared at the same rate as the cost of construction of the harbor project with which it is associated, based on project depth.

h. New Start Reconstruction Projects. New reconstruction projects are cost shared according to the project purpose(s) under WRDA 1986, as amended.

i. New Start Project Modifications beyond Continuing Authorities Program Limits.

(1) For separate beneficial use projects for ecosystem restoration or storm damage reduction, the cost share is 65% Federal / 35 % non-Federal of the incremental cost above the least cost method of dredged material placement consistent with engineering and environmental criteria.

(2) For separate navigation mitigation projects, the costs of mitigation are shared in the same proportion as the cost sharing provisions applicable to the project causing the shore damage. If the project provides storm damage reduction benefits over and above mitigation of damages from the navigation project, costs allocable to storm damage reduction are cost shared 65 % Federal / 35% non-Federal.

(3) For separate environmental modifications, the cost share is 65% Federal / 35% non-Federal.

D-2-10. Budgeting for Completion of Construction. The milestone for physical completion of construction is CW450 and the point at which the District Commander's notice of completion of the project can be issued. The costs after award of the final contract should include EDC and S&A, and in-house costs related to work on LERRD credits and the OMRR&R manual. Therefore, EDC and S&A costs and costs related to LERRD credits and the OMRR&R manual should be included in capability for the year the last contract is awarded. Additional funds, that have not been included in the capability for the year the last contract is awarded, must be provided thru reprogramming. Where monitoring is required on the project, it should be budgeted under construction, and fiscal close-out of the construction project should be done after monitoring is complete. However, if the cost to complete monitoring is less than $1,000,000 AND equal to or less than 5 years in duration, the monitoring cost may be budgeted in the last year of construction as well. Yearly carryover of funds to complete monitoring in this case is acceptable.

D-2-11. Physical Completion of the Construction Phase. Construction phase ends with the District Commander's notice of completion of the project. Construction of a water resources project, or functional element thereof, is complete when physical construction is complete. Completion of physical construction does not include completion of any approved project monitoring, adaptive management, periodic renourishment, future levee raises or any other project aspect occurring after initial physical construction is complete. Any approved project monitoring, adaptive management, periodic renourishment, or future levee raises will be undertaken as defined in the project report. As provided in the executed Project Partnership Agreement, when the District Commander determines that a project, or a functional portion thereof, is complete, the District Commander will notify the non-federal sponsor of that determination in writing so that the non-Federal interest may begin responsibilities, as applicable, for operating and maintaining the project.

D-2-12. Category-Class-Subclass and Fund Type. on work packages so that WADs and FADs that result from the work packages derive funding from the correct FAD Type (General Fund (G), IWTF, or HMTF..

a. For inland waterway construction and rehabilitation projects, each increment of work should have two work packages, one for CCS 220 and one for CCS 310. The split between CCS is 50/50 except for Olmsted Lock and Dam, IL & KY which is split 85/15.

b. For work packages for dredged material disposal facilities, including marsh creation and other beneficial uses for dredged material, and for Construction-funded mitigation of shore damages from navigation projects, use the applicable CCS from among the following: 212, 218, 231, and 791. The Section 111 and 204 programs within CAP will use CCS 232 and 792.

c. For other work packages, do not use the aforementioned CCS.

TABLE D-2-1

New Construction
Basic Eligibility Criteria

1. The project or separable element is authorized for construction. No planning, engineering, design, or construction of unauthorized functions or features is proposed for construction funding.

2. An appropriate decision document has been approved and received Executive Branch concurrence, or is scheduled to be completed by 30 June of the BY-2, to be approved by 31 August of the BY-2, and to receive final Executive Branch action or concurrence by 31 August of the BY-2. If a project modification or cost sharing change was enacted after a favorable position was developed, a favorable position also must be developed for the enacted change.

3. PED is fully funded by the end of the BY-1 and the PPA is on schedule to be executed no later than the end of the BY.

4. The Project Manager has confirmed the sponsor's understanding of its contractual and financial commitments and its willingness and ability to meet the funding requirements of the construction schedule, including its proportional cash share of sunk and current costs.

5. The project is in compliance with the applicable environmental statutes, appropriate to the current stage of implementation. An Environmental Assessment (EA) has been completed and Finding of No Significant Impact signed, or final Environmental Impact Statement (EIS) has been filed with EPA, or final EIS supplement has been filed with EPA, or the applicable action will have been completed by 31 August of the BY-2.

6. A certified Total Project Cost Summary and Micro-Computer Aided Cost Estimating System (M-CACES) cost estimate have been prepared, according to ER 5-1-11 and ER 1110-2-1302, with approval at the appropriate levels as the basis for the subsequent work and financial flow.

7. A Project Management Plan (PMP) has been prepared and approved.

8. No known or reasonably anticipated conditions or unresolved issues exist which might prevent either: (a) award of the first significant construction contract by the end of the BY; or (b) the start of real estate acquisition for the first significant construction contract so that the scheduled construction contract can be awarded no later than the end of following fiscal year (BY+1) in the absence of the sponsor possessing title to the required lands and easements. Planning, engineering and design work should be far enough along in the BY so that the orderly and continuous progression of construction is assured with the scheduled award of the first construction contract.

9. Programmed recreation facilities either are minimum facilities needed for health and safety as defined in ER 1165-2-400 Recreational Planning, Development, and Management Policies, CH1, or have a non-Federal Partner that has agreed to provide 50 percent cost sharing and financing for its share of recreation costs and to bear 100 percent of the recreation operation and maintenance costs according to the cost sharing and financing concepts in the Water Resources Development Act of 1986, as amended.

10. In the case of a specifically authorized project, separable element, reconstruction project, rehabilitation project, or navigation mitigation project, or resumption thereof that produces economic outputs and is proposed as new construction, the most recent approved report with an economic analysis must be current (meets the criteria in paragraphs D-2-5. or D-2-6. as applicable).

11. In all cases, project cost estimates exceeding the authorized cost plus inflation must be approved by the DCG-CEO. If a project is within 80% of its 902 Cost Limit the District Commander must make a risk based decision to either seek new authority through a Post Authorization Change Report (PACR) including making sure funding is available for the PACR or continue without seeking new authority after determining the projects cost at completion will not exceed the 902 cost limit. A HQ Project Cost Management Review (PCMR) team has been established by the HQ Cost Control Board (CCB) to review and evaluate MSC requests to exceed the authorized project cost plus inflation. For additional guidance see EC 5-2-1 Execution of Change Control Boards posted at link http://www.publications.usace.army.mil/Portals/76/Publications/EngineerCirculars/EC_5-2-1.pdf?ver=2016-07-29-111032-483

12. Funding for any activities where additional funding would take the project within 20 percent of the 902 limit should be included if funds will complete the project or a scheduled/funding stream to completion can be provided that demonstrates the project can complete within the 902 limit with relatively low risk and the use of those funds is compliant with ER 1105-2-100 Planning Guidance Notebook.

13. Coastal and hurricane storm damage reduction (C&HSDR) projects involving sand replacement must also be approved by the DCG-CEO according to Civil Work Policy Memorandum 15-001 which establishes the criteria for determining the maximum project cost limitations; those subject to Section 902 and those that are not.

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SUB-APPENDIX D-3

Construction and MR&T Construction

Dam Safety Assurance, Seepage Control, and Static Instability Correction Projects

D-3-1. Applicability. This program involves three types of projects: Dam Safety Assurance projects; Seepage Control projects; and Static Instability Correction projects.

D-3-2. Definitions.

a. According to Section 1203 of the Water Resources Development Act of 1986, a Dam Safety Assurance project is a "modification ... the cause of which results from new hydrologic or seismic data or changes in state-of-the-art design or construction criteria deemed necessary for safety purposes."

b. Seepage Control and Static Instability Correction projects are not types of Dam Safety Assurance projects. Rather, they are types of rehabilitation projects, and do not qualify as Dam Safety Assurance under the current Executive Branch interpretation of Section 1203 of the Water Resources Development Act of 1986.

c. The decision document for a dam safety project is a Dam Safety Modification Report (DSMR).

D-3-3. Project Development.

a. The National Dam Safety Program is a line item in the O&M account that funds, among other things, assessments of the dams in the Civil Works inventory. Each dam is classified using the Dam Safety Action Classifications (see TABLE D-3-1).

b. For those dams that meet DSAC threshold criteria, project-specific studies of the safety of the dams are funded from the Dam Safety Assurance, Seepage Control, and Static Instability Correction Program (Dam Safety Program) in the C account. Dams in all business programs are included. The first study under the program for a project is an Initial Evaluation Study (IES), which is completed by the District, reviewed by the District, MSC, and Dam Senior Oversight Group (DSOG), and approved by the HQ Dam Safety Officer. The IES defines the additional studies required for a Dam Safety Modification Report (DSMR). Upon completion of the required studies, a dam safety modification report is submitted to the Dam Safety Officers at district, MSC, and HQUSACE for approval. Upon report approval, the report is submitted to the ASA(CW) for concurrence for budgeting in construction. Planning, engineering and design continue using funds from the Dam Safety Program, provided the project continues to meet the DSAC threshold criteria. Once concurrence is obtained, the project is authorized for line-item budgeting.

c. If the ASA(CW) concurs for budgeting in construction, the project is line-item budgeted at the next opportunity. The project is budgeted as continuing construction.

d. If the ASA(CW) concurs in construction and the project is ready to initiate physical construction, the project may initiate physical construction using line-item funds, or using Dam Safety Program funds until line-item funds become available.

D-3-4. Eligibility Criteria. For FY 2020, generally only DSAC Class 1 and 2 projects are eligible for funding in the WEDGE Remaining Item or as individual line items. Prioritization of projects will be

determined by the Dam Senior Oversight Group (DSOG) via a risk informed process for the national portfolio of dams. Prioritization and queues are necessary due to resource limitations and to reduce overall portfolio risk as efficiently as possible. The associated queues contain the set of dams awaiting studies or processing to the next step, reflecting their prioritization. While the intent is that the queues are eventually cleared, there is potential that a higher priority dam (from a dam safety issue viewpoint) could come into a queue and move ahead of others already in the queue based on the individual dam's safety status and circumstance. A DSMR that has been approved by USACE DSO must be transmitted for ASA-CW concurrence prior to 1 June of BY-2 to be eligible for funding.

Interim Risk Reduction Measures (IRRMs) and IRRM Plans will be funded from the Operation and Maintenance account. See Sub Annex DI-2.

D-3-5. Cost Sharing.

a. According to Section 1203 of the WRDA 1986, 15 percent of Dam Safety Assurance project costs are assigned to project purposes according to the cost allocation in effect for the project at the time the work is initiated, and non-Federal interests share the costs of each purpose according to the cost sharing in effect at the time of initial project construction. 85 percent of costs are borne entirely by the Federal Government.

b. Under current policy, Seepage Control and Static Instability Correction projects are types of rehabilitation projects. Consequently, Section 1203 of WRDA 1986 cost sharing does not apply to them. Seepage Control and Static Instability Correction projects will be cost shared the same as other rehabilitation projects, namely, in the same proportions as O&M costs and depending on whether there are existing cost share agreements in place such as water supply. The exception is Seepage Control or Static Instability Correction at inland waterway projects, which are authorized by WRDA 1986 to be cost shared 50 percent from the Inland Waterways Trust Fund, subject to appropriations, and will be programmed as 50/50 on a cumulative basis.

TABLE D-3-1

USACE Dam Safety Action Classification (DSAC) Table

URGENCY OF ACTION (DSAC)	ACTIONS FOR DAMS IN THIS CLASS***	CHARACTERISTICS OF THIS CLASS
VERY HIGH (1)	Take immediate action to avoid failure. Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Implement interim risk reduction measures, including operational restrictions. Ensure the emergency action plan is current and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Expedite investigations to support remediation using all resources and funding necessary. Initiate intensive management and situation reports.	CRITICALLY NEAR FAILURE: Progression toward failure is confirmed to be taking place under normal operations. Dam is almost certain to fail under normal operations to within a few years without intervention. OR EXTREMELY HIGH INCREMENTAL RISK**: Combination of life or economic consequences with likelihood of failure is very high. USACE considers this level of life-risk to be unacceptable except in extraordinary circumstances.
HIGH (2)	Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Implement interim risk reduction measures, including operational restrictions as warranted. Ensure the emergency action plan is current and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Expedite confirmation of classification. Give very high priority for investigations to support the need for remediation.	FAILURE INITIATION FORESEEN: For confirmed and unconfirmed dam safety issues, failure could begin during normal operations or be initiated as the consequence of an event. The likelihood of failure from one of these occurrences, prior to remediation, is too high to assure public-safety. OR VERY HIGH INCREMENTAL RISK**: The combination of life or economic consequences with likelihood of failure is high. USACE considers this level of life-risk to be unacceptable except in extraordinary circumstances.
MODERATE (3)	Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Implement interim risk reduction measures, including operational restrictions as warranted. Ensure the emergency action plan is current and functionally tested for initiating event. Conduct heightened monitoring and evaluation. Prioritize investigations to support the need for remediation informed by consequences and other factors.	MODERATE TO HIGH INCREMENTAL RISK**: For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with likelihood of failure is moderate. USACE considers this level of life-risk to be unacceptable except in unusual circumstances.
LOW (4)	Communicate findings to sponsor, local, state, Federal, Tribal officials, and the public. Conduct elevated monitoring and evaluation. Give normal priority to investigations to validate classification, but do not plan for risk reduction measures at this time.	LOW INCREMENTAL RISK**: For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with likelihood of failure is low to very low and the dam may not meet all essential USACE guidelines. USACE considers this level of life-risk to be in the range of tolerability but the dam does not meet all essential USACE guidelines.
NORMAL (5)	Continue routine dam safety activities and normal operations, maintenance, monitoring, and evaluation.	VERY LOW INCREMENTAL RISK**: The combination of life, economic, or environmental consequences with likelihood of failure is low to very low and the dam meets all essential USACE guidelines. USACE considers this level of life-safety risk to be tolerable.

*At any time for specific events a dam, from any action class, can become an emergency requiring activation of the emergency plan.
** INCREMENTAL RISK is used to inform the decision on the DSAC assignment; NON-BREACH RISK is not reflected in this table.
***DSAC 1 and 2 dams with no life loss will be referred to the appropriate business line program and are given lower priority in the dam safety program.

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SUB-APPENDIX D-4

Construction and MR&T Construction

Supporting Documentation and Submission Requirements

D-4-1. Schedules and Capabilities.

a. Capabilities. BY thru BY+3 capabilities should be loaded into CW-IFD for each new and continuing construction project or line-item funded Dam Safety project that could initiate or continue construction in the BY thru BY+ 3 period.

b. Prepare a detailed project schedule in P2, reflecting the capability level of funding in the BY and out-years, for each new and continuing construction project, separable element, or line-item funded Safety of Dams project eligible for construction funding in the BY. The P2 data must be reflective of the same funding decisions used for determining what ultimately gets enacted by Congress for BY-2, and a realistic expectation of BY-1 funding. All active uncompleted separable elements must be displayed separately.

c. A completion date for each new or continuing construction project, separable element, or line-item funded Safety of Dams project that has programmed construction work will be developed for the Capability Level. Use the completion date for currently programmed work if the completion date for the entire project is indefinite. Show separate completion dates for initial construction and periodic re-nourishment dates for beach nourishment projects.

d. Proportional Cash Financing. Project schedules should assume Federal and Non-Federal funding is in balance (in terms of the respective percent shares of cash contributed on a cumulative basis) throughout construction life unless otherwise approved as part of the PPA. The exception is in the first fiscal year of construction, when Federal and non-Federal contributions will be adjusted to bring the sponsor's total sunk and current contributions following its required cash percentage of cumulative obligations through that fiscal year (including PED obligations, which are included in total project costs). Credit for authorized and approved construction by the sponsor, if any, should be included in financial obligations for construction and applied toward the sponsor's required cash contribution (other than the 5 percent cash share required for structural flood control) in the year that the credit for the completed work is afforded. In all cases the schedule for obligating and expending non-Federal funds is independent of the schedule for the provision or crediting of LERRDs. Proportional cash financing also applies to inland waterway projects, where the share of cumulative obligations (including PED costs) borne by the Trust Fund should attain 50 percent as soon as possible and be maintained at 50 percent throughout construction unless otherwise directed by law.

e. It is extremely important that schedules and capabilities be realistic and risk-based. Project capabilities are used in formulating the President's Budget and the Five-Year Development Plan (FYDP), and overly optimistic schedules, or capabilities that ignore carry-in, or that fund out-year planned obligations, lead to a misallocation of funding.

D-4-2. Cost Estimates, Contingencies and Inflation.

a. Cost estimates will be developed as noted below, assuming a Capability schedule and according to the instructions in paragraph 14 in the MAIN part of this EC. Inflation factors are shown in TABLE 1 in the MAIN part of this EC. Total Project Cost estimates will use EM1110-2-1304 CIVIL

WORKS CONSTRUCTION COST INDEX SYSTEM (CWCCIS) for inflation. The inflation allowance for each project will be computed only once and will be used without re-computation for other funding levels. Special attention should be paid to the February 20, 2013 memorandum from the ASA(CW) to the DCG, C&EO, subject: Life Cycle Cost Management on Civil Works Projects. This document can be obtained by e-mailing CECW-ID and requesting a copy.

(1) Develop a Capability Level schedule for each project at a 1 October BY-1 price level (Uninflated Project Cost Estimate).

(2) Do not further escalate contracts already awarded or to be awarded by 30 September BY-2.

(3) Escalate each contract to be awarded in the BY-1 and future years through its construction period according to the guidance in paragraph -9 in the Main EC.

(4) Escalate land acquisition, in-house planning, engineering and design costs, in-house construction management costs, and non-Federal costs through the construction period.

b. Design costs prior to receipt of Construction funds:

(1) Continuation of Planning and Engineering (CP&E): Effective 1 October 1985, funds obligated for CP&E are considered project costs and must be included in project cost estimates. CP&E costs obligated prior to 1 October 1985 remain excluded from project cost estimates.

(2) Advance Engineering and Design (AE&D) and Preconstruction Engineering and Design (PED): All AE&D and PED costs are considered project costs and must be included in project cost estimates.

c. Items which are indefinite or un-programmed will be based on 1 October BY-1 price levels without an allowance for inflation. Indefinite or un-programmed items include parts of projects that will very likely not be programmed due to lack of local support or other non-funding reasons, as well as all new construction candidates that are not included in the BY program. Many items in the un-programmed balance to complete, although currently designated as active, may eventually be deauthorized or reclassified to the deferred or inactive categories.

d. Contingencies: For projects that are programmed to complete in the BY, the BY request must include an appropriate, reasonable amount for contingencies. For projects that are not programmed to complete in the BY, the project cost estimate must include appropriate contingency allowances to which the contingencies apply; unused contingencies from prior years will not be reflected in carryover. As a project nears completion, the contingency allowance must be reduced accordingly. In no case will contingencies for completed work be included. Claim settlements and deficiency judgments in the BY and out-years will be handled according to normal reprogramming procedures. BY and out-year requests must not include amounts for anticipated claim settlements or anticipated deficiency judgments.

D-4-3. Benefit Cost Ratio and Remaining Benefit – Remaining Cost Ratio (RBRCR).

a. BCR. Results from the benefit-cost analysis which is performed to calculate and compare benefits and costs for a project to determine whether the project is a sound investment (justification/feasibility) and to see how it compares with other competing projects (ranking/priority assignment). BCR computations must be based on benefits in the latest approved economic analysis and must be no older than 3 years for New Start construction projects and no more than five years for

continuing construction projects. Data on BCRs should be input into CW-IFD and provided in TABLE D-4-5, entitled: BCR Calculation for Budget Submittal Worksheet, for projects and separable elements. See Main Glossary for distinctions between different types noted BCRs.

b. RBRCR. Use the following guidelines and the corresponding RBRCR worksheets and instructions shown below to compute the RBRCR at the applicable interest rate, the current interest rate, and the OMB prescribed 7% interest rate for projects and separable elements other than design or construction deficiency correction projects, safety of dams projects, and aquatic ecosystem restoration projects.

(1) Remaining Costs. Consider anticipated Federal and non-Federal allocations and other non-Federal costs through the BY-1 as sunk, and exclude them from the RBRCR computation. The remaining costs will be the Federal and non-Federal allocations as of the end of BY-1 based on the current project cost estimate and allocations from prior years and on the President's Budget for BY-2 in October 2017 dollars. Where the project includes completed separable elements, independent units and/or useful increments, OMRR&R costs for completed units/increments will also be considered sunk, and only OMRR&R for remaining units/increments will be considered in remaining project costs. The remaining costs should include any reimbursements still needing to be paid for work already completed.

(2) Remaining Benefits. Where the project includes completed separable elements, independent units and/or useful increments, the amount of annual benefits that would be expected to accrue over the period of analysis for completed or functioning components of the total project will be considered sunk and excluded from the RBRCR computation. Sunk benefits for projects that have reimbursable features should be estimated based on the reimbursable costs expended and an estimate on the amount of sunk benefits that would be associated with that level of expenditure. Remaining benefits are those that will be attainable in the BY or thereafter only if project features not completed with allocations through BY-1 are completed and operated and maintained.

(3) The RBRCR supporting BY funding requests for new construction candidates must be based on current approved evaluations of benefits and costs contained in an official report approved in or no earlier than BY-5. In no case should the benefits be price indexed except for specific benefit categories such as roads, bridges and rail line damages provided these benefits do not constitute a major portion of overall benefits.

(4) For projects that were authorized without a formal benefit-cost analysis because monetary benefits have not been quantified, indicate that the RBRCR is not applicable and state the reasons why.

(5) For BY, the RBRCR's will be computed using both the applicable rates from TABLE D-4-5 and a standard discount rate of 7 percent.

c. Alternative Methods for RBRCR. Use one of the following methods for determining RBRCR as appropriate for the conditions and situations associated with each project. It is expected that the most commonly used method will be the Deflation of Costs method outlined below. In any case, cost savings from implementation of the project or separable element will be treated as benefits, not as offsets against implementation costs.

(1) Deflation of Cost Method. The Deflation of Cost method will generally be used for projects where the last approved economic analysis remains generally current with existing and anticipated future conditions. In this method, remaining costs are to be deflated to the date of price level basis of the last approved economic benefits analysis using the composite CWCCIS found in EM1110-2-1304. Interest

during construction will be computed for the remaining period of construction at the various interest rates and based on the anticipated remaining construction allocations. The total project cost will be annualized at the various interest rates over the appropriate period of analysis (usually 50-years). Remaining OMRR&R will also be deflated to the price level of the last approved benefit analysis and added to the annualized capital costs to determine total remaining annual costs. The total remaining annual benefits will be determined on the same price levels of the last approved economic analysis, and at the various interest rates. Then RBRCRs for the various interest rates will be computed.

(2) Economic Update Method. The Economic Update Method will consist of the district preparing an economic update of total and remaining project benefits on current price levels according to an approved Economic Update Plan. The price level prevailing during BY-2 will be used to update the benefits. Remaining cost will be calculated using the steps outlined in paragraph 1 above. RBRCRs calculations using this method will then be adjusted by the deflation method outlined above. The Economic Update Method should be used for projects wherein the last approved economic analysis is old and/or otherwise no longer reflective of current and anticipated future conditions. This would be especially useful for projects that have prolonged and periodic construction activities such as levee lifts (i.e. MR&T) and additions to training river control works over extended periods of time. In performing economic updates current and future development, traffic levels, fleet characteristics, residual risks, operating practices, and other relevant factors should be factored in to the analysis as appropriate to derive a reasonably accurate estimate of project benefits.

(3) Beach Re-nourishment Projects. For beach re-nourishment projects, the general assumption and calculations in the original (and last approved) economic analysis is one of needing to continue to periodically re-nourish the beach to maintain the design profile. Otherwise the estimated benefits would not be realized. Therefore, for beach re-nourishment activities, the RBRCR will be computed in the following manner for the various project interest rates. Either the Deflation of Project Costs or the Economic Update Method outlined above may be used, however, the period of analysis for comparison of remaining costs and remaining benefits will be the remaining period of authorized Federal participation in the period re-nourishment of the project and/or applicable separable element. Remaining benefits will be considered the total annual benefits of the project after accounting for any historic and future growth in development used in the last approved economic analysis. For example, if there are 25 years remaining in authorized Federal participation in re-nourishment, the remaining construction and OMRR&R costs will be amortized over that period at the various interest rates, and compared to the annual benefits also computed at the same interest rate.

d. RBRCR instructions and spreadsheets are below:

TABLE D-4-1

Remaining Benefit/Remaining Cost Ratio (RBRCR) Summary Sheet

RBRCR Summary Sheet

TABLES D-4-2a & 2b

Sample Non-Beach RBRCR Spreadsheet with Instructions

table_D-4-2a.docx

table_D-4-2b.xlsx

TABLES D-4-3a & 3b

Sample Beaches RBRCR Spreadsheets with Instructions

Table D-4-3A
Remaining Benefit Rer

RBRCR Spreadsheet
- Beaches

TABLE D-4-4
Final Division Summary RBRCR

Table D-4-4.xlsx

TABLE D-4-4b
Final Division Summary RBRCR List

Table D-4-4b.xls

TABLE D-4-5

BCR Calculation for Budget Submittal Worksheet

Table D-4-5
BCR.docx

D-4-4. Submission Requirements.

a. All items will be submitted by the dates shown in TABLE 2 in the MAIN part of this EC.

(1) See paragraph 19 in the MAIN EC for specific instructions on J-sheets and Congressional submission to HQ.

(2) Figure D-4.1, BY Justification Sheet - Early submission of continuing and new justification sheets are used by decision makers as additional information to determine the highest priority projects to

budget. Although funds for separable elements of ongoing construction projects are not programmed on an individual basis and are included as part of the program requests for their parent projects, Figure D-4.2 will be prepared for each separable element that is recommended as new construction in the BY. Also see Figure D-4.3 Project Status Map for guidance relating to map content and formatting.

(3) BCR and RBRCR analyses according to paragraph D-4-3 for projects and separable elements other than design or construction deficiency correction projects, safety of dams projects, and aquatic ecosystem restoration projects will be submitted by the dates shown in TABLE 2 in the MAIN part of this EC.

(4) Dam Safety J- Sheets: The Dam Safety J-Sheets will be prepared by the Districts according to the guidance and suspense dates provided in the annual FY 2020 Program Development Policy Guidance and Engineer Regulation 11-2-240, Civil Works Activities –Construction & Design, in addition to any supplemental guidance that may be issued by HQUSACE or the respective MSC. In addition, Districts will coordinate the initial development of their Dam Safety project J-Sheets with the supporting Dam Safety Production Center (DSPC) for their Dam Safety projects. During the initial development period, the regional DSPCs will communicate the status and any issues for the Dam Safety project J-Sheets with the DSMMCX. The DSMMCX will provide any necessary guidance and feedback for the Districts through the DSPCs. The Districts will incorporate any necessary changes provided by the DSPC and/or the DSMMCX prior to their initial submission to the MSCs. Upon completion of the MSCs' review of the Districts' initial submission, the MSCs will copy furnish the DSMMCX when they submit the Dam Safety project J-Sheets to the Regional Integration Team (RIT)/HQs level. After the initial submission of the J-Sheets to the RIT/HQs level, the Districts will copy furnish the DSPCs and the MSCs will copy furnish the DSMMCX on any further revisions to the Dam Safety project J-Sheets.

b. New Construction. New construction is defined in paragraph D-2-7. The following items will be submitted by the dates shown in TABLE 2 in the MAIN part of this EC.

(1) Figure D-4.3 New Construction Checklist, will be prepared to identify each new start and new investment decision recommended for construction funding in the BY.

(2) Note actual or scheduled approval date in Figure D-4.3, and notify HQ if approval is pending. If copies of required reports have been sent for previous program submissions, the RIT will verify the availability of these reports before requesting additional copies.

(3) Evidence of Executive Branch support - note actual or scheduled date in Figure D-4.3, and notify HQ if final Executive Branch action is pending.

(4) Certified Total Project Cost Summary and M-CACES cost estimate - summary sheets to the feature element level for each feature and the appropriate narrative.

TABLE D-4-6
Applicable Discount Rates in Effect
When Initial Construction Funds Were Appropriated

Fiscal Year	Discount Rate 1/ Show on Justification Sheet	Show on Figure D-2.1
1958	2 1/2	2.500
1959	2 1/2	2.500
1960	2 1/2	2.500
1961	2 5/8	2.625
1962	2 5/8	2.625
1963	2 7/8	2.875
1964	3	3.000
1965	3 1/8	3.125
1966	3 1/8	3.125
1967	3 1/8	3.125
1968	3 1/4	3.250
1969	3 1/4	3.250
1970	4 7/8	4.875
1971	5 1/8	5.125
1972	5 3/8	5.375
1973	5 1/2	5.500
1974	5 5/8	5.625
1975	5 7/8	5.875
1976	6 1/8	6.125
1977	6 3/8	6.375
1978	6 5/8	6.625
1979	6 7/8	6.875
1980	7 1/8	7.125
1981	7 3/8	7.375
1982	7 5/8	7.625
1983	7 7/8	7.875
1984	8 1/8	8.125
1985	8 3/8	8.375
1986	8 5/8	8.625
1987	8 7/8	8.875
1988	8 5/8	8.625
1989	8 7/8	8.875
1990	8 7/8	8.875
1991	8 3/4	8.750
1992	8 1/2	8.500
1993	8 1/4	8.250
1994	8	8.000
1995	7 3/4	7.750
1996	7 5/8	7.625
1997	7 3/8	7.375
1998	7 1/8	7.125
1999	6 7/8	6.875

TABLE D-4-6
(Continued)

Applicable Discount Rates in Effect
When Initial Construction Funds Were Appropriated

Fiscal Year	Discount Rate 1/ Show on Justification Sheet	Show on Figure D-2.1
2000	6 5/8	6.625
2001	6 3/8	6.375
2002	6 1/8	6.125
2003	5 7/8	5.875
2004	5 5/8	5.625
2005	5 3/8	5.375
2006	5 1/8	5.125
2007	4 7/8	4.875
2008	4 7/8	4.875
2009	4 5/8	4.625
2010	4 3/8	4.375
2011	4 1/8	4.125
2012	4	4.000
2013	3 3/4	3.750
2014	3 1/2	3.500
2015	3 7/8	3.375
2016	3 1/8	3.125
2017	2 7/8	2.875
2018	2 ¾	2.750

1/ Unless the project qualifies for the 3 1/4 percent rate under the "grandfather" clause in Section 80 of the 1974 Water Resources Development Act.

BY Justification Sheet

(NOTE: Development of this Justification Sheet should begin with the last version sent to Congress, if applicable. Any changes to the previously cleared version should be explained/justified using comments, but should be limited and by exception only.)

(NOTE: DO NOT TYPE FIGURE HEADING ON JUSTIFICATION SHEET)

APPROPRIATION TITLE: Construction - Enter the project classification and type, Fiscal Year BY.

PROJECT: Enter the project name, state and whether it is new, continuing, or a completion or a resumption in parenthesis as appropriate.

LOCATION: Enter a brief description of the project location, clearly identifying major landmarks, counties, and municipalities in the project vicinity.

DESCRIPTION: Enter a brief description of the problem the project seeks to solve, the date and title of the supporting decision document, a summary of the recommended plan of improvement clearly identifying major project features . Indicate if project is part of a system. For reservoir projects, include breakdown of storage by function. Differentiate between programmed and un-programmed work. For ecosystem restoration projects include area in acres to be restored and types of habitat. If operation and maintenance is required to maintain describe briefly what and how often – For example to keep an area as a wetland dredging will be required every 5 years. If monitoring/adaptive management is authorized or recommended in the approved report – briefly describe what is approved and the period of time involved. Note the recommended/authorized cost of these items. Identify the non-Federal sponsor and the pertinent cost-share(s) applicable to the project or, if applicable, state that the project is funded at 100 percent Federal expense. Indicate what work is unprogrammed (authorized, but not part of the recommended plan).

AUTHORIZATION: Enter the act authorizing the project, such as: Section XXX of Water Resources Development Act of xxxx.

REMAINING BENEFIT-REMAINING COST RATIO: Enter the RBRCR for the project at a 7 percent discount rate (as calculated per Appendix D-4). If the project is substantially complete and the RBRCR is no longer meaningful, enter: Not applicable because project construction is substantially complete.

TOTAL BENEFIT-COST RATIO: Enter the benefit-cost ratio for the project at a 7 percent discount rate.
For Ecosystem restoration projects briefly summarize the results of the Cost Effectiveness/Incremental Cost Analysis. If the NER plan was not authorized note this.

Division: District: Project name:

Figure D-4.1 - BY Justification Sheet

INITIAL BENEFIT-COST RATIO: Enter the benefit-cost ratio at the applicable discount rate and the fiscal year for which Congress appropriated initial construction funds such as: 1.11 to 1 at 5 1/8 percent (FYxxxx). Omit this item for BY new construction. Use the applicable discount rate from TABLE D-4-6.

BASIS OF BENEFIT-COST RATIO: Indicate the basis of the benefit-cost ratios, such as: Benefits are from the latest available evaluation approved in (month) xxxx at xxxx price levels.

SUMMARIZED FINANCIAL DATA			ACCUM PCT OF EST FED COST	STATUS (1 Jan xxxx)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
(For projects with an un-programmed balance to complete, but no future non-Federal reimbursement.)				Element A	xx	May xxxx
				Element B	0	Indefinite
				(For shore protection projects)		
				Initial Construction	xx	Sep xxxx
Estimated Federal Cost		xx,xxx,xxx		Periodic Nurshmnt	xx	Jun xxxx
Programmed Construction	xx,xxx,xxx					
Un-programmed Construction	xx,xxx,xxx			Entire Project	xx	Jun xxxx
Estimated Non-Federal Cost		xx,xxx,xxx				
Programmed Construction	xx,xxx,xxx					
Cash Contributions	xx,xxx,xxx					
Other Costs	xx,xxx,xxx					
Estimated Non-Federal Cost						
Unprogrammed Construction	xx,xxx,xxx					
Cash Contributions	xx,xxx,xxx					
Other Costs	xx,xxx,xxx					

Division: District: Project name:

Figure D-4.1 (Continued)

Total Estimated Programmed Construction Cost	xx,xxx,xxx
Total Estimated Unprogrammed Construction Cost	xx,xxx,xxx
Total Estimated Project Cost	xx,xxx,xxx
Authorized Cost (plus inflation)	
Maximum Cost Limit (Section 902)	

SUMMARIZED FINANCIAL DATA (Continued)		ACCUM PCT OF EST FED COST	STATUS (1 Jan xxxx)	PCT CMPL	PHYSICAL COMPLETION SCHEDULE
Allocations to 30 September _(BY-4)_	xx,xxx,xxx				
Allocation for FY__(BY-3)__	xx,xxx,xxx				
Allocation for FY__(BY-2)__	xx,xxx,xxx				
Conference Allowance for FY__(BY-1)__	xx,xxx,xxx 5/				
Allocations through FY__(BY-1)__	xx,xxx,xxx 1/ 2/ 3/ 6/				
Estimated Unobligated Carry-In Funds	xx,xxx,xxx 4/				
President's Budget for FY__(BY)__	xx,xxx,xxx				
Programmed Balance to Complete after FY__(BY)__	xx,xxx,xxx 7/				
Un-programmed Balance to Complete after FY__(BY)__	xx,xxx,xxx				

1/ $_____reprogrammed to (from) the project. (Retain this footnote and enter $ or $0 as applicable)
2/ $_____rescinded from the project. (Retain this footnote and enter $ or $0 as applicable)
3/ $_____transferred to the Flood Control and Coastal Emergencies account. (Retain this footnote and enter $ or $0 as applicable)
4/ Estimated Unobligated Carry-in Funding: The actual unobligated carry-in from FY BY-2 to FY BY-1 was $xx. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into FY BY from prior appropriations for use on this effort is $x.This amount will be used to perform work on the project as follows: (NOTE: provide a brief description here of how the unobligated carry-in funds will be used if the carry-in amount is greater than $0. If the carry-in amount is $0, put $0 in the blank space above and insert "N/A" for description of work).
5/ There was no Conference Amount available at the time this J-sheet was prepared. The amount shown is [the President's budget amount for FY2013.] [the stated capability that takes into consideration unobligated FY2013 carry-in funds and the current schedule as of the date of this J-sheet.] (NOTE: Chose ONE of the bracketed phrases as appropriate). (NOTE: Remove this footnote and the footnote in the table above if not applicable.)

Division: District: Project Name:

Figure D-4.1 (Continued)

6/ PED costs of $_____ are included in this amount.
7/ For programmed work only; remaining work is un-programmed pending a decision to construct these features.

PHYSICAL DATA: Using a narrative, describe the physical data associated with the major project facilities.

JUSTIFICATION: Enter an explicit and factually objective presentation of the merits of the project, i.e., an answer to the question: "Why now?" In narrative form, present your best case. (The following information, when related to recent events or the current state of the economy, is more convincing than recitation of facts.)
For flood projects, state the present value and type of property subject to flood damage; the average annual damages, with and without the project; the flood
frequency against which protection is to be provided; the maximum flood of record; the damage sustained at that time and what it would be now; the frequency and
duration of flooding; recent flood experience; and any other data which indicate the magnitude and severity of the flood problem and the need for protection. Include information on risk to life such as velocity and depth of flooding and amount of warning time and egress conditions. If more than 20 percent of urban flood damage prevention benefits are future benefits, explain the basis for such future benefits. In particular, estimated benefits for prevention of damages to household contents must be according to the most recent CECW-P guidance. Describe the residual risk in terms of damages, population at risk, and the type of risk (rapid flooding from levee overtopping, etc). Does project directly or indirectly support future flood plain development in areas other than those near already urbanized areas or where flood plain values have been largely lost? Does it avoid, to the extent possible, the long and short term adverse impacts associated with the destruction or modification of wetlands and/or other environmental attributes?

For commercial navigation projects, discuss major commodities imported and exported; average commerce tonnage over the most recent 10-year period; savings per ton for selected commodities; availability of dredged material disposal sites; and size of ships expected to call at the port in the future.

Division: District: Project name:

Figure D-4.1 (Continued)

For beach nourishment and navigation sand mitigation projects, provide a description of the initial construction to include the completion date and # of cys placed. Include the # cy of sand authorized by the Chief's Report, the re-nourishment cycle (e.g. 2-yr cycle), authorized # yrs of re-nourishment from commencement of initial construction and the scheduled last year of re-nourishment. State the # cycles completed to date and the cy placed in each cycle (e.g. 1993 (415,000 cy), 1995 (330,000 cy),etc.). If there is significantly more or less sand placed (40% +/-) in any given year, state why this was necessary (e.g. past delays in re-nourishment schedule, greater erosion rates due to storms, etc.). If the project has been effective in preventing damage, include a statement to this effect and include the features that were protected (all or parts of a city, certain buildings, etc.). Also state what features would be damaged if the project were not there or the re-nourishment schedule is compromised.

For Ecosystem restoration discuss significance, as described in Appendix C, TABLE C-2-3 paragraphs 52-65, of the resources being restored, expected benefits and time frame for the realization of these benefits (e.g. – mature oak forest full benefits 10-20 yrs out), incidental benefits, and significant factors affecting the cost – such as urban. See Appendix C for other items that you may want to cover in the justification.

For water supply/hydropower projects, specify the storage provided, and the potential sponsor(s) who has agreed to fully finance the applicable costs.
Identify those counties, districts, Indian reservations, or other areas which qualify as areas of "substantial and persistent" unemployment using the procedures in the Principles and Guidelines. The construction activities must be physically located in such areas in order for the benefits from employment of previously unemployed labor resources to be included in the project's justification.

Discuss the extent to which project beneficiaries have made investments other than the required items of local cooperation whose return is contingent upon completion of the Federal project.

Include a tabular listing of annual benefits as the final item of the justification paragraph if there is more than one applicable benefit category, such as: Average annual benefits are as follows:

Annual Benefits	Amount
Benefit 1	x,xxx,xxx
Benefit 2	x,xxx,xxx
Benefit 3	x,xxx,xxx
Total	xx,xxx,xxx

Division: District: Project name:

Figure D-4.1 (Continued)

FISCAL YEAR BY-1: Enter a tabular explanation of how BY-1 funds are being used. The TOTAL unobligated dollars are being applied as follows: (use the same tabular format as shown below for FISCAL YEAR BY:). Explain a change in capability from the BY-1 J-sheet.

FISCAL YEAR BY: Enter a tabular explanation of how the BY funds will be used, such as: The budget amount plus carry-in funds will be applied as follows:

Initiate	$x,xxx,xxx
Initiate and complete	x,xxx,xxx
Continue	x,xxx,xxx
Complete	x,xxx,xxx
Planning, Engineering, and Design for parent project	x,xxx,xxx
Planning, Engineering, and Design for Element A	x,xxx,xxx
Planning, Engineering, and Design for Element B	x,xxx,xxx
Construction Management	x,xxx,xxx
Total	$xx,xxx,xxx

NON-FEDERAL COST: Enter a separate tabular explanation of the requirements of local cooperation included in each project cooperation agreement applicable to the project together with the associated payments during construction, reimbursements, and annual operation, maintenance, repair, rehabilitation, and replacement costs, such as: According to the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, the non-Federal sponsor must comply with the requirements listed below.

Requirements of Local Cooperation	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs

Separable Element A (Repeat as applicable for each separable element).

Figure D-4.1 (Continued)

Provide lands, easements, (and) rights of way, (add for all but commercial navigation projects: and dredged or excavated material disposal areas) (add if appropriate: , which may be reduced for credit allowed for work in kind (Section 104 of the Water Resources Development Act of 1986, as amended, Section 215 of the Flood Control Act of 1968, or section 221 of the Flood Control Act of 1970, as amended)) after reductions for such credit have been made in the required cash payments.	x,xxx,xxx	
(Add if covered under post-1994 PPA: Participate in Project Coordination Team, conduct audits of non-Federal costs, and perform investigations of hazardous substances).	x,xxx,xxx	
Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.	x,xxx,xxx	
Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower features.	x,xxx,xxx	x,xxx

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, repair, rehabilitation and replacement of municipal and industrial water supply features.	x,xxx,xxx	x,xxx
	x,xxx,xxx	x,xxx

Figure D-4.1 (Continued)

	x,xxx,xxx	x,xxx
Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operation, maintenance, repair, rehabilitation and replacement of recreation features.	x,xxx,xxx	x,xxx
Pay xx percent of the separable and joint costs allocated to recreational navigation to bring the total non-Federal share of recreational navigation costs to 50 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreational navigation features.		
Pay xx percent of the costs allocated to flood risk management to bring the total non-Federal share of flood risk management costs to (include one of the following: 25 percent / 35 percent / xx percent as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal.		
Annual Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
sponsor's ability to pay) (add if appropriate: , as reduced for credit allowed for work in kind (Section 104 of the Water Resources Development Act of 1986, as amended, Section 215 of the Flood Control Act of 1968, or Section 221 of the Flood Control Act of 1970, as amended)), but no less than 5 percent of the costs allocated to flood risk management, and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood risk management features.		
	x,xxx,xxx	x,xxx

Figure D-4.1 (Continued)

Pay xx percent of the costs allocated to fish and wildlife enhancement, and pay xx percent of the costs of operation, maintenance, repair, rehabilitation, and replacement of fish and wildlife features.	x,xxx,xxx	x,xxx
Pay xx percent of the costs allocated to ecosystem restoration to bring the total non-Federal share of ecosystem restoration costs to 35 percent (add if appropriate: as reduced for credit allowed for work in kind (Section 221 of the Flood Control Act of 1970, as amended)), and bear all costs of operation, maintenance, repair, rehabilitation and replacement of ecosystem restoration features.	x,xxx,xxx	x,xxx
Pay a share of project costs to bring the total non-Federal share of the costs allocated to coastal storm damage reduction to 35 percent, the total non-Federal share of the costs allocated to recreation to 50 percent, and the total non-Federal share of the costs allocated to privately owned shores (where use of such shores is limited to private interests) to 100 percent, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of coastal storm damage reduction features.		

Requirements of Local Cooperation (Continued)	Payments During Construction and Reimbursements	Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs
Pay (include one of the following: 35 percent / xx percent, as determined under Section 103 (m) of the Water Resources Development Act of 1986, as amended, to reflect the non-Federal sponsor's ability to pay,) of the costs allocated to agricultural water supply, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of agricultural water supply features.	x,xxx,xxx	x,xxx
	x,xxx,xxx	x,xxx

Figure D-4.1 (Continued)

Pay xx percent of the costs allocated to general navigation facilities during construction (add if appropriate: and pay 50 percent of the costs of incremental maintenance below 45 feet below mean low water).	x,xxx,xxx	
Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as reduced by a credit allowed for the value of lands, easements, rights of way, and relocations provided for commercial navigation.	x,xxx,xxx	x,xxx
Total Non-Federal Costs		

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and, for general navigation, reimburse its share of construction costs within a period of 30 years following completion of construction.

Note: After approval by the ASA(CW), local credit based on ability to pay (Section 103 (m) of the Water Resources Development Act of 1986, as amended), or general credit for prior work (Section 104 of the Water Resources Development Act 0f 1986, as amended, or Section 215 of the Flood Control Act of 1968) must be reflected in the requirements of local cooperation as an offset to required cash contributions or, if necessary, LERRD contributions. However, any credit provided under Section 104 of the Water Resources Development Act 0f 1986, as amended, or Section 215 of the Flood Control Act of 1968 may not be used to offset the required 5 percent cash contribution.

STATUS OF LOCAL COOPERATION: Identify the non-Federal sponsor, the current status of letters of intent, the current status of the PPA, the date of the executed PPA, actions being taken by the non-Federal sponsor toward compliance with the requirements of local cooperation, such as contributions made, bond issues passed, or other specific items. If known, state the method by which the non-Federal sponsor intends to provide its share of the project first costs (cash and other items of local cooperation) and annual O&M costs. List all potential sources of funds (together with dollar amounts, if known) to meet local cooperation requirements, including any anticipated Federal funds for which the Federal granting agency has indicated in writing that the use of such funds for items of local cooperation is authorized. List and describe any local work or investments that have already been made or are underway which would serve to fulfill all or part of the local cooperation requirements (including work accomplished per Section 215 of the 1968 Flood Control Act or creditable under Section 104 of the 1986 Water Resources Development Act).

In the event a PPA has not been executed, provide the scheduled month and year when the PPA is scheduled to be executed.

Figure D-4.1 (Continued)

For projects with future non-Federal reimbursement, indicate the specific conditions which govern the initiation of non-Federal reimbursement payments and the scheduled date such reimbursement payments are scheduled to begin.

For each project with an executed PPA, compare the approved non-Federal cost estimate in the PPA with the current non-Federal cost estimate and provide an assessment of the non-Federal sponsor's financial capability to contribute toward any increased costs and an indication of the sponsor's willingness to share in any increased costs, such as: The current non-Federal cost estimate of $8,000,000, which includes a cash contribution of $3,000,000, is an increase of $1,000,000 from the non-Federal cost estimate of $7,000,000 noted in the Project Partnership Agreement, which included a cash contribution of $2,500,000. In a letter dated 3 March xxxx, the non-Federal sponsor indicated that it is financially capable and willing to contribute the increased non-Federal share. Our analysis of the non-Federal sponsor's financial capability to participate in the project affirms that the sponsor has a reasonable and implementable plan for meeting its financial commitment.

COMPARISON OF FEDERAL COST ESTIMATES (see ER 11-2-240, paragraph 10): Enter a tabular explanation of the changes in the Federal (Corps) cost estimate from the last estimate presented to Congress to the current estimate, such as: The current Federal cost estimate of $xxx,xxx,xxx is an increase (decrease) of $xx,xxx,xxx from the latest estimate ($xxx,xxx,xxx) presented to Congress (FYxxxx). This change includes the following items.

Item	Amount
Price Escalation or De-escalation on Construction Features	$x,xxx,xxx
Design Changes	x,xxx,xxx
Additional Functions Added under General Authority	x,xxx,xxx
Authorized Modifications	x,xxx,xxx
Post Contract Award and Other Estimating Adjustments (including contingency adjustments)	x,xxx,xxx
Schedule Changes	x,xxx,xxx
Price Escalation or De-Escalation on Real Estate	x,xxx,xxx
Total	$x,xxx,xxx

STATUS OF ENVIRONMENTAL IMPACT STATEMENT COMPLIANCE: Indicate the status of the environmental impact statement, such as: The final EIS was filed with EPA on 28 September xxxx. List other significant items such as Clean Water Act, Coastal Zone Management Act, cultural resources and Endangered Species Act compliance status if not completed at the time the EIS was filed.

Figure D-4.1 (Continued)

OTHER INFORMATION: Indicate when funds were appropriated to initiate preconstruction engineering and design and construction, respectively, such as: Funds to initiate preconstruction engineering and design were appropriated in FYxxxx and funds to initiate construction were appropriated in FYxxxx. If the scheduled completion date for programmed work has changed from the date last presented to Congress, explain the changes, such as: The scheduled completion date of June xxxx for programmed work is a (slippage or acceleration) from the latest completion date of March xxxx presented to Congress. This change is due to _____. Also, note any problems that should be considered by the Committees which might affect the progress schedule shown in your program request, as well as your expectations for and timing of a resolution of the problems. Fish and Wildlife Mitigation costs should also be separately identified and reflected in this paragraph.

Separable Element A (Repeat as necessary for each programmed separable element).

SUMMARIZED FINANCIAL DATA: For ongoing projects with programmed separable elements, provide a breakdown of the summarized financial data for each programmed separable element in the same format as displayed for the parent project, except that the allocations and conference allowance information is not required.

REMAINING BENEFIT-REMAINING COST RATIO: Enter the RBRCR for each programmed separable element at a 7 percent discount rate. If the element is substantially complete and the RBRCR is no longer meaningful, enter: Not applicable because construction is substantially complete. N/A for Ecosystem restoration.

TOTAL BENEFIT-COST RATIO: Enter the total benefit-cost ratio for each programmed separable element at a 7 percent discount rate. For Ecosystem Restoration projects briefly summarize the results of the Cost Effectiveness/Incremental Cost Analysis. If the NER plan is not being implemented note this and explain briefly.

Figure D-4.1 (Continued)

Additional Examples of Summarized Financial Data

For projects with no un-programmed balance to complete, and no future non-Federal reimbursement.

Estimated Federal Cost		xx,xxx,xxx	
Estimated Non-Federal Cost		xx,xxx,xxx	
Cash Contributions	xx,xxx,xxx		
Other Costs	xx,xxx,xxx		
Total Estimated Project Cost		xx,xxx,xxx	
Authorized Cost (plus inflation)			
Maximum Cost Limit (Section 902)			

For projects with both an unprogrammed balance to complete and future non-Federal reimbursement.

Estimated Total Appropriation Requirement			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Unprogrammed Construction		xx,xxx,xxx	
Future Non-Federal Reimbursement		xx,xxx,xxx	
Programmed Construction		xx,xxx,xxx	
Unprogrammed Construction		xx,xxx,xxx	
Estimated Federal Cost (Ultimate)		xx,xxx,xxx	
Programmed Construction		xx,xxx,xxx	
Unprogrammed Construction		xx,xxx,xxx	

Figure D-4.1 (Continued)

For projects with both an un-programmed balance to complete and future non-Federal reimbursement (continued).

Estimated Non-Federal Cost			xx,xxx,xxx
Programmed Construction		xx,xxx,xxx	
Cash Contributions	xxx,xxx		
Other Costs	xxx,xxx		
Reimbursements	xxx,xxx		
Purpose 1	xxx,xxx		
Purpose 2	xxx,xxx		
Unprogrammed Construction		xx,xxx,xxx	
Cash Contributions	xxx,xxx		
Other Costs	xxx,xxx		
Reimbursements	xxx,xxx		
Purpose 1	xxx,xxx		
Purpose 2	xxx,xxx		
Total Estimated Programmed Construction Cost			xx,xxx,xxx
Total Estimated Un-programmed Construction Cost			xx,xxx,xxx
Total Estimated Project Cost			xx,xxx,xxx

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement.

Estimated Total Appropriation Requirement		xx,xxx,xxx
Future Non-Federal Reimbursement	xx,xxx,xxx	
Estimated Federal Cost (Ultimate)	xx,xxx,xxx	

Figure D-4.1 (Continued)

For projects with no unprogrammed balance to complete, but with future non-Federal reimbursement (continued).

Estimated Non-Federal Cost		xx,xxx,xxx
Cash Contributions	xx,xxx,xxx	
Other Costs	xx,xxx,xxx	
Reimbursements	xx,xxx,xxx	
Purpose 1	xx,xxx,xxx	
Purpose 2	xx,xxx,xxx	
Total Estimated Project Cost		xx,xxx,xxx
Authorized Cost (plus inflation)		
Maximum Cost Limit (Section 902)		

For projects with an unprogrammed balance to complete, future non-Federal reimbursement, and where an additional Federal agency is involved.

Estimated Appropriation Requirement (CoE)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Appropriation Requirement (CWIFD)		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	
Estimated Total Appropriation Requirement		xx,xxx,xxx
Programmed Construction	xx,xxx,xxx	
Unprogrammed Construction	xx,xxx,xxx	

Figure D-4.1 (Continued)

New Construction Checklist

Division:

Type 1/	Project or Elem Name	Author-ization Act 2/	Total Proj Elem Cost $000	Total Fed Appn Rqmt $000	Total IWTF Appn Rqmt $000	Total Non-Fed Cost $000	Table D-2. 1 Criteria Met Y/N	BCR at Appl Rate 3/	RBRCR at Appl Rate 3/	Type of Decisn Doc.	Act/Sch Date of Dec Doc Approval Mo/Yr	Act/Sch Date of Exec Br Support Mo/Yr 4/	Sched PPA Exec Date Mo/Yr	First Const Ct Awd Date Mo/Yr

1/ Types: 1. New start specifically authorized project
2. New start specifically authorized project modification (reconstruction, beneficial use, navigation mitigation, environmental modification)
3. New start separable element
4. New start project not needing specific authorization (rehabilitation, deficiency correction, or biological opinion project)
5. Resumption

2/ Does not apply to type 4.

3/ Applies only to: (1) specifically authorized project, (2) separable element, (3) reconstruction project, (4) rehabilitation project, (5) navigation mitigation project, or resumption thereof, that produces economic outputs, (6) design or construction deficiency correction projects, (7) Safety of Dams projects.

4/ See page D-2-8, paragraph 2.

FOR FIGURE PURPOSES ONLY

Figure D-4.2 - New Construction Checklist

PROJECT STATUS MAP

1. A Project Status Map is prepared for each project included in the Budget Fiscal Year Submission to Congress for new and continuing construction projects, and accompanies the justification sheets.

2. The Project Status Map is intended to show clearly all localities and features noted in the accompanying Justification Sheets and PB-2a, and to indicate the work completed and remaining to be accomplished. Do not clutter the map with unnecessary details not pertinent to the project. The map is to be printed on medium or heavy grade paper, in black only. Maps will not be prepunched. Two high quality reproducible copies of each map will be submitted. One copy will be placed behind the justification sheets for that project prior to printing, and the other copy will be retained in CECW-B. If the construction justification sheets are prepared by the MSC or district as a package ready for printing, each map will be provided with a page number in sequence with the page numbers for the preceding justification sheets for the project. If the construction justification sheets are assembled as a package ready for printing by CECW-B, the page number will be added to the map by that office.

a. Size. The map must be printed on paper that is 8 1/2 by 11 inches overall, including a 3/4 inch margin along the 11-inch top edge, to permit binding so that the maps face the front of the book. The map cannot be printed on larger size paper and folded.

b. Reverse Side. Nothing may be printed on the reverse side of the map. Information formerly printed on the reverse side, including the project name, division, and district is no longer necessary.

c. Title Block. In the lower right corner of the map, place the title block, including the project name, District and Division, and nominal date of preparation for each submission, namely, 1 January 19XX.

d. Vicinity Map. In the upper right corner of the sheet, or in some other position only when the project map layout so requires, insert a small- scale vicinity map, clearly locating the project with respect to main geographical features. If at all practicable, the vicinity map should at least show a substantial portion of the state in which the project is physically located, and a sufficient portion of adjacent states to more clearly locate the project geographically. Do not overburden the vicinity map with unnecessary details.

e. Orientation. Whenever feasible, orient the project and vicinity map with north to the top, and place the orientation arrow in a convenient position on the map. Where this standard orientation is unfeasible, orient the maps with north to the left. All printing on the map is to read in the same direction as that on the Justification Sheets when the 11-inch top edge of the map is aligned with the top of the Justification Sheets.

f. Graphic Scales and Special Dimensioning. Show separate graphic scales for the project and vicinity maps. Where necessary to clearly show the extent of proposed operations, portions of the project map may be set out with exaggerated dimensions. Where the map size precludes the clear presentation of the various portions of the project, in close a brief description of the work in a rectangular box, bordered with a solid or cross-hatched margin to and arrowed to its proper location on the project map and arrowed to its proper location on the project map.

Figure D-4-3 - PROJECT STATUS MAP

Where practicable and desirable, indicate particularly significant dimensions, capacities, or characteristics of major project facilities. Where sections of a waterway are of different dimensions, indicate the length of each section in miles, or in feet if less than one mile long. Indicate waterway widths in feet. Where work can be effectively illustrated by means of a cross-sectional view, this method should be used. Show both the present and authorized project dimensions for budgeted navigation improvements.

g. Legend. The legend for the project map will use appropriately distinguishable cross-hatching to display the following information:

- Work completed.
- Work underway with funds available for the Current Fiscal Year.
- Work proposed with funds requested for the Budget Fiscal Year.
- Work required to complete the project after the Budget Fiscal Year.

Do not show allocations of funds to various items of work. Shade shoreline to distinguish between land and water areas. For projects with reservoirs, indicate the real estate taking line or, if this is not available, the boundary of the flood control pool. Also indicate the status of land acquisition by cross-hatching the reservoir area according to the legend noted above. For local protection projects, show the flood line and date of flood of record. For projects with separately authorized modifications, distinguish between the work under the modifications being budgeted and the other modifications; under the "Legend," show about half of each applicable block cross-hatched differentially, and insert, below the last block, "Lighter modifications not included in current budget request."

Figure D-4.3 (Continued)

APPENDIX E

Operation and Maintenance

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APPENDIX E-1

Operation and Maintenance

General

E-1-1: Applicability. This appendix provides guidance for all new and continuing projects and programs funded by line item under the O&M appropriation, including the HMTF, as applicable, and O&M portion of the Flood Control, MR&T appropriation for the Budget Fiscal Year. This appendix does not address RI programs.

This appropriation funds operation, maintenance, and related activities at the water resources projects that the Corps operates and maintains. Work to be accomplished consists of dredging, maintenance, repair, and operation of structures and other facilities, as authorized in the various River and Harbor, Flood Control, and Water Resources Development Acts. Army Budget Guidelines for O&M.

Budget priority is given to O&M infrastructure based on the condition and the potential consequences (e. g. , economic, environmental, and public safety impacts) of project performance if the O&M activity is not undertaken in the BY, as well as legal factors. Budget guidelines for O&M activities are as follows:

a. Each proposed O&M work package, including those in the MR&T appropriation, will be assigned to one of seven business lines: Navigation, Flood Risk Management, Environment (including Environmental Stewardship and Aquatic Ecosystem Restoration business programs), EM, Recreation, Hydropower, or Water Supply. Guidance for joint work packages is described in Joint Section of the PDM.

b. The economic benefits that will accrue for the dollars spent to improve the level of performance must be considered before the O&M work package is included in the budget. An informed judgment must be made to determine the economic impact of the work, and where possible must make verifiable use of existing performance data, including project benefits and risks to the delivery of those benefits. Work with a higher return on investment (in terms of benefits delivered or performance) will receive a higher priority in the budget process. For example, the evaluation for commercial navigation includes the current and five-year average cargo tonnage (coastal) and cargo ton-miles (inland waterways), cost per ton and cost per ton-miles, as well as other factors including harbors with U. S. Coast Guard Marine Safety operations, critical harbors of refuge and subsistence harbors. For Flood Risk Management, criteria include the risks of loss of life and loss of property; for Recreation, criteria include the National Economic Development benefits provided, visitor attendance and jobs created; and for Hydropower, criteria include the risk of a generating unit shutdown and resultant loss of generating capacity.

c. Reliability of projects is evaluated to determine a project's ability to adequately perform its intended function in a consistent manner upon demand when field conditions allow. Condition classification guidelines are used in component condition assessments to evaluate the condition of individual critical and non-critical components. Consequence rating criteria are used to determine the impact (cost in dollars, potential loss of property or loss of jobs, etc.) of reduced performance. The results of the condition and consequence evaluations lead to a risk-level determination based on an established matrix for each program area. The risk to project performance of not funding the proposed work is evaluated in terms of the intended function. Cost-effectiveness measures are used to determine the lowest cost solution to operate the project as intended and to maintain or improve the overall reliability of the project.

d. Public safety and national security are also factors used in evaluating O&M activities, in addition to all other available and pertinent work package data including the revised Relative Risk Matrices for each business line, as well as appropriate performance measures. For example, a proposed work package would normally be a higher priority if its purpose is to reduce the risk of a failure that could result in loss of life. Other factors that may be applicable include whether the harbor is a designated harbor of refuge, or a subsistence harbor, whether the harbor supports U. S. Coast Guard operations, and for other defense and national security requirements.

e. O&M work to address a significant environmental concern is evaluated based on the risk to project performance and delivery of benefits. Those O&M activities that reduce the risk of a significant adverse environmental impact are given a higher priority in the budget according to the risk-informed analysis of the performance effects of that environmental impact. Minimum legal environmental requirements such as reasonable and prudent measures of a biological opinion or maintenance that supports facilities such a fish passage structures that pass endangered fish must be characterized as Common O&M. All environmental packages will be discrete work packages.

f. Projects with O&M-related legal requirements typically are also given a higher consideration in the budget; for example, projects with requirements to address Native American Tribal rights and projects whose operation involves ongoing requirements for Final Biological Opinions under the Endangered Species Act or recurring mitigation and/or curation storage requirements. These minimum environmental costs will be prioritized to reduce legal risk or consequences associated with requirements.

g. Caution should be used when budgeting for monitoring activities for channel improvement projects. Monitoring for channel improvements must be budgeted in the O&M appropriation. Monitoring for beach nourishment projects must be budgeted in the Construction appropriation.

h. Some instances of study-like activities previously funded in the O&M account will now be funded in the Investigations account. See Appendix C for additional guidance.

E-1-2: O&M Budget Development Principles.

O&M budget development considers the relationships of projects within and across business lines and over the lifecycle of the projects. For example, closure of one lock in a system that would affect other lock passages or reservoir operations on one project could affect other downstream reservoirs. Considering systems in the operation and functioning of projects will achieve better service to the public. The key components of this approach include:

- Mission performance
- Risk and reliability as determined by condition and consequences
- Consistent activity scope, activity descriptions, and funding requirements linked to specific performance outputs
- Budget execution tracking

The O&M budget must be examined holistically to ensure consistency, lowest sustainable investments, and acceptable or shared risks. All the projects are placed on the same basis to establish priorities based on benefits and risks.

The O&M budget is developed from an asset management perspective that incorporates an emphasis on long-range planning, delivery of project benefits, and reduction of risks

The O&M budget is formulated based on performance goals and objectives and risk-based indices (details can be found in the business line sections of the PDM). Performance metrics are used to set funding priorities.

This O&M guidance continues to be shaped according to the FY18-20 Budget Transformation Roadmap (as updated by the Roadmap for Future Improvements). A continuing foundational piece of the roadmaps are standardization of activities and costs by focusing on similarities between operating projects, such as number of dam gates, number of hydropower generating units, number of lock chambers, number of PSAs, etc. O&M 20/20 is integral to O&M Budget Transformation and is a national effort to simplify and improve the budget development process by requiring consistent definitions of activities and costs related to mission performance across the Civil Works enterprise. It is composed of three integrated yet distinct efforts: 1) the development and implementation of improved, consistent business rules and reporting mechanisms with which to monitor the results of those rules; 2) the continued refinement of RC and WCCs WCCs with which to characterize both budget development and execution; and 3) the continued development and implementation of risk-informed decision analytics and budget prioritization through the Asset Management effort.

The Administration gives priority to investments based upon the level of performance those investments allow the facility to provide. Aligning the USACE Budget process with this approach requires the expression of project requirements in terms relevant to decision-makers; therefore, greater national clarity and consistency will be required regarding the labeling of activities and the linkage of them to specific performance levels.

E-1-3: Life-cycle Portfolio Management. The development and application of Life-cycle Portfolio Management (LCPM) is an integral part of overall Civil Works Strategic Plan and USACE Campaign Plan objectives. LPCM provides a viable framework for applying this long-term perspective to O&M investment decisions to maximize the delivery of project benefits by implementing concepts such as the Total Cost of Ownership (TCO), consistent tolerable operational risk levels, and total project benefits delivered. The specific national application of LCPM to Civil Works is still under development and further guidance will be provided in future years, but in general, LCPM strategies to formulate O&M funding plans should articulate the overall life-cycle maintenance strategy for each constructed asset (i.e., lock, dam, power plant, PSA, etc.) and reflect, to the degree possible, the anticipated O&M life of the project and its assets through the short- and long-term actions anticipated during that time frame. LCPM must take into account asset condition assessments and risk assessments that affect estimates of remaining equipment life, future maintenance and repair requirements, continued asset reliability, re-capitalization plans, and fluctuation of Federal investments on national priorities; and as appropriate, should also be linked coherently to a clearly stated project life-cycle status (active vs. inactive) , including disposition as appropriate. In addition, funding plans should not only be developed as a project-specific long-range plan, but also be based on sub-plans recommended by business lines. Project plans must be rolled up and examined holistically from a regional perspective to ensure consistent reliability goals, mission execution, lowest sustainable investment levels, and acceptable or shared risk levels.

To enable LCPM through the budget development process, each Specific Work Activity package submitted for the budget that requires follow-on funding in future years will have those future funding requirements reflected in the out-year funding stream in CW-IFD (e.g. Budget Year+1, Budget Year+2, etc.). This ensures the Business Line Manager is aware of the total funding requirements before

selecting the package to be funded. This requirement does not include regular recurring packages, such as annual or cyclical dredging or cyclical inspections. See the Main EC for additional out-year requirements.

APPENDIX E-2

Operation and Maintenance

Project O&M Guidance

E-2-1: Purpose and Scope. This sub-appendix provides general procedural guidance and a uniform approach for budget development and justification for Project O&M. Guidance concerning automated data requirements for submittal of budget recommendations is contained in the PDM.

E-2-2: Performance-Based Programming. Performance measures are described in the PDM sections for individual Business Lines. "Performance" in this context means the delivery of project benefits. Performance data will be entered in CW-IFD for each budget item for which funds are requested. Each budget item will be assigned to a level of performance as defined under **Error! Reference source not found.**. Performance goals will be expressed as a tangible, measurable objective, against which actual achievement can be compared, including a goal expressed as a quantitative standard, value, or rate. In the funding arguments for different budget activities, districts must cite the specific performance that is intended to be produced by each work package.

a. Condition Assessments. All Civil Works project assets and major components will have an approved current rating indicating the operational condition of that asset or component relating to the intended delivery of project benefits. Ratings are developed with business line specific guidance such as HydroAMP for hydropower projects, or Operational Condition Assessments for Navigation and Flood Risk Management projects.

b. Risk Assessment of operational project risk is available for work packages through the use of Relative Risk Matrices except for Inland Navigation Locks & Dams, which uses the Operational Risk Assessment web- tool that uses a Risk Reduction value instead of the Relative Risk value.

c. Relative Risk Matrix (RRM). The ability of projects to meet their performance goals are subject to risks that affect performance. In order to express the uncertainty inherent in meeting performance goals, a risk assessment is needed. The assessment evaluates component condition and the consequence of failure to produce an indication of the relative risk to the delivery of project benefits.

A Relative Risk Matrix allows for a consistent approach to formulating this. These matrices assist in the prioritization of work/budgeting because work packages to preclude failures with high consequences would be readily apparent. O&M budget development uses a single common Relative Risk Matrix for the FRM, REC, EN (ENS and AER), and WTR business lines shown as **Error! Reference source not found.**. NAV and HYD each have an individual Relative Risk Matrix in their respective PDMs specific to each business line.

Consequence categories will be determined using the business line specific consequence category tables in each respective business line section of the PDM (except Bridges, which will be determined according to Section **Error! Reference source not found.**, and Boundary and Encroachment, which will be determined according to Section **Error! Reference source not found.**). The condition assessment ratings will be used in conjunction with consequence categories to determine 1-25 relative risk values by cross referencing five levels of consequence category values on the vertical axis of **Error! Reference source not found.** with five levels of condition classification across the horizontal axis at the top of the table.

Table E-2-1. Relative Risk Ranking Matrix For Business Lines Excluding NAV and HYD

CONSEQUENCE CATEGORY	CONDITION CLASSIFICATION F	D	C	B	A
I	1	2	6	10	15
II	3	5	9	14	19
III	4	8	13	18	22
IV	7	12	17	21	24
V	11	16	20	23	25

E-2-3: Integrated Management Guidance. Key to successful management of assets is the ability to ensure that the actual execution of appropriated funds reflects the investment decisions made during budget formulation. As such, alignment of CW-IFD, P2, CEFMS, and FEM must be established across both budget development and execution in order to track investment decisions at the asset level as well as the associated resulting changes in condition and risk (see Figure E-2 1). To facilitate integrated management of Civil Works assets, the following guidance will be followed to create linkages between the systems.

a. Each O&M work package will be associated with the pertinent major asset using the constructed asset's Feature Codes. 'PRIMARY FEATURE CODE' should be populated with the Feature Code for the major constructed asset that the budget work package supports. 'ADDITIONAL FEATURE CODES' would list additional Feature Codes associated with other real property assets that the work package will address. These will typically be associated with Common O&M work.

b. FEM: All asset deficiencies should be captured in FEM Work orders, according to Phase 3 of the Maintenance Management Improvement Plan (MMIP). Each SWA maintenance work package will have an individual FEM work order. However, for SWA maintenance work packages with the same activity but separate WCCs, the work order may use "Related Records" in FEM to link the work packages. Additionally, it is required that in FEM, the Work Order will contain the minimum:

- Work Order Title
- Long Description with work package justification
- Description including the WCC

- Status = WFUNDS
- Command Work Type = DM (Deferred Maintenance)
- Work Order Type = SPWA (Specific Work Activity)
- Ordering Work Item
- Estimated Capability of work package

FEM Budget Package Guidance has been developed through the USACE Maintenance Management effort. This guidance addresses creating work orders and transitioning prior FY work orders that were not funded in the President's Budget or Workplan and are being resubmitted. Every effort will be made to resolve and/or close any of these outstanding Work Orders. Guidance can be found at: https://cops.usace.army.mil/sites/AM/FEM/FEMBudget%20Development%20Docs/Forms/AllItems.aspx

c. CW-IFD: The "FEM Work Order Number" field will be populated for each Specific Work Activity work package in CW-IFD to enhance the validity of the work package. The FEM work order number generated in from in the guidance above will be input into this field.

d. P2: For all Specific Work Activity packages, a single CW-IFD Work Package ID will be entered into P2 for the associated P2 Activities. In no cases will multiple CW-IFD Work Package IDs be entered for an individual P2 Activity, but multiple P2 activities may have the same CW-IFD Work Package ID. The work package ID will be input in the "work package ID" user-defined field in P2. The entry of the CW-IFD Work Package Number into P2 will align P2 with CW-IFD. This will also align budgeted Work Package information with CEFMS financial data by way of the P2-CEFMS interface. The P2-CEFMS interface creates a unique CEFMS Work Item for each unique P2 Activity ID allowing for detailed financial data information to be retrieved for each P2 Activity ID.

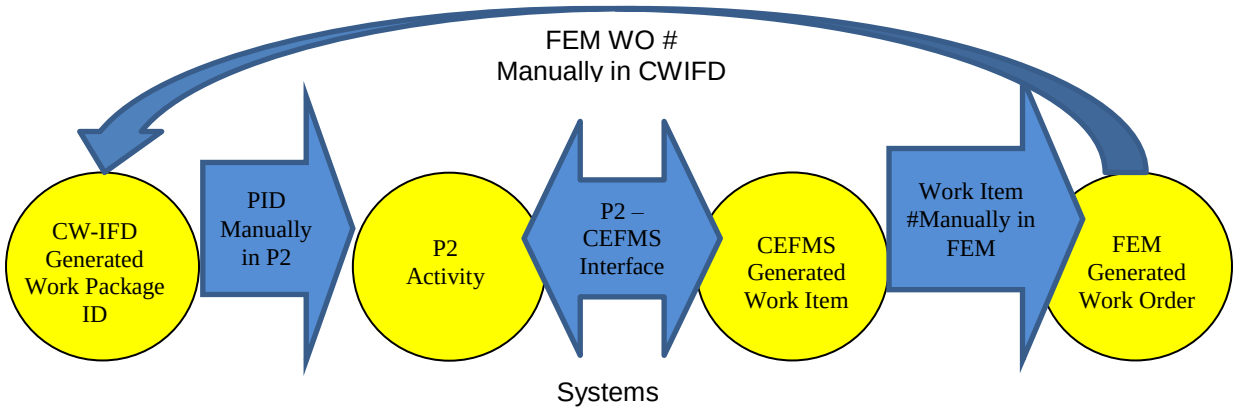

Figure E-2-1: Links Between Budgeting and Execution

E-2-4: National Programs. Includes Inspection of Completed Works (ICW), Project Condition Surveys (PCS), Scheduling Reservoir Operations (SRO), Surveillance of Northern Boundary Waters (SNBW) and Inspection of Ecosystem Restoration Projects.

a. Each of these programs will have a budget activity per state, per district, and per appropriation.

(1) In those cases where these programs are performed in more than one state, the district will have a work package for each state. The work packages do not necessarily have to be associated with the same level of performance. For example, Little Rock District (SWL) has projects in Missouri and Arkansas; therefore SWL should have ICW work packages on the commensurate project by state, one for Missouri and one for Arkansas.

(2) Districts, even Districts in different MSCs, may have ICW work packages in the same state; these work packages should be included in the same state project. For example, Buffalo District (LRB), Pittsburgh District (LRP), Huntington District (LRH), and Louisville District (LRL) all have ICW work packages in Ohio. These Ohio ICW work packages combine in ICW project for Ohio. Baltimore District (NAB), Philadelphia District (NAP), Buffalo District (LRB), and Pittsburgh District (LRP) have ICW budget activities in Pennsylvania; they should all be included in one Pennsylvania ICW project.

(3) O&M-funded ICW projects and MR&T O&M-funded ICW projects may also exist in the same state. The O&M-funded ICW work packages and the MR&T O&M-funded ICW work packages in a state will be included in two separate ICW projects.

b. The Justification/Remarks will indicate how many surveys, inspections, actions, etc. of that district's total will be performed in a particular work packages for the respective business line. For example, an ICW work package for SWL for Missouri would state five critical inspections would be conducted out of a total of 10 in the BY. Additional ICW work package(s) would be included as justified by increased performance or benefits.

E-2-5. Category-Class-Subclass Codes for Harbor Maintenance Trust Fund. It is important to use the correct CCS on work packages so that Work Allowance Documents (WADs) and Funding Authorization Documents (FADs) that result from the work packages derive funding from the correct Fund Type (General Fund or HMTF).

a. WADs and FADs for navigation-related specific costs, other than on fuel-taxed inland and intracoastal waterways designated by Public Law 95-502 and Public Law 99-662, will be derived from the HMTF and will use one of the following CCS: 111, 113, 114, 11D, 11E, 11G, 125, 131, 133, 134, 138, 411, 421, 430, 450, 460, 470, 480, and 491.

b. For O&M work packages for non-HMTF specific costs, do not use the aforementioned CCS.

c. For an O&M-funded project with joint use costs that are partially derived from the HMTF, the PR&C for joint use costs must include two line items, one for HMTF and one for General Fund. The CCS applicable to specific HMTF costs and specific non-HMTF costs, respectively, should be used.

d. For MR&T (Maintenance) costs for the five harbor projects (Baton Rouge, Greenville, Helena, Memphis, and Vicksburg), use CCS 410. Do not use CCS 410 for other projects.

e. Guidance can be found in CECW-I/CERM-F Memorandum dated 20 September 2017, Subject: Allocation and Tracking of Funding Derived from Harbor Maintenance and Inland Waterways Trust Funds.

APPENDIX E-3

Operation and Maintenance

O&M 20/20 Budget Development Framework

E-3-1: Overview. O&M budget development follows the O&M 20/20 Budget Framework, which states that similar projects and assets should have largely similar activities and costs, and those similarities should be reflected in the annual budget development. This framework will help articulate priorities and link proposed investments to specific anticipated mission performance outputs. Additional information can be found at https://intranet.usace.army.mil/hq/cecw/Pages/OM2020.aspx.

The O&M 20/20 Budget Framework organizes the O&M budget by types of work and levels of performance. 'Common O&M'' and 'Specific Work Activities' distinguish the types of activities contained in each work package. 'No Mission', 'Partial Mission', and 'Full Mission' distinguish the funding necessary to achieve different levels of performance.

Figure E-3-1 shows the O&M Budget Development Framework as a guide to consistently characterize and organize O&M work packages.

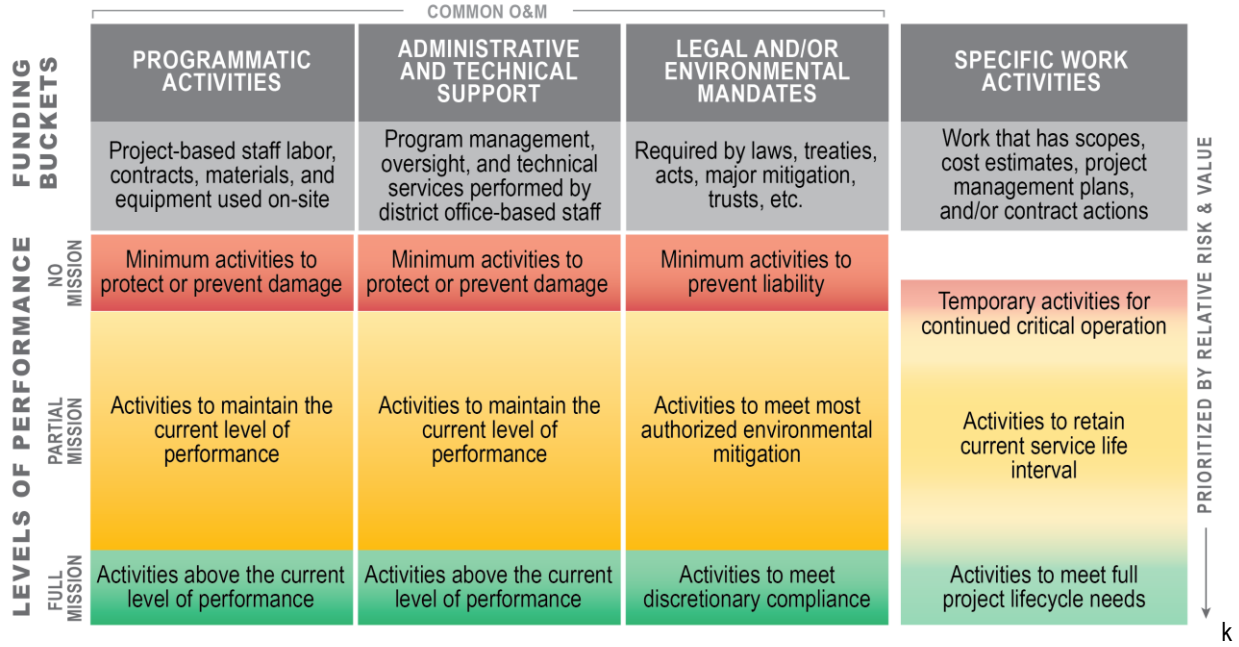

Figure E-3-1. O&M 20/20 Budget Development Framework

E-3-2: Funding Bucket Definitions. The O&M 20/20 Budget Development Framework divides O&M activities into four separate buckets as shown in Figure E-3-2.

- Common O&M is divided into three buckets: Programmatic Activities, Administrative and Technical Support, and Legal and/or Environmental Mandates. A fourth funding bucket is used for Specific Work Activities, which include work packages performing significant recurring, corrective, and component renewal maintenance. Specific Work Activities also contains marine construction or fleet work, including dredging and revetment.

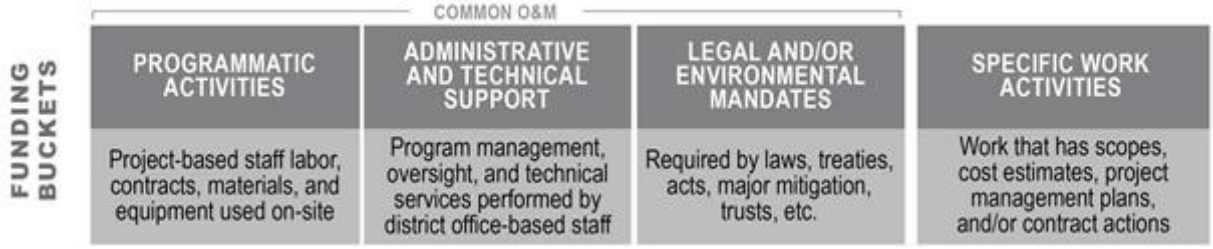

Figure E-3-2. Funding Buckets

a. Common O&M Work Packages include work that is commonly performed at similar projects. Examples of activities to include in each of the three buckets under Common O&M are:

(1) Programmatic Activities: costs associated with operation and common recurring maintenance for O&M funded projects performed at the project. This includes project-based staff labor, contracts, materials, and equipment used on-site.

(2) Administrative and Technical Support: District Office-based staff for program management, oversight and technical services (e.g., inspections, real estate, planning, engineering, environmental, etc.)

(3) Legal and/or Environmental Mandates: activities that are required because the project exists for No Mission, or because the project is operating for Partial and Full Mission levels of performance (e.g., legal, treaties, ESA compliance, major mitigation, trusts, etc.). This bucket captures differences in costs between similar projects that may have vastly different legal or environmental requirements.

b. Specific Work Activity Work Packages include work that has scopes, cost estimates, project management plans and/or contract actions. It also includes larger scale planned operation or planned component renewal efforts that have a specific beginning and end and require a greater level of rigor and documentation in the form of planning, scoping, contracting, etc.

(1) Each Specific Work Activity must be shown separately to allow for individual funding decisions based on performance metrics and risk-based indices.

(2) The entire cost for the all Specific Work Activities must be included in the work package or work package group (e.g., labor to perform the work must be included; it cannot be included in a separate package).

(3) Specific Work Activities include, but are not limited to:

(a) Project-specific marine construction work or fleet work, such as dredging, revetment work, and coastal structures, whether by contract or hired labor.

(b) Recurring (cyclical) and Component Renewal maintenance requirements to support anticipated mission delivery or to meet anticipated levels of service in subsequent budget years.

(c) Recapitalization, Major Maintenance and Major Rehabilitation.

(d) Estimated corrective maintenance (proactive) resourcing for commonly occurring breakdown maintenance.

(e) Maintenance to sustain project performance beyond BY+2; or full maintenance enhancing the original service life of assets (or producing a new service life interval).

E-3-3: Level of Performance Definitions. Figure E-3 3 shows Level of Performance (LOP) in the O&M 20/20 Budget Framework. LOP differentiates between the minimum funding required to capture the fixed cost of ownership (No Mission); the additional funding required to deliver the majority of project benefits at the current LOP, i.e., normal operation (Partial Mission); and the additional funding required to deliver an increased LOP up to providing all project benefits and fully preserve the facility for the foreseeable future (Full Mission). The LOP does not reflect any priority, only the costs related to delivering specific performance outputs.

Figure E-3-3. Levels of Performance

Additional LOP details applicable to a specific Business Line will be referenced in the PDM for that particular Business Line. The Organize tab of the WP Organize – Prioritize Tool provides specific guidance on activities to include in each LOP as a supplement to the definitions below. The WP Organize – Prioritize Tool can be found here: https://intranet.usace.army.mil/hq/cecw/Pages/OM2020.aspx

a. No Mission LOP. Minimum activities to prevent liability or prevent damage: The No Mission LOP captures the minimum cost associated owning assets and does not provide mission performance or delivery any benefits to the project. It includes only critical O&M activities that either prevent liability (financial or legal penalty) or prevent damage / protect property and infrastructure. No Mission LOP does not fund work to support mothballing a facility.

b. Partial Mission LOP: Provides current performance and reasonable availability of with tolerable risk. The Partial Mission LOP includes O&M activities that address near-term project needs and "must-have" activities necessary to ensure basic project safety, to keep the project operating, and to

deliver its mission. This LOP provides reasonable assurance of project availability with tolerable risk (for FY20 budget formulation, "tolerable risk" may be defined as the inherent plus operating risks which have been customarily accepted by project stakeholders). Partial Mission LOP activities are funded in addition to and separately from No Mission LOP funds. Most projects are currently performing at this level.

c. Full Mission LOP: Provides increased performance above the current level of performance. The Full Mission LOP includes O&M activities above the current level of performance, up to and including full project lifecycle needs, such as completing all preventive maintenance, complying with all guidance, preserving project assets, and planning for project renewal and sustainment. This LOP provides risk reduction for project availability to meet its authorized purpose, or full depth/dimension. Full Mission LOP activities are funded in addition to and separately from No Mission and Partial Mission LOP funds.

APPENDIX E-4

Operation and Maintenance

O&M Budget Development.

E-4-1: Overview. An integrated O&M budget will be developed by each MSC. This integrated budget applies to all business lines and no business line or project is to be constrained by a specific percentage or dollar amount.

Figure E-4-1 provides an overview of the budget development process. Organizing work packages (WPs) is discussed in Sections E-4-2 through E-4-5. Prioritizing and ranking are discussed in Sections E-4-6 and E-4-7.

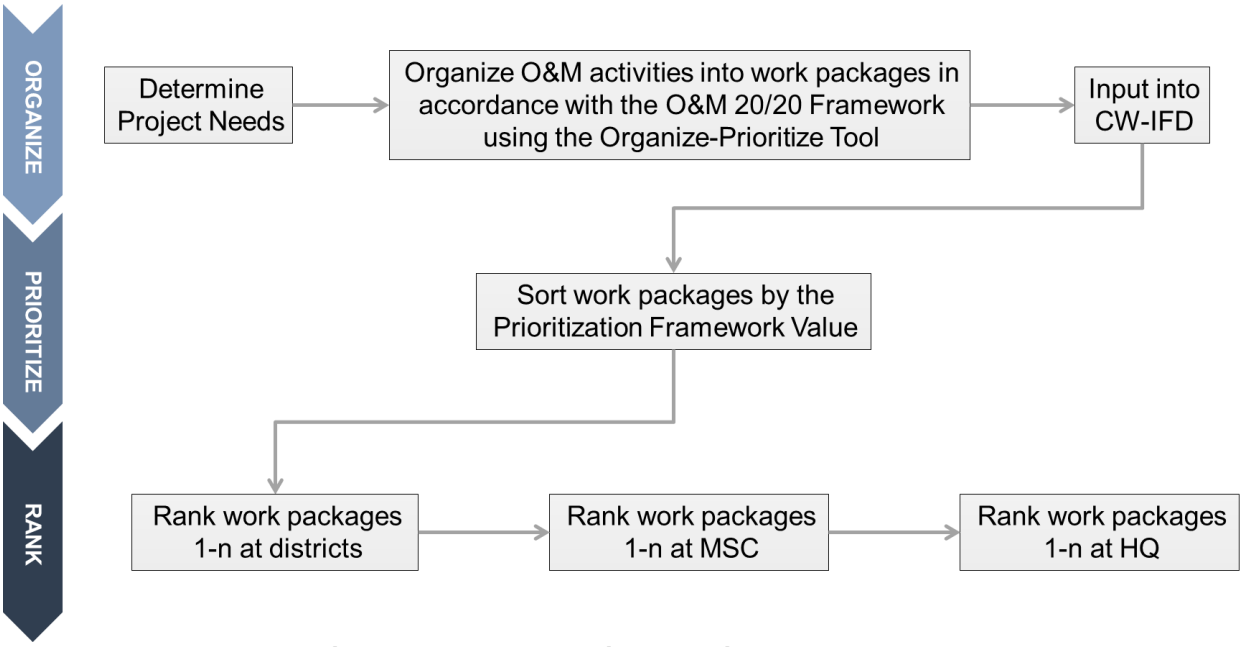

Figure E-4-1. O&M Budget Development Process

E-4-2: Operation vs Maintenance. Budget activities relate to either operation or maintenance, depending upon the nature of the work. In this context, operation should be considered the cost “to use”; while maintenance should be considered the cost “to take care of.” WCCs provide uniform guidance for the appropriate placement of budget activities within operation or maintenance.

a. Operation work may include work that is of a recurring nature, and is integral to continued project operation. Operation activities include facility operation such as lock and dam operation, custodial services, removing ice and snow, debris, trash, cleaning; replacing lighting elements. This work is performed on an annual basis, typically by hired labor or small contract (service contract, purchase order, etc.), and is directly related to the day-to-day operation of the project or area not the facility/equipment life-cycle. Operation work should be placed under operation WCCs.

b. Maintenance work, specifically, preventive maintenance and inspections, cyclical (recurring) maintenance, corrective maintenance, and component renewal should be placed under maintenance WCCs. Annual recurring costs for corrective maintenance work items, (e.g., minor roof repairs one year, placing signs and markers, painting of guardrails, wall striping, repainting comfort stations, etc.), also belong under maintenance WCCs.

Component Renewals are non-recurring maintenance costs of major assets, such as spillway gate replacements, navigation lock gate replacements, hydroelectric power generator rewinding, and turbine replacement. This work is not a capital improvement. Costs almost always exceed capital thresholds and generally are funded over multiple budget cycles.

E-4-3: O&M Work Packages. In a performance-based budget, every work package must relate to performance goals expressed as a tangible, measurable objective, against which actual achievement can be compared, including a goal expressed as a quantitative standard, value, or rate for the Business Line. These linkages and the necessity of the work package to performance goal attainment must be made clear to all levels of reviewers, both internal and external (e.g., OMB or Congress) to the Corps.

The impacts of the work package on specific areas of customer service, project performance, infrastructure investment, personnel or public safety, the local community, statutory requirements, or other considerations should be included in the funding argument if not covered in the performance measures. In developing a work package, all costs required to accomplish the work intended by the specific WCC must be included in the capability amount (refer to the Glossary for the definition of capability). All work packages will have a maximum of one WCC each.

a. Each contract, task order, or contract option, and the associated support costs for that contract should be a separate work package.

b. Each set of plans and specifications supporting a contract solicitation should be a separate work package.

c. If the work in one work package belongs to more than one business line, the work package must be replaced with two or more work packages. Accordingly, the MSC or Lab must ensure that all work in an O&M work package in CW-IFD is in the same business line as all other work in that work package.

d. All work in an O&M work package assigned a “joint activities” Work Category Code must be truly joint and not specific to any business line. This applies to multipurpose projects as well as other projects, and applies to Common O&M work packages as well as Specific Work Activity work packages.

e. HQUSACE monitors execution in the O&M appropriation and compares it to allocations in the O&M appropriation to ensure that allocation decisions are being followed or that deviations can be explained (for instance, to address accidents, outages, and flood damage repairs).

f. Endangered Species Protection work packages must include language specific to each package that identifies the name of Biological Opinion and /or court order (including date and reasonable and prudent measure) in the Work Package Description. All packages that fund work required by a biological opinion will be budgeted with the correct Phase Activity Codes (see Main EC, Table 3b). This

also applies to mitigation work that is part of Biological Opinion requirements. Packages that describe work in a recovery plan (not biological opinion) should not use this phase activity code.

Mitigation work packages must include language specific to authorizing document of the mitigation and brief description of the progress the item makes towards full implementation of mitigation in the Work Package Description. All packages that fund mitigation work will be budgeted with the correct Phase Activity Codes (see Main EC, Table 3b)

g. All annual maintenance curation costs and cultural resource management costs, other than Native American Graves Protection and Repatriation Act (NAGPRA), should be included in the appropriate WCC, within project work packages under the primary business line for which the archeological materials were removed or in joint projects according to the Joint Section of the PDM. Funding requirements for activities to ensure compliance with Section 5–7 of the NAGPRA (PL 101-601) and with 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, should follow the directions for Cultural Resources (NAGPRA) in the Remaining Items Appendix.

h. Descriptive examples of Work Packages organized according to the O&M 20/20 Budget Development Framework have been developed for most business lines showing the intended relationship between WCCs, Levels of Performance, and business line performance measures. These examples will be available for reference at the O&M 20/20 Intranet site located here: https://intranet.usace.army.mil/hq/cecw/Pages/OM2020.aspx, under the “Work Package Development Tool” section on the website.

E-4-4: Linking Work Packages. Individual work packages that are related and represent one useful portion of work must be linked.

a. Work packages may be linked if they involve more than one WCC, more than one funding bucket, and, for Specific Work Activities, more than one LOP.

b. Each work package to be linked will be identified by including "(x of y)" at the end of the work package title; with "x" representing the order of the individual work package within the link and "y" representing the total number of work packages being linked.

c. Each work package that is linked must have the same rank (District rank, MSC rank, BLM rank, and HQ Rank).

d. For Common O&M packages, linked packages will represent work from one WCC at one LOP, but can link the funding buckets: Programmatic Activities, Administrative and Technical Support, and Legal and/or Environmental Mandates (e.g., partial mission requirements for WCC 60210).

e. For Specific Work Activity packages, linked packages will represent one useful portion of work, but may link multiple WCCs (e.g., disposal area management and associated dredging activities), and may link No Mission and Partial Mission only.

E-4-5: CW-IFD Work Package Requirements.

a. O&M Work Package Titles.

(1) For Common O&M packages, the work package title should be the "Short Title" of the WCC (e.g., 60210 = "Operation for Flood Risk Management").

(2) For Specific Work Activity packages, the work package title should be a succinct description of the scope of the package, and should include an "action" verb, to show what's being done (e.g., "Dredge Outer Harbor," "Repair Spillway Bridge," or "Update Master Plan"). (3) For linked work packages, the titles will include "(x of y)" as described in Section **Error! Reference source not found.**.

b. O&M Work Package Descriptions.

(1) For Common O&M, work package descriptions should include applicable portions of the Work Category Code description assigned to the work package.

(2) For Specific Work Activities, work package descriptions should include all activities to be accomplished by the work package.

(3) If the work package spans multiple years, include “Multi-year Package” at the beginning of the work package description.

c. O&M Work Package Justifications

(1) Care should be taken to write all funding justifications clearly and concisely; well-written justifications are essential to convince reviewers who are not familiar with the work to fund your needs.

(2) If the work package spans multiple years, the justification should include the activities to be accomplished in the BY.

(3) Characteristics of a quality justification statement:

(a) First sentence or two summarizes the issue and explicitly quantifies the expected return on the investment.

(b) Clearly identifies and explains why the investment is needed.

(c) Includes any pertinent data that supports the issue, to include, references to policy and formal reports down to the paragraph, page, etc.

(d) Explains why the investment cannot be deferred.

E-4-6: Prioritization.

a. The prioritization process for O&M work packages uses the level of performance and pertinent work package data to produce a broad characterization of all O&M work packages for all business lines.

b. A Prioritization Framework has been created to prioritize types of work into general bands of prioritization values. A new required field has been added to CW-IFD to assign a Prioritization Framework value. The Prioritization Framework is part of the WP Organize-Prioritize Tool and can be found here: https://intranet.usace.army.mil/hq/cecw/Pages/OM2020.aspx

(1) The Prioritization Framework uses numeric values to prioritize Common O&M and those Specific Work Activities that are commonly performed across the enterprise (i.e., dredging and inspections).

(2) The Prioritization Framework uses alpha characters to identify Specific Work Activities that are not commonly performed (i.e. repairs and replacements), which will then be ranked according to the merits of each work package. The alpha characters in the framework do not imply priority.

E-4-7: Ranking.

a. The prioritization results obtained under Section **Error! Reference source not found.** above will be ranked across all business lines at the District, MSC, and HQ levels from 1-n.

(1) Specific Work Activity packages assigned an alpha character in the Prioritization Framework will be ranked among the numerically prioritized packages as needed to meet mission needs.

(2) Ranking should reflect the use of data generated from all available risk-informed tools and processes for each business line in a coherent, repeatable, and transparent fashion. Ranking should also consider underlying data (or the lack thereof), unique project requirements, and/or the expert judgment of knowledgeable individuals.

(3) The ranking process may position a work package higher or lower than the value band it was assigned in the Prioritization Framework field. The work package should stand on its own merits to justify the ranking decision.

(4) When blending the ranks across projects, some Full Mission LOP work packages may be ranked higher than other Partial Mission LOP work packages.

b. In developing the national budget, HQ USACE will rely on the final rankings assigned by the MSC in CW-IFD, provided they meet the requirements and overall policy of this guidance. It is therefore important that rank assignments be made according to the relative importance of the work as it relates to reducing operational mission risk so as to ensure that the highest priority activities can be accomplished within available resource limits in order to maximize mission performance and delivery of benefits.

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APPENDIX E-5

Operation and Maintenance

O&M Programs

E-5-1: Overview. This section provides guidance on programs that apply across O&M projects. It provides a uniform approach to these programs across the O&M appropriation, to include the O&M portion of the MR&T appropriation.

E-5-2: Deficiency Correction Projects. Deficiency correction projects are undertaken to remedy design and construction deficiencies, according to ER 1165-2-119 Modifications to Completed Projects, under the following two circumstances: 1) a project constructed with Civil Works funds; and maintained and operated by a non-Federal entity; or 2) a Federally maintained and operated project, where the cost of the remedy is $5 million or more (less costly remedies at Federally-operated projects are funded as part of project O&M).

O&M activities include evaluation reports and preconstruction engineering and design (PED).

a. For a project operated and maintained by the Corps, the evaluation report will be funded from O&M or MR&T funds.

b. For a project operated and maintained by a non-Federal entity, the evaluation report may be funded from Inspection of Completed Works (ICW).

c. Once the Evaluation Report has been approved by HQUSACE, PED for construction will be funded from O&M or MR&T M funds until:

(1) Construction new start is included in the budget OR

(2) Construction is specifically funded through appropriations.

E-5-3: USACE Levee Safety Program. Risk-informed decision-making will be used to determine program budget priorities and improve decision-making by understanding the levee risk (characterized by a Levee Safety Action Classification (LSAC)) in relation to the USACE Tolerable Risk Guidelines (TRG) for levee systems. LSACs range from LSAC 1, “very high” urgency of action to LSAC 5, “very low” urgency of action (maintain routine activities). Risk-informed decision-making will be applied within the USACE Levee Safety Program on a portfolio level and on an individual levee system level. Funding to govern and implement the USACE Levee Safety Program is to be budgeted as described in the FRM PDM.

E-5-4. Section 408 - Requests to Alter Civil Works Projects. Budget requests associated with requests to alter any USACE Civil Works Project per 33 USC 408 (Section 408) should follow the directions for Review of Non-Federal Alterations of Civil Works Projects in the Appendix J, (Remaining Items).

E-5-5. USACE Dam Safety Program. Site specific conditions must be considered when determining costs for each project, following collaboration between the District Dam Safety and Operations experts. Dam Safety monitoring, evaluations, and cyclic / recurring dam safety activities are eligible for budgeting as Administrative and Technical activities. Essential dam safety activities should be viewed as Common

O&M. The list below is not a comprehensive list and additional dam safety work items may be programmed.

a. O&M funded dam safety actions will be prioritized based on risk. Budgeted dam safety items consider the performance history, potential failure modes, and severity of adverse consequences associated with each operating project. The assigned Dam Safety Action Classification (DSAC) and agency risk reduction recommendations (as identified in the Dam Safety Program Management Tools database) must be considered in prioritization.

b. Routine dam safety monitoring, inspections, instrumentation data collection, instrumentation maintenance, surveys, training, Emergency Action Plan Updates, dam safety training, and dam safety exercises are considered critical Common O&M and/or critical Specific Work Activities and may be eligible to be budgeted to ensure safety despite a No Mission LOP. Care must be taken to properly budget using existing WCCs and Phase Activity Codes to allow accurate tracking of routine dam safety budgeting and expenditures, severable from the overall project operating costs.

c. Dam Safety Interim Risk Reduction Measures (IRRM).

(1) IRRM Plans. IRRM Plans are required for Dam Safety Action Classification (DSAC) 1, 2 and 3 projects to reduce the probability and consequences of unacceptable performance while long term remedial measures are pursued. Funding for IRRM Plan preparation and implementation will be from the O&M appropriation for the project and may be budgeted under Common O&M. The IRRM work will be recorded in the proper Operation WCCs or Maintenance WCCs, depending on the nature of the activity.

(2) Approved Dam Safety IRRMs must be a component of an IRRM plan for DSAC 1, 2, and 3 projects and will be identified in budget submittal as a separate work package. IRRM work packages will be identified with the Phase Activity Code of SI and the IRRM plan will be referenced in the “Work Package Description” field in CW-IFD. The IRRMs could be characterized as Common O&M and/or Specific Work Activities and should be budgeted accordingly to address deficiencies for failure modes that drive risks to public safety. Water Control Plan Updates, Emergency Action Plan Updates, Emergency Exercises, and Instrumentation Data Collection and Monitoring are considered critical Specific Work Activities. Examples of Common O&M and Specific Work Activities are: Increased monitoring for a critical failure mode is a Common O&M activity while stockpiling emergency materials for a critical failure mode is a Specific Work Activity. IRRM repair actions, such as emergency rock stockpiles, repairs to spillway gates or improvements to seepage control systems may be budgeted as other Specific Work Activities.

d. Special Inspections for Project Features (e.g., Hydraulic Steel Structures, Scour surveys, and stilling basin inspections), Periodic Inspections and Periodic Assessments will be budgeted as Specific Work Activities. Periodic Assessments, which expand the scope of Periodic Inspections (PI), should be scheduled on all dams every 10 years. Approximately one half of the PIs scheduled for FY20 will be budgeted as PAs and will include labor and development costs to conduct a Potential Failure Mode Analysis (PFMA) and a Semi-Quantitative Risk Assessment (SQRA). Districts must distinguish the projects selected for PAs in their remarks, and budget for additional data collection and technical and administrative support as part of the PA/PI costs. The district is responsible for funding the PFMA, SQRA, and PI activities for their district PA/PI Team. The Risk Management Center will provide labor and travel funding for the Risk Facilitator and a co-facilitator, who are independent of the district, and will be utilized to lead the PFMA/SQRA activities.

e. Critical Common O&M Dam Safety Activities.

(1) Critical Common O&M, Administrative and Technical activities include the following:

(a) Monitoring and Evaluation; Program Coordination, Instrument Data Collection and Management, Data Review and Analysis, Instrument Maintenance and Calibration, Survey Monitoring Data Collection and Management.

(b) Annual Inspections

(c) Emergency Preparedness; Annual update of EAP notification sub-plans, Periodic updates to EAP's as needed, Dam Safety Training for the Operating project personnel every five years.

(d) Operating projects have been assigned Dam Safety Action Classifications by HQUSACE. See ER 1110-2-1156 for DSAC definitions.

E-5-6. USACE Bridge Safety Program. Bridges are vital to the nation's highway and transportation systems, especially high-level highway bridges over waterways and canals. Bridges are also mission critical for flood risk management projects as well as for public access in our recreation and environmental stewardship lands.

a. Bridge Operational Condition and Risk. The U.S. Army Corps of Engineers, through Asset Management, has been developing condition and risk assessment methodologies to provide the appropriate level of accuracy and rigor to support risk informed investment decisions during the budget development process. A universal assessment methodology is guided through the development of Operational Condition Assessments (OCA) and Operational Risk Assessments (ORA) for various business lines and bridges. Results from the OCA/ORA assessments include inventory and condition information as well as condition classification values (A, B, C, D or F), consequence category values (I, II, III, IV or V), relative risk values (1-25), and a relative risk matrix index (1-5). These values will be used to identify and prioritize activities and budget packages across all business line. CEBIS will be implemented in developing the FY20 budget by each business line with Specific Work Activity bridge requirements. For all business lines using a risk informed methodology for prioritization of requirements, the relative risk matrix will be used as determined by the guidelines and process in Corps of Engineers Bridge Information Systems (CEBIS) and QMS (see below). The relative risk values are determined using the process outlined in Section **Error! Reference source not found.** and **Error! Reference source not found.**. These values can be directly converted to a relative risk matrix index of 1-5 that will correlate to a Bridge Safety Action Classification (BSAC) level of (I-V) as seen in **Error! Reference source not found.**. This is for consistency with other on-going safety program risk assessments, such as the Dam Safety Action Classification (DSAC), codes of (1-5) which are used to prioritize program activities or corrective action for deficiencies. In **Error! Reference source not found.**, a value of 1 is the most critical need and 5 is a non-critical need.

(1) The guidelines document for the Bridge OCA/ORA Process will be functionally programmed into CEBIS for use by inspection Team Leaders as well as the full documentation provided in the CEBIS Bridge Reference Library (BRL) in the "Criteria/Guidance" folder. CEBIS is accessed at: https://cebis.usace.army.mil/CEBIS/cebis_2pub.pub_utl.main and requires ACE-IT permission in UPASS.

(2) For non-CEBIS user, the Bridge OCA/ORA process 08150 can be found on the Quality Management System (QMS) at: https://apps.usace.army.mil/sites/QMS/DC/_layouts/15/WopiFrame.aspx?sourcedoc=/sites/QMS/DC/QM

SDocumentLibrary/HQ%20-%20USACE/08150%20%20Bridge%20Operational%20Condition-Risk%20Assessment%20Process.docx&action=default&DefaultItemOpen=1.

Table E-5-1. Relative Risk Index / Bridge Safety Action Classification Matrix

CONSEQUENCE CATEGORY	CONDITION CLASSIFICATION				
	F	D	C	B	A
I	1(I)	1(I)	2(II)	2(II)	3(III)
II	1(I)	2(II)	2(II)	3(III)	4(IV)
III	2(II)	2(II)	3(III)	4(IV)	4(IV)
IV	2(II)	3(III)	4(IV)	4(IV)	5(V)
V	3(III)	4(IV)	4(IV)	5(V)	5(V)

E-5-7: Critical Infrastructure Protection and Resilience Program Requirements. USACE has established the Critical Infrastructure Protection and Resilience (CIPR) Program to achieve a more secure and more resilient critical infrastructure portfolio by enhancing its protection capabilities in order to prevent, deter, or mitigate the effects of manmade incidents and improve preparedness, response, and rapid recovery in the event of a physical or cyber attack, natural disaster, and other emergencies. The CIPR program with the Critical Infrastructure Cyber Security Center of Expertise (CICSCX) leads physical and cyber risk assessment and prioritization efforts for USACE critical infrastructure portfolio in order to enhance its protection and resilience. The program includes both critical Common O&M actions (security and operations personnel training, cyber security awareness and implementation training, cyber security certification and accreditation process, security patrol and monitoring, Common O&M physical and cyber security equipment maintenance, physical and cyber security risk assessments, industrial control systems (ICS)/ Supervisory Control and Data Acquisition (SCADA) system security configuration and system lifecycle management and refresh, blast damage assessment studies, dam security exercises, operating interim risk reduction measures, and physical and cyber security inspections) and Specific Work Activity actions (protection and operational interim risk reduction measures, physical and cyber security implementation, construction retrofits/upgrades and system hardening for vulnerability mitigation, and surge in protective measures due to increased threat levels). Site specific conditions must be considered when determining costs for each project, following collaboration between the District Commander and the Chief of Operations, in coordination with security experts and Business Line Managers. The CIPR program activities are described in further detail in the PDMs for Flood Risk Management, Hydropower, and Navigation.

a. Prioritization of O&M Funded Critical Infrastructure. O&M funded critical infrastructure protection actions will be prioritized based on relative risk. Budgeted critical infrastructure protection items consider the three main security risk components: Threat (the probability that a given attack scenario will occur, where the scenario involves an attack vector against a given target), Vulnerability (the probability that the attack will be successful, given it is attempted), and Consequences (the predicted losses, given a successful attack, typically estimated in terms of loss of life or economic loss associated with each operating project).

b. Budgeting for Critical Infrastructure. Critical infrastructure security and operations personnel training, security patrol and monitoring, routine security equipment maintenance, physical and cyber security risk assessments, cyber security awareness and implementation training, cyber security certification and accreditation process, industrial control systems (ICS)/Supervisory Control and Data Acquisition (SCADA) system security configuration and system lifecycle management and refresh, blast damage assessment studies, dam security exercises, operating interim risk reduction measures, and physical and cyber security inspections will be budgeted to ensure safe and secure operations per guidance in Section .

A higher standard of care is warranted for projects that are deemed of highest relative criticality, have known dam safety deficiencies, or because their inherent characteristics (reservoir size, construction methods, geographic setting, etc.) pose unacceptable life safety risks to the public. Care must be taken to properly budget using existing WCCs to allow accurate tracking of Common O&M and Specific Work Activity critical infrastructure protection budgeting and expenditures, severable from the overall project operating costs.

c. Critical Infrastructure Protection and Resilience (CIPR) Program Activities

(1) Only critical Common O&M critical infrastructure protection activities to ensure USACE meets minimum fundamental security and protection standards as determined by the District Commander may be included under a No Mission or Partial Mission LOP. The District Commander recommendations will be provided through the District's Operations Chief to the FRM, NAV or HYD business line managers. Activities needed to meet DoD mandated cyber security certification and accreditation requirements will be included in Common O&M and may be characterized as No Mission. Other Critical Infrastructure Protection activities will be included as Common O&M under a Partial Mission LOP or Specific Work Activities as warranted. Priority and costs for the tasks vary for each project, due to differences in project age, size, reservoir operations, construction methods, features and performance history. Consequently, each District is responsible to develop program costs based upon their unique projects.

(2) Critical Common O&M activities may include the following as applicable:

(a) Security Training and Monitoring; Security Patrol and Facility Monitoring, Program Coordination, Annual Training for Security & Law Enforcement and Operations Personnel, Adequate Equipment for Security and Law Enforcement Personnel, cyber security awareness and implementation training, and appointed Information Assurance (IA) personnel qualification certifications.

(b) Common O&M Physical and Cyber Security Equipment Maintenance; Includes all costs to maintain and replace structural and/or physical improvements for facility protection and security associated with criminal and terrorist activities. Includes costs to maintain, repair or replace permanent or temporary vehicle barriers, fences, doors and gate locks, signage, lighting, communications equipment, intrusion detection and deterrence systems such as cameras and video surveillance equipment (closed-circuit television), alarms, and access control electronic systems. Includes all costs for ICS lifecycle management including network equipment, computer equipment, programmable logic controllers (PLCs) and remote terminal units (RTUs), software licenses, and maintenance costs.

(3) Specific Work Activities may include the following as applicable:

(a) Inspections and Assessments; Annual Physical and Cyber Security Inspections (PSI), Comprehensive Facility Assessments (CFR), Threat Assessments (TA), Blast Damage Assessments (BDA), and Common Risk Model for Dams (CRM-D) Security Risk Assessments (SRA). The District is responsible for funding the CRM-D SRA and PSI activities for their district CRM-D SRA and PSI Team. The District is also responsible for funding the BDA, to be performed by the U. S. Army Engineer Research and Development Center (ERDC) as part of thee CRM-D SRA implementation. The Critical Infrastructure Protection and Resilience (CIPR) Program Manager will provide labor and travel funding to support a Risk Analyst Facilitator and Risk Analysis Team Cadre member who are both independent of the District, and will be utilized to lead CRM-D SRA implementation activities. The tools to support all these activities are hosted within the Corps of Engineers Security Analysis Tool (CESAT), centrally managed by the CIPR Program Manager office. Annual Federal Information Security Management Act (FISMA) audit and National Institute of Standards and Technology (NIST) review for industrial control systems are also included.

(b) Memoranda of Understanding (MOUs) with State and local jurisdictions security and law enforcement supporting first response efforts.

(c) Emergency Preparedness; Annual update of Site-Specific Security Plan (SSP) and Rapid Recovery Plans (RRP). Security-scenario based training exercises (e.g., drills, workshops, table-top exercises, functional exercises, full exercises) to test plans and operational procedures every three (3) years.

(d) Coordination and support to U. S. Department of Homeland Security (DHS), designated Dams Sector-Specific Agency, in the implementation of critical infrastructure protection and resilience initiatives.

(e) Critical Specific Work Activity critical infrastructure protection to ensure USACE meets minimum fundamental security and protection standards.

(f) Risk-reduction measures, to include implementation of physical and cyber security, protection and operational vulnerability mitigation options to reduce security risks at high-risk critical projects based on CRM-D SRA implementation.

(g) Support implementation of additional security presence and protective measures requirements at critical infrastructure projects due to increased National or regional threat levels.

d. Ranking of Critical Infrastructure. Critical infrastructure projects will be ranked based on the identification and prioritization results obtained through consequence-based screening efforts conducted on USACE's portfolio using the Dams Consequence-Based Top Screen (CTS) methodology. The official list of critical projects is transmitted annually to the Command through a memorandum issued by the Director of Contingency Operations and Homeland Security. These projects will represent the priority in funding for physical and cyber security risk assessments (SRAs) using the Common Risk Model for Dams (CRM-D). For cyber security risk assessments, these projects represent a Tier 1 priority.

E-5-8: USACE Boundary and Encroachment. Maintenance of Government boundary lines and enforcement of Government real estate interests against encroachments are critical to protect life, perform project missions, provide project security and protect natural resources.

a. Budgeting for Boundary and Encroachments. Boundary maintenance and encroachment enforcement will be budgeted across business lines. Maintenance of real estate boundaries and encroachment resolution for fee boundary and fee encroachments will be budgeted under the Environmental Stewardship (ENS) business line through ES CWIFD where a natural resources program exists. Maintenance of boundaries and encroachment resolution for flowage easements and other real estate, other than fee interest, will be budgeted under the FRM or Navigation Business NAV if a FRM mission is not present. All business lines will use the same risk informed matrices.

Additionally, boundary maintenance and encroachment resolution activities will be budgeted as standalone work packages and not combined with other activities. Activities will be budgeted with the correct Phase Activity Codes (see Main EC, Table 3b).

b. Boundary Maintenance and Encroachment Resolution Levels of Performance. Boundary maintenance and encroachment resolution are a fundamental responsibility of ownership. Insuring proper inspection, prevention of encroachments and resolution of encroachments that present life safety, health, or property damage is required under applicable regulations. However, all boundary line demarcation needs and encroachment resolution are not equal in priority. Generally the following levels of performance should apply:

(1) No Mission. Cursory boundary line inspections to identify project security or life safety and health encroachments.

(2) Partial Mission. Includes inspection for required utilization and real property inventory surveys and maintenance of fee boundary and easement at current levels to include coordination with Real Estate, providing clear identifiable property and easement lines and resolving resolutions beyond life safety and project security, and to include protection of project missions and ecological resources.

(a) Common O&M Activities – Level of inspections and encroachment resolution currently funded annually at a given project.

(b) Specific Work Activities – One-time effort to address back-log of boundary line maintenance or one-time effort to address back-log of encroachment resolution. See tables E-5-2 and E-5-3 below.

(3) Full mission. Includes the marking and clearing of boundary and easements according to standards and regulations and in coordination with Real Estate Encroachment resolution will be budgeted to the level of capability.

(a) Common O&M Activities – Increase in level of annual inspections and encroachment resolutions above and beyond what is currently funded annually at a given project.

c. Managing Boundary and Encroachments through Risk Informed Decisions. For specific work activities, **Error! Reference source not found.** and **Error! Reference source not found.** provide guidelines for risk informed decisions for encroachment resolution and preventive maintenance for all business lines. The values will be converted to a score of 25 in CWIFD according to the rules of the business line as defined in each PDM. Requirements are to be submitted in work packages corresponding to a single level of relative risk and are not to be bundled into a single work package with varying levels of relative risk.

Table E-5-2 Encroachment Resolution

Risk Informed Encroachment Resolution Decision Criteria		
Consequence I – highest V – Lowest		Condition Classification F – Worst Condition A – Best Condition
Flooding - Risk to human life or health impacts and private property damages.	I	F – flooding of habitable permanent structures (main living space) D - flooding of habitable permanent structures (basement) C - flooding of habitable temporary structures (no evacuation route) B - flooding of habitable temporary structures (evacuation above flood pool) A - flooding of temporary structures (evacuation above flood pool)
Impacts to Project Operations of major mission areas such as Flood Risk Management, Hydropower or Navigation.	II	F – significant reduction in flood storage capacity/other major mission D – moderate reduction in flood storage capacity/other major mission C – minor reduction to flood storage/other major mission B – restricts project access interfering with project mission A – temporarily restricts project access interfering with project mission
Ecological/ Cultural Resources Impacts - Negative impacts to special status species, critical habitat or culturally important sites.	III	F – illegal ATV over ESA habitat or burial grounds (consistent or repeated offense) D – timber trespass of high quality forest bottomland hardwoods or forested wetland C – timber trespass of other forest for watershed view B – illegal ATV/other impacts over watercourse A – illegal ATV/other impacts over land and vegetation
Minor Public Safety Encroachments- Minor risks to public safety such as attractive nuisance or negative impacts to the project.	IV	F – illegal construction/installation – stairs, docks, temporary structure with multiple known hazards D – trash, debris disposed of on property creating potential hazards C – illegal construction/installation – stairs, docks, etc/ Potential minor hazard B – illegal construction/installation – stairs, docks, etc/ No immediate hazard A – trash, debris disposed of on property. No immediate hazard.
Other Encroachments - Minor impacts to land access or resource damages.	V	F – Removal of property signs, markers or monuments by adjacent landowners. D – trespass - boat trailer/vehicle/camper parked on fee lands (land cleared) C – trespass - boat trailer/vehicle/camper parked on fee lands (no land cleared) B – trespass – repeated camping on or across boundary line A – trespass - camping equipment left on fee land.

Table E-5-3 Preventive Maintenance

Risk Informed Approach for Funding Preventive Maintenance for Boundaries		
Consequence I – Highest V – Lowest		Condition Classification F – Worst Condition A – Best Condition
Flooding - Risk to human life or health impacts and private property damages.	I	F - There are existing communities adjacent to flowage easement or fee boundary that are not well marked. D – There are individual housing lots up for sale adjacent to flowage easement or fee boundary that are not marked well or documented. C – There are large tracts of land adjacent to flowage easement or fee boundary that are being considered for subdivision and sale and portions of the easement line are in need of remarking. B – There are existing land owner's homes adjacent to flowage easement or fee boundary with some history of encroachment and portions of the easement line is in need of remarking. A - All adjacent land owner's homes are located above flowage easement elevation and fee boundary and there is no risk of new construction adjacent to or on flowage easement. Easement line is adequately marked to provide a clear property line recognition.
Impacts to Project Operations of major mission areas such as Flood Risk Management, Hydropower or Navigation and associated safety and security	II	F – Poor boundary or easement maintenance will lead to encroachments preventing a project's mission including safety and security. D – Poor boundary or easement inspection and maintenance will lead to encroachments that have the potential to prevent a project's mission including safety and security C – Poor boundary or easement inspection and maintenance will lead to encroachments will hinder a project's mission including safety and security B – Poor boundary or easement inspection and maintenance will lead to encroachments have the potential to hinder a project's mission including safety and security A - Boundary or easement maintenance is adequate to not affect a project's mission including safety and security

Ecological/Cultural Resources Impacts - Negative impacts to special status species, critical habitat or culturally important sites.	III	F - There are known Federally listed species, designated habitat, or cultural resources sites Listed on the Natural Register located on fee owned lands where boundary is not well visible or maintained. D – There are known Federally proposed species, proposed designated habitat, or eligible historic sites where boundary is maintained but not sufficient to insure protection of critical species, habitat or cultural resources. C – Poor boundary inspection or maintenance presents a moderate risk of impact to listed species. B – C – Poor boundary inspection or maintenance presents a minor risk of impact to Federally listed species but may moderately impact state species or managed stewardship lands. A - There are no Federally endangered species, critical habitat, cultural resources sites or managed stewardship lands in risk of impact due to boundary maintenance issues.
Minor Public Safety Encroachments- Minor risks to public safety such as attractive nuisance or negative impacts to the project due to missing monumentation or unclear boundary.	IV	F – Lack of inspection and marking results in a history of chronic encroachments and removed monuments and signage D – Lack of inspection or maintenance results in annual missing monuments and lack of boundary signs with adjacent residential development C – Lack of inspection and marking results in monuments and signage that are in place but the boundary has not been maintained and overgrown with vegetation with adjacent residential development B – Boundary monuments and signage are in place but the boundary is mostly maintained and overgrowth is limited or isolated A - Boundary monuments and signage are in place and the boundary has been maintained and there is no adjacent residential development
Other Encroachments -Minor impacts to land access or resource damages.	V	F – Lack of inspection, removal of trees, or illegal clearing of vegetation. D – – Lack of inspection results in trespasses such as boat trailer/vehicle/camper parked on fee lands (land cleared) C – Lack of inspection results in trespasses such as boat trailer/vehicle/camper parked on fee lands (no land cleared) B – Inspection and maintenance is adequate and results in only minor trespasses such as repeated camping on or across boundary line A – Inspection and maintenance is adequate to prevent trespasses and encroachment

E-5-9: Cost Savings Measures *[formerly Sustainability]*. Executive Order 13693 and federal energy efficiency statutes including the Energy Policy Act, 2005 (EPAct) and the Energy Independence and Security Act, 2007 (EISA) establish requirements for federal agencies to systematically identify and implement energy, water and petroleum conservation measures as means to gain operational efficiencies and reduce operating costs. Information for EISA and EPAct, and Sustainability requirements, is

available at: https://eko.usace.army.mil/usacecop/environmental/sustainability/ and http://www1.eere.energy.gov/femp/.

a. Federal Energy and Sustainability Requirements. Actions required to meet the above Federal energy and sustainability requirements are described in the USACE Sustainability Plan (SP) and associated implementing directives, including the current Sustainability OPORD (OPORD 2016-21). USACE Civil Works O&M budget development in support of federal energy and sustainability goals is focused on funding life-cycle cost effective budget packages (i.e., Cost Savings Measures) to achieve O&M cost savings while also achieving the associated federal goals. For further information see "Planning and Implementation" at https://eko.usace.army.mil/usacecop/environmental/sustainability/.

b. Funding Cost Savings Measures (CSM) Work Packages. According to ASA(CW) budget guidance, strong consideration will be given to funding the maximum amount of high quality work packages supporting Executive Order 13693 (sustainability) that can be efficiently executed in FY20. The use of Energy Savings Performance Contracts (ESPC) and Utility Energy Services Contracts (UESC) is strongly encouraged. Sustainability funds will be taken "off the top" of the FY20 budget and distributed to the MSCs based on competitive selection of budget packages that conform to the guidance below, and which align with the USACE and MSC Sustainability Plans in response to the Sustainability OPORD (OPORD 2016-21), available at https://eko.usace.army.mil/usacecop/environmental/sustainability/.

(1) USACE Campaign Plan (UCP) Priority Action 1c1: *Support the Nation and the Army In Our Energy and Sustainability Goals*. USACE top priority goals for Cost Savings Measures (CSM) include a 25% reduction in energy use intensity (BTU/GSF), a 36% reduction in water use intensity (Gal/GSF), and a 30% increase in petroleum efficiency. The leading metrics established under UCP 1c1 guide and inform USACE actions to achieve these goals. The focus for FY20 budget development will be on efforts to meet Sustainable Federal Buildings (SFB) requirements through facility energy and water efficiency improvements and improving petroleum efficiency in facilities, vehicles, and vessels.

(2) Electric Vehicle Charging Stations. EO 13693 requires increased fleet composition of zero emission vehicles (ZEV) and plug-in hybrid vehicles (PIHV). To accelerate achieving this fleet composition, budget packages that include the installation of vehicle charging stations will be given priority. These budget packages must also include assurance/documentation that the project has coordinated with their District ULA Transportation Specialist to submit requisition(s) for ZEV/PIHV requirements.

(3) Water Line Replacement and Dedicated Water Meters. Many facilities have aging infrastructure. Water main breaks and leaks in water lines waste water, increase O&M costs for emergency repairs, and increase reportable water consumption. Budget packages that replace water lines with a documented history of recurring breaks and repairs will be given priority. Priority will also be given to budget packages for installation of dedicated water meters on high-consumption water lines, such as those in large, high-occupancy campgrounds. Dedicated water meters are installed to improve a project's ability to more quickly identify and correct future water line breaks.

(4) Alternative Financing. FY20 budget submissions for ESPCs and UESCs should contracting support costs and costs incurred locally by projects, Districts and Divisions to support ESPC and UESC development and execution.

(5) Metering. The USACE 5-Year Metering Plan is available under "Metrics and Reporting" at https://eko.usace.army.mil/usacecop/environmental/sustainability/. The 5-year metering plan identifies individual buildings "appropriate" for dedicated, building-specific metering. Any project with one or more

appropriate buildings should submit FY20 budget packages to install meters according to the USACE 5-year metering plan, unless Energy Conservation Measures (ECMs) budgeted or implemented in FY17-FY20 in the appropriate building(s) would result in reducing an appropriate building's annual electricity bill to an amount lower than the thresholds for a dedicated, standard or advanced electric meter. Budget packages submitted for ECMs that will result in removal of one or more buildings from the USACE list of appropriate buildings will be given priority. The Work Package Justification must specify that the budget package will result in elimination of one or more appropriate buildings from the USACE 5-year metering plan.

(6) Pay-Back. Budget packages with a simple pay-back of ten years or less will be given priority.

(7) Covered Facilities. Budget packages for new or recurring EISA 432 audits and energy and water efficiency at USACE Covered Facilities as listed in the current Sustainability OPORD, available at https://eko.usace.army.mil/usacecop/environmental/sustainability/will be given priority in the FY20 budget.

(8) Audit, Sustainable Federal Buildings (SFB), and Commissioning Assessment-Identified ECMs. Priority will be given to budget packages implementing energy and water conservation measures (ECMs), and other facility improvements identified through facility-level audits/commissioning assessments, and SFB assessments conducted by experienced professionals, e.g., energy services contractors, utility companies, and appropriately trained and experienced DoD, Army, or USACE personnel.

c. Data Requirements for Sustainability Work Packages. A supplementary data submittal is required for each FY20 sustainability and energy budget package to support the competitive evaluation and determination of conformance to the above guidance. The additional data requirements are defined in the instructions for completing the FY20 Sustainability Budget Data Spreadsheet at https://team.usace.army.mil/sites/HQ/PDT/craft/Sustainability_Budget_Data_Spreadsheets/Forms/AllItems.aspx.

d. Support for Developing Sustainability Work Packages. Technical and engineering consultation support for developing budget packages for energy and water conservation is available through HNC on a first-come first-served basis. HNC will support budget development for up to 8 hours (centrally funded by HQ USACE) per consultation event.

e. Budget Submission of Sustainability Work Packages. To enable enterprise-wide documentation of sustainability funding and execution, all Sustainability work packages, regardless of funding source, will be entered into CW-IFD with Phase Activity Code "EP".

After budget submission, the competing sustainability work packages will be evaluated by the HQUSACE sustainability manager (CECW-CO-N) and classified as either "acceptable" or "unacceptable". Those work packages that are classified "acceptable" will be prioritized based on the criteria in the Budget EC. The highest priority packages will be appropriately visible as Specific Work Activities in CW-IFD, and the work packages will be given a HQ Rank of "1" (Below Ceiling level).

In order to ensure that Sustainability work packages are not taken "out of hide," within a project or business line, all "accepted" Sustainability work packages will be withheld from the budget process until business line deliberations and budget adjustments are complete. The "accepted" Sustainability work packages will then be added to the business line budgets. Submission date for Sustainability work packages is shown in TABLE 2 in the MAIN part of this EC.

E-5-10. Initial Appraisal Reports under Section 216. Initial appraisal reports prepared under Section 216 of the River and Harbor and Flood Control Act of 1970 which authorizes investigations for modification of completed projects or their operation when found advisable due to significantly changed physical or economic conditions and for improving the quality of the environment in the overall public interest should have its own work package. The cost of preparing the initial appraisal report is limited to $20,000 and is entered as a separate work package. Following the initial appraisal the 216 study process is the same as an investigations specifically authorized feasibility study and competes as a new start feasibility study, reference Annex I.

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APPENDIX E-6

Operation and Maintenance

O&M Work Category Codes

E-6-1: Budget Development Work Category Codes. The O&M budget development process reflects the Corps' compliance with the requirements of the GPRA. Therefore, the budget will be submitted in a form that reflects the primary business functions established for the O&M mission. The WCCs are aligned within the primary Business Lines within the operation or maintenance areas. WCC details can be found in the "Work Category Code Spreadsheet" link under "Guidance" on the O&M 20/20 website at https://intranet.usace.army.mil/hq/cecw/Pages/OM2020.aspx.

E-6-2: O&M Work Category Codes Matrixes. **Error! Reference source not found.** shows the Operation Work Category Code Matrix by business line and **Error! Reference source not found.** shows the Maintenance Work Category Code Matrix by business line.

Table E-6-1 Operation Work Category Code Matrix (by Business Line)

WCC	Navigation **601xx**	Flood Risk Management **602xx**	Hydropower **603xx**	Environment **604xx**	Recreation **605xx**	Joint Activities **606xx**	Water Supply **608xx**
60x10	Operation	Operation	Operation	Operation	Operation	Operation	Operation
60x20	Studies & Surveys	Studies & Surveys	Studies & Surveys	Studies & Surveys	Studies & Surveys	Studies & Surveys	Studies & Surveys
60x30	Dam Safety	Dam Safety	Dam Safety	Dam Safety	Dam Safety	Dam Safety	Dam Safety
60x40	Water Management	Water Management	Water Management	Water Management	Water Management	Water Management	Water Management
60x50	Real Estate Management	Real Estate Management	Real Estate Management	Real Estate Management	Real Estate Management	Real Estate Management	Real Estate Management
60x60	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance
60x70	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved
60x80	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved
60x90	Facility Security	Facility Security	Facility Security	Facility Security	Facility Security	Facility Security	Facility Security

Table E-6-2 Maintenance Work Category Code Matrix (by Business Line)

WCC	Navigation **611xx**	Flood Risk Management **612xx**	Hydropower **613xx**	Environment **614xx**	Recreation **615xx**	Joint Activities **616xx**	Water Supply **618xx**
61x10	Maintenance excluding Dredging	Maintenance excluding Dredging	Maintenance excluding Dredging	Maintenance excluding Dredging	Maintenance excluding Dredging	Maintenance excluding Dredging	Maintenance excluding Dredging
61x20	Dredging	Dredging	Dredging	Dredging	Dredging	Dredging	Dredging
61x30	Dam Safety	Dam Safety	Dam Safety	Reserved	Reserved	Dam Safety	Reserved
61x40	Water Management Equipment	Water Management Equipment	Water Management Equipment	Water Management Equipment	Water Management Equipment	Water Management Equipment	Water Management Equipment
61x50	Real Estate	Real Estate	Real Estate	Real Estate	Real Estate	Real Estate	Real Estate
61x60	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance	Environmental Compliance
61x70	Remaining O&M Major Rehabs	Reserved	Remaining O&M Major Rehabs	Reserved	Reserved	Reserved	Reserved
61x80	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved	Reserved
61x90	Facility Security	Facility Security	Facility Security	Facility Security	Facility Security	Facility Security	Facility Security

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APPENDIX E-7

Operation and Maintenance

Justification Sheets

E-7-1: Justification Sheets for O&M for Congressional Submission.

a. J-Sheets will be according to the MAIN part of this EC. Each MSC will prepare and submit Justification Sheets (J-sheets) for each O&M project, using the format and template in FIGURE E-7-1.

Figure E-7-1 MSC O&M Justification Sheet Template

OM J-Sheet Template.docx

b. To avoid allocation problems associated with roll-ups, projects spanning more than one district should be entered separately with titles showing the district name, for example:

OHIO RIVER LOCKS AND DAMS, PA, OH and WV (Pittsburgh Dist)

OHIO RIVER LOCKS AND DAMS, WV, KY and OH (Huntington Dist)

OHIO RIVER LOCKS AND DAMS, KY, IL, IN and OH (Louisville Dist)

(Other projects include Ohio River Open Channel Work, McClellan-Kerr, Missouri River and the Upper Mississippi River).

c. Justification sheets for National programs or activities such as Inspection of Completed Works, Scheduling Reservoir Activities, and Project Condition Surveys will be prepared by HQUSACE. See **Error! Reference source not found.** for a list of all of the National program J-sheets and a list of the HQ and MSC proponents.

Table E-7-1 Matrix of the National Program J-sheets Proponents

BUSINESS LINE	NATIONAL PROGRAM J-SHEETS	HQ OR MSC PROPONENTS
Flood Risk Management	Inspection of Completed Work	CECW-ID
	Surveillance of Northern Boundary Waters	CECW-ID
	Scheduling Reservoir Operations	CECW-ID
	MR&T Inspection of Completed Works	MVD
Navigation	Project Condition Surveys	Navigation
	Removal of Aquatic Growth	SAD
	Removal of Aquatic Growth	MVD
Aquatic Ecosystem Restoration	Inspection of Completed Environmental Projects	Planning

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APPENDIX F

Expenses

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APPENDIX F

Expenses

F-1-1. Appropriation Title. Expenses 96 18/19/20-3124.

F-1-2. Purpose. This APPENDIX provides guidance for the formulation of the FY 18, FY 19 and FY 20. Expense (E) Program for Headquarters, U.S. Army Corps of Engineers (HQUSACE), MSCs, and other command and control support activities. The FY 18 program will undergo the same Program Management Advisory Committee (PMAC) validation process used in previous years. The results of the FY18 PMAC validation will be used as the basis for recommending funding allocation to the Headquarters Priority Group (HPG) and the Senior Program Budget Advisory Committee (SPBAC). The FY 18/19 data will be used for the development of the Expenses programs to OMB.

The attached template (Illustration F.1) as used in previous years for the normal identification and validation of requirements in the PMAC setting, will be used for this process. Per OMB guidance, the Enterprise Requirements will be submitted for budget consideration.

F-1-3. Program Objective. The Expenses appropriation provides funding for the Executive Direction and Management (ED&M) of the Civil Works Budget (CWB). It supports the program development, defense and execution of the Civil Works Program (CWP) and funds the salary/support costs of senior leadership that provides oversight and execution of the mission of the CWP via five (5) key functions which include; Command and Control, Policy Guidance, Program Management, National/Regional Interface, and Quality Assurance.

a. The five (5) functions of ED&M are explained in detail below:

(1) Command and Control – Exercise of command and control of USACE Civil Works Program operations;

(2) Policy and Guidance – Development, coordination and issuance of policy and guidance that will guide headquarters, regional, and field operations;

(3) Program Management – Development, defense and execution of the Civil Works Programs;

(4) National and Regional Level Coordination – Coordination with the Administration, federal and state agencies, national stakeholders, and other interest groups to facilitate development of program policy and guidance and efficient execution of the Civil Works Program;

(5) Quality Assurance – Assurance that the Civil Works Program is being executed according to law, policy and guidance.

b. The Expenses appropriation is aligned with all of the National priorities/goals that guide, inform, and shape the CWP priorities and goals. USACE completed a manpower survey in FY11. The survey validated a requirement of 978 FTEs to provide for optimum, efficient and effective accomplishment of the CW mission. The Command is scheduled to review these requirements to determine where to align the requirements and request funding accordingly.

c. In direct support of the five functions, the Expenses appropriation pays for two categories of requirements and they are “labor” and “non-labor”.

(1) Labor consists of civilian pay.

(2) Within the non-labor category, there are two categories or bins-- “mandatory” and “discretionary” and they are further broken down by common (work done by all offices) and unique (work done by only some offices). Examples of mandatory non-civilian pay requirements are; rent, utilities, military officers salary reimbursed to Army, enterprise reimbursable accounts, previously termed fee for service (DFAS, UFC,CPAC/CPOC bills), and EEO settlements. Examples of discretionary requirements are; travel, training, supplies, printing and office equipment. The Expenses program executes 65%- 70% labor and 30% non-labor requirements. Twenty percent (20%) of the non-labor requirements are mandatory and 10% are discretionary. Although the 11 May 2012, OMB M 12-12 guidance expired, the SPBAC did not impose a ceiling on travel however, the expectation is that Commands will remain conscientious in the execution of travel.

d. Support activities outside of the headquarters are accomplished by:

(1) Eight (8) Major Subordinate Commands.

(2) Institute for Water Resources (IWR) - provides forward-looking analysis and research in development of planning methodologies for the Civil Works Program.

(3) Humphreys Engineer Center Support Activity (HECSA) – provides administrative and operational support to HQUSACE for the Civil Works Program.

(4) Engineering Research and Development Center (ERDC) - conducts research and development as support of the Civil Works Program.

(5) USACE Finance Center (UFC) - providing finance & accounting support for the Civil Works Program.

(6) Army Corps of Engineers – Information Technology (ACE-IT) – provides corporate information management support to HQUSACE for the Civil Works program; and

(7) USACE Logistics Activity (ULA) – provides logistics support to HQUSACE for the Civil Works program.

e. Program and Financing. The Expenses Program will be developed for the accomplishment of the program objective by HQUSACE, MSCs, and other USACE command and control support activities. The Expenses Program will reflect any carry-over from prior fiscal years in the USACE Consolidated Command Guidance (CCG), the Command Priorities and Budget Guidance, as well as any new initiatives approved by the Chief of Engineers’ and/or directed by Assistant Secretary of Army for Civil Works (ASA (CW))/Office of Management and Budget (OMB)/Congress. Further, program formulation for FY 18/19/20 will be developed based on guidance issued by HQ Resource Management. FY19 and FY20 will be used for formulation and program development. Resource Management will publish an official data call with suspense and definitive guidance for the 3 year requirements. The instructions from the data call will be used to complete the spreadsheet at Illustration F.1. Additionally, between now and the time of the PMAC, RM will work with CW to gain an understanding of the CW priorities so that our validated requirements accurately reflect leadership’s priorities.

f. Labor Requirements and Funding.

(1) Labor Requirements. The Budget Year (BY) 19 estimates of labor requirements will reflect the most efficient utilization of personnel necessary to achieve the program objective. Staffing will be at the allocated level that is published in the CCG and the manpower attachment to the data call. Labor estimates for BY18 will be at the allocated level of 917 and BY+1(BY20) will also be at the allocated and required level of 917 FTEs. The labor expense program pilot which is designed to identify and prioritize workload functions/work packages that would be included in the Labor ceiling/below ceiling and decrement list for the Command, is described in Main Document of the Program Development EC.

(2) Labor Funding. Funding requests for BY will include base labor cost as of the current pay rate, plus projected inflation rates. The rates will reflect national and locality pay raises, plus any agency contributions for employee benefits. The rate for overtime will be issued in the annual budget data call memorandum. In preparing estimates for overtime, overtime will be analyzed to ensure usage is prudent and efficient. All reasonable alternatives to overtime usage will be explored, such as flexible scheduling. Ensure that approval authority, monitoring, and audit procedures are in place to avoid overtime abuse.

Total labor funding requirements include locality, cost of living increase (COLA), overtime, awards and estimated pay raises. Labor funding is provided for authorized/allocated FTE. Funding is fenced. Hire lag funding can be used to support details and developmental assignments related to unfilled vacancies, PCS, and costs for the Student Educational Employment Program.

(3) Non-labor Requirements and Funding. Costs for military/uniformed officers are executed as a non-labor expense, as we are not directly paying labor, instead, we are reimbursing DA. Costs for Expenses-funded military/uniformed-officers will be based on the DOD Military Personnel Composite Standard Pay and Reimbursement Rate schedule. All other non-labor requirements will be submitted as reflected in Illustration F-1. Non-labor requirements are separated into Mandatory and Discretionary. Specific guidance on how to budget for non-labor requirements, such as travel, training, AIS costs will be outlined in the annual budget data call memorandum.

F-1-4. Supporting Data. The BY Expenses budget submission will be comprised of requirement build, specific FTE by name and salary, and details on contractual support to include justification by object class. Any requirement that is unclear on the requirement sheet, should be explained on the supporting data template. The Expenses program manager will develop multiple program options based upon OMB and ASA (CW) guidance, and field data listed above. These will include a 'ceiling' program which will be submitted to reflect no more than the amount needed to maintain "current services" as compared to the FY18 budget. A second 'Recommended' program will be developed to accomplish performance targets over five years. During the Civil Works budget development process which takes place in the summer, the Director of Civil Works will review the funding scenarios provided (ceiling, above ceiling and decrement) and determine which level will be submitted to OMB as the Expenses funding level request. Therefore, it is critical that your requirements are well defined and documented so that the Director of Civil Works has the information necessary to make the right funding level decision for the program.

F-1-5. Submission Requirements. Submit by electronic mail to CERM-BI your budget supporting data as described above. The data-call letter will outline suspense dates. If there are any problems complying with these submission requirements, e-mail your concerns to CERM-BI. CWIFD will eventually be a part of this requirement. It will be under construction sometime next year.

F-1-6. Prior Years Funds. This section is discussed in the FY17 Execution EC.

Figure F-1

Requirements Summary

Figure F-1
Requirements Summa

APPENDIX G

Regulatory

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APPENDIX G

Regulatory

G-1-1. Background. The mission of the Regulatory Program is to protect the Nation's aquatic resources and navigable capacity while allowing reasonable development through fair and balanced decisions. The Corps regulates the discharge of dredged and fill materials and other construction-related activities in jurisdictional waters of the United States. This responsibility is mandated by Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act of 1899, and Section 103 of the Marine Protection, Research, and Sanctuaries Act. During the past decade, the Corps Regulatory Program has evaluated and made permit decisions for over 80,000 permit applications a year for projects that impact waters of the United States, including wetlands. The end state of the Regulatory Program is to issue balanced, timely, and transparent regulatory decisions that are rooted in sound science and compliant with applicable laws.

Regulatory decision-making is more than processing paperwork and takes more than people. Training a Regulator to become fully capable takes 3-5 years. Retaining those trained Regulators is essential for efficient and effective execution of the Regulatory mission and for optimum service to the public. The evaluation and decision-making process requires current data, science, and technology to ensure defensible, efficient, and transparent decisions. As such, enterprise-level actions are necessary to deliver the Regulatory Program with a capable, well trained and well equipped workforce. Recruiting, retaining, and maintaining a competent, well-trained, and well-equipped workforce is essential to supporting a strong, balanced, and efficient Regulatory Program to serve the needs of all stakeholders.

Between 2010-2017, the Program met and in some cases exceeded all established OMB performance metrics at the allocated funding level; however:

- those metrics focus only on timeliness of permit decisions and compliance/enforcement efforts associated with those permit decisions.

- the public and permittees also expect decisions to be consistent, based on sound science, legally defensible, and for our decision-making process to be transparent.

- we still do not have OMB-approved metrics for those aspects of our program, but we provide those services and to provide them requires funding.

G-1-2. Objectives. The goal of this annex is to provide guidance to districts to request funds to perform the Regulatory Program mission as determined by labor and non-labor costs associated with specific levels of national performance measures. The Regulatory Program goals and performance measures are provided below in TABLE G-1, “Regulatory Goals and Performance Measures.” The performance measures were developed to link the Regulatory budget to performance and necessary labor and non-labor expenditures that would help advance the Regulatory end state. . Based on the national budget priorities, the Corps will provide funds to administer the program. Funds allocated to the district will be correlated to the target percentages for each of the performance measures. The targets for each of the performance measures are designed to evaluate performance of these objectives based on available budget and to provide information in support of the overall program goals. For example, the % of General Permits (GPs) issued in 60 days would be an indication of the timeliness of the permit evaluation process. GPs are intended to streamline the authorization process for activities that will result in no more than minimal individual and cumulative adverse environmental effects. Therefore, GPs provide an incentive

for project proponents to minimize impacts to waters of the United States, including wetlands to qualify for the more readily obtained GP authorization. Higher target percentages for the performance measure would provide direction that resources should be prioritized to ensure more GP verifications are completed in a timely manner.

In addition to funding staff to meet performance goals, the Regulatory Program also requests funds to build a capable, well-trained, and well-equipped workforce to advance the Regulatory end state and be able to provide the same level of service to the public and similar protection to aquatic resources everywhere in the country. A portion of all Regulatory funding is requested and utilized for enterprise level initiatives that provide district Regulatory Project Managers with the information, science, training, and technology they need to efficiently execute the mission. Initiatives will be organized along four lines of effort (LOEs): Science and Technology initiatives; Technical and Leadership training; Program Efficiencies; and Transparency (efforts such as ORM2/public website updates). These LOEs support the six conceptual Regulatory pillars: transparency, program efficiencies, training and development, science and technology, strong leaders, and knowledge management. Headquarters will continue to work together with districts/divisions to deliver a Regulatory Program according to the national goals noted above.

G-1-3. Civil Works Five-Year Development/Business Plan. The concepts described above form the framework for the Regulatory Five-Year Development/Business Plan (FYDP). The FYDP will produce results that contribute to achievement of the strategic goals and objectives contained in the Civil Works Strategic Plan and the USACE Campaign Plan. For the Regulatory Program, the proposed increments included in this EC were developed to provide the glide path to get the program to its target goals to be included in the FYDP.

G-1-4. Activities. The program has historically categorized, allocated, and expended funds within the following categories:

Activity	Work Category Code	AMSCO Code
Permit Evaluation	100	008204
Enforcement and Resolution	210	008205
Studies/Support of Enterprise Initiatives	300	088890
Other Regulations	400	008207
Environmental Impact Statements	500	088870
Administrative Appeals	600	013579
Compliance of Authorized activities and mitigation	800	010688

New categories may need to be developed to track expenditures according to the new performance metrics as follows:

- Outreach
- Onboarding/sustainment information sessions
- Staff recruitment/retention

This categorization allows the districts to distribute funds into particular categories and track utilization. These accounts also provide information on the effectiveness of the program within each of the categories.

G-1-5. Performance Measures.

The Regulatory performance metrics measure the program effectiveness. These metrics will also help inform progress for the USACE Campaign Plan and Civil Works Strategic Plan. The table below lists the metrics that were developed for testing in FY18, calibrating in FY19 and implementation in FY20. The performance measures listed below may also change after re-evaluation, review, and approval. The new performance measures would more closely align with the Regulatory mission and desired end state and specific measures would be developed to measure the following:

G-1-6. General Submission Guidance. Data will be entered into the P2 Program under "REG" as the Primary Business Line. A separate (inactive) Budget WBS should be added and funds scheduled must reflect the requested resource needed for funding FTEs and non-labor items that will be requested to achieve performance levels outlined in paragraph G-9. MSCs should ensure that submissions reflect uniform and consistent levels of work effort among the districts and those submissions accurately reflect the required level of service. Divisions should include a Level 1 Regulatory activity to cover costs associated with only the execution of administrative appeals program, not to exceed $200,000, unless additional funds are requested for areas with high locality pay or other extenuating factors (need for additional field reviews, high travel costs to support any appeals in the Pacific Ocean Division (POD), etc.).

Table G-1: Proposed Metrics

Program Goal	Performance Measure (w/ Targets)	FY20 Targets
1. Transparent Regulatory Processes	1.1 Outreach to applicants and stakeholders	
	1.2 ORM2 public updates	
2. Decisions compliant with Regulatory Program Requirements	2.1 Development/maintenance/execution of onboarding and sustainment information sessions	
	2.2 Review GP decision documents for consistency with regulatory program requirements	
3. Timely permit decisions	3.1 GP decisions in 60 days or less	
	3.2 IP decisions in 120 days or less	
	3.3 Mitigation banks/ILFs reviewed according to Mitigation Rule timeframes	
4. Protection of aquatic resources and navigation capacity	4.1 Strategic compliance inspections	
	4.2 Strategic resolution of non-compliance and unauthorized/enforcement actions	
5. Recruit/Retain staff	5.1 Division/National-level initiatives to improve staff recruitment/retention	

G-1-7. Types of Activities (Projects) and Work Functions. Resource needs under the Regulatory appropriation can be submitted for up to 10 activities. The 10 Regulatory activities are Permit Evaluation-100, Enforcement-210, Studies/Support of National Initiatives-300, Other Regulations-400, Environmental Impact Statements (EISs)-500, Administrative Appeals-600, Compliance- 800, Outreach_____, Onboarding/sustainment information sessions, _____, and Recruitment/retention

initiatives_____. Resources can be further identified according to P2 Resource codes and are at the discretion of the individual districts.

G-1-8. Definition of Activity (Project) Categories.

a. Permit Evaluation (100). Includes all costs related to the review and evaluation of permit applications under Section 9, 10, 103, and 404, as well as environmental assessments supporting this review. Cultural resource investigations, jurisdictional determinations, public hearings, and other activities related to application evaluation are included, as are general permit development and consideration of activities under general permits. Resource requests are no longer to be entered in the sub-accounts (110, 120, & 130). Metrics 1.2, 2.2, 3.1, 3.2, and 3.3, will be assessed out of this activity

b. Enforcement (210). Includes all costs related to those activities associated with unauthorized activities and jurisdictional determinations related to enforcement actions, ground and aerial surveillance, and follow-up on violations. Metric 4.2 will be assessed out of this activity.

c. Studies and Support of Enterprise Level Initiatives (300). Includes all costs related to support the Regulatory LOEs, including studies, science, technology, development of leadership and technical training, ORM2 data entry initiatives, knowledge management, and District/Division programmatic initiatives to increase program efficiencies. Some examples include jurisdiction studies (actual jurisdictional determinations are included under permit evaluation), mapping, wetland studies, shoreline inventories, equipment for collection of data for environmental databases, funding slated to increase transparency or technical competencies. Resource requests must be grouped by an identified and defined specific study/initiative. Studies/initiatives must be justified and approved prior to allocation or expenditure. This will ensure district initiatives align with national level goals, objectives, and priorities and will advance the Regulatory desired end state. Funding moved to/from this account requires HQUSACE approval. These costs should be included in table G-4.

d. Other Regulations (400). Includes all costs related to administration of the miscellaneous regulations such as danger zones and restricted areas, or review of Section 402 applications. Security concerns may require a need for funds for administration of restricted areas and danger zones.

e. Environmental Impact Statements (EISs) (500). Includes all costs associated with the preparation of EISs where the Corps is the National Environmental Policy Act (NEPA) lead or co-lead. In most cases, the Corps cost is for labor to review and manage the EIS and to complete the Record of Decision, with the permit applicant(s) providing the project information/data and paying for the Third Party Contractor that develops the EIS for the Corps. If an EIS is to be prepared without the use of a Third Party Contractor (i.e., done in-house), HQUSACE must approve. Resource requests for EISs will be described and grouped by type. Any new project-specific EISs will be resourced under the district Regulatory organization codes. Resource requests for programmatic EISs may require support from other offices in the district, and those organization codes should be included. All EISs must be identified as either ongoing or projected, and the likelihood of the EIS being required should be indicated (represented as a percentage). No resource request for EIS may be submitted where the EIS is not specifically identified. Costs for EISs may be submitted at Level 1 and 2 if the EIS is ongoing or a determination has been made it will be undertaken in the current budget year. An EIS, where there has been a preliminary decision that it will likely be needed, should be placed in Level 2 and ranked below any request tied to performance. NOTE: Any reprogramming requests from this account require HQUSACE approval. These costs should be included in table G-2.

f. Administrative Appeals (600). At the division level, the Administrative Appeals request should reflect costs to support work undertaken by the Division Engineer designated Appeal Review Officer (RO). Costs should include travel, training, and related costs incurred during the execution of the Administrative Appeals Program only and may not exceed $200,000. At the District level, the Administrative Appeals request should reflect costs for performing work to prepare the administrative records for submittal to the RO, participation in appeal meetings, conferences, site investigations, and/or other duties in support of the division appeals program. District work associated with the review and evaluation of a permit or jurisdictional determination as a result of a RO remand should be accounted for in the Permit Evaluation activity category.

g. Compliance (800). Includes all costs related to compliance inspections of Department of the Army (DA) permits for authorized work and resolution of construction activities not in compliance with DA permits. Only a percentage of all permit authorizations, compensatory mitigation (including mitigation banks, in-lieu fee programs, and site specific mitigation), and non-compliance actions are reviewed each year. This category includes costs associated with site inspections, review of compensatory mitigation monitoring reports and mitigation bank ledgers, and resolution of non-compliance actions found as a result of inspections, as well as administrative civil penalties for non-compliance. Metrics 4.1 and 4.2 will be assessed out of this activity.

MAY NEED NEW CODES for metrics 1.1 (Outreach), 2.1 (onboarding/sustainment information sessions), 2.2 (review of GP decision docs) and 5.1 (improve staff recruitment/retention). We should try to capture expenditures in these categories to demonstrate that not all our appropriation goes to process permits – this will be critical to sustain our argument that Regulatory decision-making is more than processing paperwork and takes more than people.

G-1-9. Definition of Resources.

a. Labor (LABOR). Fully burdened labor costs required to pay salaries and benefits of personnel (except contracted personnel) and normal office operational costs to support these personnel according to the service provided at each level (i.e., only manpower and costs related to manpower necessary to meet the performance measures should be included at that level). Labor will be input by organization code (Regulatory and support to Regulatory by all other district elements). Items to include are: overhead costs not separately charged under another P2 resource code such as rent, utilities, communications, computer systems, travel, training, reproduction, supplies, etc.

(1) Support Labor Costs are defined as any organization providing technical assistance, legal assistance, or other assistance not supervisory or administrative in nature to the Regulatory office.

(2) Administrative Labor costs are defined as any direct labor cost for organizations that charge labor for supervision, management, or oversight of the Regulatory office.

b. Vehicle Costs (GSAVEH). All projected vehicle costs to perform work at the identified activity level.

c. Printing (PRINTING or ENTPRINT). All printing costs associated with the identified activity level. It is envisioned that these costs will decrease in the future with the increase in paperless initiatives.

d. Other contractual services (OTHCONSVC). Any contractual services required at the identified activity level. All mission support type contracts must be listed (new or renewal of existing contracts). Examples of work to be shown are: aerial photography, inspection contracts, cost sharing agreements

with states or other Federal agencies, contractual personnel, and data gathering contracts. Large contracts or those that span multiple FYs, will require MSC review and/or approval prior to award.

e. Travel (TRAVEL). All direct-charged travel costs required to meet goals of identified activity level.

f. Any other appropriate P2 resource code required to meet stated Regulatory Program goals. Resources will be entered at the appropriate activity and funding level. Districts should not schedule funds for resources the program would typically not incur (e.g., AE contracts, construction placement, and land acquisition).

g. Data Acquisition Costs. Costs associated with the acquisition of data in support of watershed level analyses, inclusion in CorpsMap2 (or latest version) or ORM2. Districts should consider submitting line item level 2 budget requests for priority data acquisition (beyond that provided by HQ and other sources) if it is determined to be critical for analysis of project impacts, cumulative impacts, and mitigation within targeted watersheds. Requests for acquisition of data should be part of the non-labor costs in TABLE G-3 and identified under the corresponding level 2 initiative(s) in TABLE G-4.

h. Other supporting costs for program implementation including field equipment and supplies and automated devices,

G-1-10. Funding Levels. District Regulatory resource requirements should be submitted in three funding levels. Each level must include a scheduled breakdown of all costs associated with the Regulatory Program operating budget. This will include a break out of costs based on FTE~~s~~ utilization in Regulatory, FTE utilization in support of Regulatory from other offices (e.g., Office of Counsel), and any administrative FTE utilization. Additionally, each level must include any non-labor costs that are separate from the General and Administrative Overhead (G&A). As part of each funding level, districts will also be required to report the expected effective rate, Indirect rate (DOH), and G&A rate that will be applied to the aforementioned FTE utilization. Costs to support all activity categories can be combined provided that no more than 25% of the total request is resourced for the Compliance (800) and Enforcement (210) responsibilities collectively. Future revisions to the performance measures proposed in Table G-1 will be included in the funding levels below. Additional information on the revised performance measures will be provided once they are approved.

a. Funding level 1. The level 1 funding package is designed to sustain operations at the current FY baseline funding level, meeting SOME of the performance metrics in Table G-1. Resource requests should be submitted detailing the break out of FTEs utilization in Regulatory, FTE utilization in support to Regulatory from other business lines, and any administrative FTE utilization. Essential Non-labor costs should also be included in the request. This equates to funding that you have.

b. Funding Level 2. The level 2 funding package was designed to provide a balanced, operational program that will meet ALL the performance metrics in Table G-1. This equates to the funding that you need.

c. Funding Level 3. The level 3 funding package was designed to represent the fully funded program, meeting ALL the performance metrics and exceeding metrics 3.1, 3.2, 3.3. After requests have been submitted to meet or exceed the performance targets, additional, non-mandatory requests to enhance the program may be submitted. Level 3 requests may include activities or initiatives, not directly contributing to meeting the measures but in support of the Regulatory Program (e.g., studies,

Programmatic EIS) and Goal 2a of the USACE Campaign Plan. This equates to the funding that you want, recognizing funding at this level is unlikely, but costs do need to be quantified.

G-1-11. Scheduling. All scheduling for Regulatory labor will ultimately result in the estimation of FTEs and other expenditures at each funding level and should be broken out by business line providing support to the program. IMPORTANT: In order to ensure that labor requests are considered, districts should be certain that the appropriate number of FTEs (both Regulatory and non-Regulatory) are reflected in the appropriate Primary Business Line (REG) in P2. Note – previous year carryover should also be included in basic and adjusted schedule amounts.

G-1-12. Points of Contact. Questions pertaining to policies, procedures, or format of the Regulatory Program activity should be referred to HQUSACE, CECW-CO-R.

G-1-13. Submission Requirements. See TABLE 2 in the MAIN part of this EC for applicable suspense dates for submission of budget data.

G-1-14. Division Funding & Staffing Summary. Districts are to include any EIS specific requests in TABLE G-2. These items should be listed by EIS name and include specific dollar amounts as well as projected FTEs needed to accomplish the task at the given level to gain visibility on the level of effort needed for EISs. This submission will be a subset of what is included in TABLE G-3. Submission of the table does not imply that funding will be provided, rather it identifies the potential need for funds that may be required and should be funded by the district. If district funds are insufficient to cover costs, funds from other districts within the division should be used. Requirements for the next FY should be assessed near the end of the current FY and will involve a review of any carryover or projected shortfalls.

a. Table G-4 is a new table added in the FY 2018 development EC to track district level initiatives to support the LOEs. Examples of requests include costs related to studies, science/tech needs, development of leadership and technical training, resources necessary to keep the ORM2 database updated, knowledge management, and programmatic initiatives to increase program efficiencies, tracked in the 300 account. Level 1 funding for support to the four LOEs will also be a subset of what is included in TABLE G-3. Identify where contracts are needed to implement any item identified in this table. Expenditures of funds will require MSC level review and/or approval prior to contract award to ensure these efforts align with the national level efforts and not duplicative.

b. In addition, each district will prepare and submit electronically to its division office the funding and staffing information summary in TABLE G-3. Level 2 and 3 calculations should be cumulative and include the subsequent level request. (e.g., Level 1 $5,000,000, Level 2 $6,500,000, Level 3 $8,000,000). A staffing (FTE) summary should be developed from the resource requirements of each funding level created in P2. The summary should include any items a district listed in TABLE G-3. Note – these only include General Regulatory Funded (GRF) positions and do NOT include those receiving funding from any funding agreements (e.g., WRDA Section 214, Section 139(j), etc.). A separate data request (for the annual WRDA reports) will be completed for Section 214 or other funded agreements. Divisions will consolidate the districts responses and forward these to HQUSACE electronically in an excel table format. A separate table will be provided for each district. In addition, the division table will sum district amounts for each category and level (cumulatively). Divisions will include the division office amounts for the administrative appeals RO in the summary table. All tables will be included in one excel file, with separate worksheets for each district and one for the division summary, which will include the division RO FTE and cost information (column 2 and 3 of TABLE G-3).

TABLE G-2
(SUBSET OF TABLE G-3)
District: Example
($000) 500 Account

Funding Level	Name	Details of request	FTEs in Regulatory	Fully Burden Reg Labor costs	FTE Support to Regulatory	Support Labor cost	Total Labor Costs	Non-labor Costs	Total Request
Funding Level 1									
Funding Level 2									
Funding Level 3									

TABLE G-3

Division/District: Example
Funding Summary($000)

Funding Level	GRF Funded FTEs in Regulatory	Fully Burden Reg Labor Costs	FTE Support to Regulatory	Support Labor Costs	Admin FTE	Admin Labor Costs	Total Labor Costs	Non-labor Costs	Total Request	Effective Rate	DOH Rate	G&A Rate
Funding Level 1												
Funding Level 2												
Funding Level 3												

TABLE G-4
(SUBSET OF TABLE G-3)
Division/District
Funding Summary($000) for Studies/District Proposals to support National Level Initiatives in the 300 Account

Funding Level	Initiative Name/LOE	Cost Estimate	Rationale on how the initiative aligns with national goals/ objectives	Previous funding obligated/expended to support this initiative	Anticipated future funding over the lifespan of the initiative
Funding Level 1					
Funding Level 2					
Funding Level 3					

APPENDIX H

Formerly Utilized Sites Remedial Action Program

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APPENDIX H

Formerly Utilized Sites Remedial Action Program
Fiscal Year 2020

H-1-1. Introduction.

a. In 1998 Congress directed the Corps to conduct response actions for Manhattan project and Atomic Energy Commission sites subject to the administrative, procedural, and regulatory provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (as amended) and the National Oil and Hazardous Substances Pollution Contingency Plan. This program, called the FUSRAP, was begun in the 1970s by the Atomic Energy Commission, a predecessor agency to the Department of Energy (DOE). Response actions under CERCLA consist of: sampling and assessment of contaminated areas, characterization of site conditions, determination of the nature and extent of contamination, selection of the necessary and appropriate response actions as lead Federal agency, cleanup and closeout of sites, and other actions necessary for remediation. In addition, the Corps assesses whether other potentially responsible parties are involved and addresses stakeholder environmental and regulatory issues.

b. Twenty-one sites still under evaluation and/or remediation were transferred from DOE to the Corps in FY98. Five of these sites have been remediated and transferred back to DOE for long-term stewardship. Since FY98, DOE has identified an additional 17 sites as eligible for FUSRAP. The Corps uses a Potential Sites budget line item to fund the Preliminary Analysis/Site Inspection (PA/SI) for new eligible sites referred by DOE. The Corps has completed the PA/SI on thirteen of these sites, eliminating five of them from further consideration, and adding eight of these sites into the program. They were included in the budget for additional activities, after concluding that a release or threat of release of a hazardous substance exists that warrants response action under CERCLA. Congressional direction resulted in addition of one of the sites (Willow Land Disposal Area (SLDA) being added since the Corps started executing the program. The Corps is completing the closeout and transfer of one site back to DOE (Colonie). Funds were budgeted for a total of twenty-two sites in FY17.

H-1-2. Purpose. To clean up contaminated sites throughout the United States where work was performed as part of the Nation's early atomic energy program.

H-1-3. Goals and Objectives. The goal of the FUSRAP program is to protect human health and the environment from residual radioactive contamination at sites formerly utilized by the Manhattan Engineer District for the Nation's early atomic energy program. The major objectives of the FUSRAP program are to evaluate and remediate, as necessary, sites identified by the Department of Energy - Office of Legacy Management (DOE-LM) as eligible for consideration under FUSRAP. Each FUSRAP divisions' multi-year program should be developed and conducted in such a manner that projects are completed as soon as possible and at the lowest reasonable cost consistent with the site specific cleanup criteria. Criteria utilized are those that are protective of human health and the environment, responsive to regulatory and community interests, and according to the current and reasonably foreseeable future land use.

TABLE H-1

FUSRAP Environmental Performance Measures

CW Strategic Goal #4 – Restore, Protect and Manage Aquatic Ecosystems to Benefit the Nation.. From the December 2014 Civil Works Strategic Plan
Strategic Objective 4.3 --- Cleanup radioactive waste sites.
Performance Measures:
#1 - Number of individual properties returned to beneficial use on a cumulative basis.
#2 – Cumulative percentage of FUSRAP funding that is expended on cleanup activities rather than studies.
#3 – Cubic yardage of contaminated material disposed.
#4 – Number of Records of Decision (RODs) signed on a cumulative basis by the U.S. Army Corps of Engineers.
#5 – Number of Remedial Investigations Completed.
#6 – Number of Remedies in Place (RP) or Response Complete (RC).
#7 – Total Cost of disposing of contaminated material as measured in cubic yards.
#8 – Number of Action Memorandums signed.

H-1-4. Five Year Funding Stream.

a. The five year development plan (FYDP) for FUSRAP projects will follow the guidance provided in paragraph 15 in the MAIN part of this EC. The BY to BY+4, five year plan will be finalized at the yearly FUSRAP Budget meeting.

b. The Final BY budget amounts will be provided after OMB Passback, and the Divisions will update the FYDP based on the Passback. A final FYDP will be prepared to support the President's Budget final submission to Congress in February BY-1. See paragraph 15 in the MAIN part of this EC.

c. An additional ten year development plan for FUSRAP projects will build on the five year development plan detailed above in Section a and finalized at the yearly FUSRAP Budget meeting. This will be used for HQ Program life cycle projections.

H-1-5. Ranking Process.

a. Project activities lending themselves directly to accomplishment of the FUSRAP objectives and sub-objectives will be prioritized using the following factors to assist in assuring that program goals are being met. The FUSRAP Program Manager will hold a budget meeting with the MSC's and Districts performing FUSRAP work in the third quarter of the fiscal year to analyze the current year budget, and to project the five year requirement at a program level. The FUSRAP team will draft an initial budget increment and additional increments as discussed below. The ranking factors in order of importance are as follows:

(1) Eliminate demonstrable threat to public health, safety, or the environment;

(2) Federal Facility Agreements (FFA) or other legal/contractual/regulatory requirements;

(3) Complete Preliminary Assessment to identify presence of demonstrable or potential threat;

(4) Completion of final response action, including site close out requirements and transfer to Department of Energy, Legacy Management (DOE LM);

(5) Efficient design/construction schedule;

(6) Completion of current study or removal phase (RI/FS, EE/CA, etc.);

(7) Eliminate potential threat to public health, safety or the environment;

(8) Local support; and

(9) Potentially responsible party issues.

b. The initial program is defined using the following criteria:

(1) Activities necessary to maintain site security and meet legal mandates.

(2) Preliminary Assessments/preliminary legal analysis of potential new sites at minimum sufficient level to determine if immediate human health or environmental safety threats exist. This criterion will be used to rank projects in the potential sites line item within the FUSRAP budget and from any available unobligated carryover funds.

(3) Continue previously awarded contracts for design, removal, or remediation projects under construction phase of remediation.

(4) Continue previously awarded contracts for Remedial Investigation (RI), Feasibility Studies, and Records of Decision activities. Only award new RI/FS/ROD contracts where human health and/or environmental safety threats need to be characterized.

(5) Perform site closeout activities sufficient to meet legal and health and safety requirements and transition sites to DOE LM in efficient fashion.

(6) Removal Actions necessary to meet CERCLA criteria for time critical or non-time-critical removals.

(7) Activities necessary to facilitate participation by potentially responsible parties, either as performers of work or contributors of funds toward remediation and site closeout.

(8) New contracts for design, removal, or remediation projects must be funded according to the guidance in paragraph 14 in the MAIN part of this EC.

H-1-6. Performance Based Budget Increments. Add additional budget items for logical, needed increments that contribute to the program performance measures in the table above.

H-1-7. Environmental Operating Principles (EOPs). These principles apply to the FUSRAP Program and must be given appropriate consideration when formulating the BY budget. See the Corps website at: http://www.usace.army.mil/Missions/Environmental.aspx for the Corps EOPs.

H-1-8. Program Phases.

a. The FUSRAP Study Phase includes the following CERCLA processes:

(1) Preliminary Assessment. A Preliminary Assement is a limited-scope investigation to collect readily available information about a site and its surrounding area. The PA is designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA also identifies sites requiring assessment for possible emergency response actions.

(2) Site Inspection (SI). SI is an on-site inspection to determine whether there is a release or potential release and the nature of the associated threats. The purpose is to augment the data collected in the preliminary assessment and to generate, if necessary, sampling and other field data to determine if further action or investigation is appropriate.

(3) RI is the process undertaken to determine the nature and extent of the problem presented by a release, which emphasizes data collection and site characterization. The remedial investigation is generally performed concurrently and in an interdependent fashion with the feasibility study.

(4) Feasibility Study (FS). FS is a study undertaken to develop and evaluate alternatives for remedial action.

(5) Engineering Evaluation/Cost Analysis (EE/CA). This document is prepared in the case of a non-time critical removal action. The EE/CA is an analysis of removal alternatives and must satisfy environmental review and administrative record requirements, and provide a framework for evaluating and selecting alternative solutions.

(6) Proposed Remedial Action Plan (PRAP). This document explains the Corps preferred alternative in clear, non-jargon or overly technical language. It is used to seek and consider comments from the public, and federal and state environmental regulatory agencies. This is a publicly available document usually released in conjunction with a mandatory minimum 30-day public comment period and other public outreach activities.

(7) Record of Decision (ROD). The ROD is a document prepared according to the requirements of 40 CFR 1505.2 that provides a concise public record of the agency's decision on a proposed action. It identifies alternatives considered in reaching the decision, the environmentally preferable alternative(s),

factors balanced by the agency in making the decision, and mitigation measures and monitoring to minimize harm.

(8) Remedial Design (RD). RD is an engineering phase that follows the Record of Decision when technical drawings and specifications are developed for subsequent remedial action.

b. The FUSRAP Implementation (Construction) phase consists of the following CERCLA processes:

(1) Remedial Action (RA). RA is the actual construction and implementation of a remedial design that results in long-term site cleanup.

(2) Removal Action (EE/CA). An Engineering Evaluation/Cost Analysis (EE/CA) documents a removal action that is used where a site presents a relatively time-sensitive, non-complex problem that can and should be addressed relatively inexpensively. But even expensive and complex response actions may be removal action candidates if they are relatively time-sensitive.

c. The FUSRAP Site Close Out and Transfer phase consists of the following processes:

(1) Remedy in Place (RP) - The Remedy in Place process is a FUSRAP Program specific term used when the total amount of funding needed to complete the entire site remedy is received/requested in a fiscal year. This includes all Operable Units (OUs). It means that the response action is complete and a Site Close Out Report is completed that is according to the ROD, in compliance with CERCLA, as amended, and the NCP. Certain remedies may require a period of O&M, after the remedy is implemented, before the remedial action objectives and cleanup criteria are achieved. Should a 5-year CERLCA review be required, according to CERCLA, during this time, it will still be the District and Project Manager's responsibility to schedule and budget for these actions until Remedy Compete (RC) is achieved.

(2) Remedy Complete (RC) - The Remedy Complete process is a FUSRAP Program specific term that applies when no further funding needed/budgeted for the Project. It means that the site is ready for, or in process of being transferred back to the DOE – LM FUSRAP program for long term maintenance and monitoring. The Corps will have no further financial, programmatic or legal obligations concerning the site.

(3) Documentation Transfer to DOE-LM - During the life of the entire project, and especially at close-out, the District and Project Manager will ensure that all necessary onsite field activity records, key milestone documents (RI,ROD,CO) and project files are given to DOE-LM to ensure a smooth transfer of responsibility from the Corps to DOE-LM after completion of remediation and the operation and maintenance period. Detailed information and instructions will be those provided in FY 18, together with any updates.

H-1-9. Definition of FUSRAP Budget Increments.

a. Work Increment: A work increment is a discrete amount of work identified by an activity or a set of activities with specific resource requirements and a schedule.

b. Activity: A component of work performed during the course of a project. An activity could be a process (e.g., collection of data) or lead to a deliverable (write a report). Activities are the building blocks of the P2 system – they have assigned durations, resources, and relationships. These increments do NOT define funding levels.

(1) Investigation/Study Phase Increment Definitions:

(a) Increment 1: This increment will include only the minimum continuing study activities, which include all CERCLA study processes. The total request is limited to the budget amount for BY-1, by study. Do not include new studies. Increment must be performance based with high outputs and consistent with ranking.

(b) Increment 2: This increment will include the activities needed to sustain (not fall behind/not accelerate) the study schedule included in the PMP. The total of the activities included in this level is not limited by the BY-1 budget. New starts may not be included. Increment must be performance based with high outputs and consistent with ranking.

(c) Increment 3: This increment includes additional capability activities that can be supported by Corps resources. This increment can be viewed as enhancing the project schedule. Increment must be performance based with high outputs and consistent with ranking.

(d) Increment 4: Place new start studies in Increment 4, for example a new RI at a new site. Increment must be performance based with high outputs and consistent with ranking.

(e) Increments 5 – 8: Not used.

(f) Increment 9: Place unbudgetable studies for potential sites in Increment 9.

(2) Implementation (Construction) phase Increment Definitions:

(a) Increment 1: This increment will include only the minimum implementation processes continuing from BY-1 and is limited to no more than the budget amount for BY-1, by project. Engineering and Design during Construction (EDC) and Supervision and Administration (S&A), of contracts fully funded in BY-1 and before may be included in this increment. Real estate activities for required project lands, easements and right-of-ways may be included. Increment must be performance based with high outputs and consistent with ranking.

(b) Increment 2: This increment will include the activities needed to sustain (not fall behind/not accelerate) the efficient project schedule based on the PMP. The total of the activities included in this level is not limited by the BY-1 budget. Multiple contracts should be submitted as separate increment requests and shown in priority order by District and MSC Rank. New starts may not be included. Increment must be performance based with high outputs and consistent with ranking.

(c) Increment 3: This increment includes additional capability activities that can be supported by Corps resources. This increment can be viewed as enhancing the project schedule. Increment must be performance based with high outputs and consistent with ranking.

(d) Increment 4: Place new start projects with decision documents (such as, a signed ROD) cleared by the HQ USACE in Increment 4. Increment must be performance based with high outputs and consistent with ranking.

(e) Increments 5-9: Not used.

H-1-10. P2 and CW-IFD Requirements.

a. CW-IFD will be used to develop the BY budget for FUSRAP. The following paragraphs provide general information for creation of budgets in CWIFD. Due to ongoing changes to CW-IFD, the Headquarters PID will provide instructions during the course of the year on data entry and usage.

b. The instructions that follow describe the specific tasks that must be done to develop the BY budget for Corps FUSRAP projects. CW-IFD is the primary system used to manage and record annual budgets, and to prepare Work Plans.

(1) General Directions.

(a) Project managers must assign a program code to each project, if one is not already assigned. The program code must be the six character Program Code (formerly CWIS code) that has been assigned in PRISM for the project. If the project is new and does not have a PRISM created CWIS number, then a P2 Program Code Number is to be assigned as both the project and program code. If multiple P2 projects have been created from one Program Code/CWIS, then each P2 project must be assigned the same program code, together with individual project numbers. The program code will allow project data in P2 to be matched to CW-IFD and CEFMS. See your P2 Coordinator to determine who has permission to add the program code to a project, and for a current list of program codes. Note that the Program Code is the same as the AMSCO number in CEFMS, which allows accurate financial transactions and reporting.

(2) P2 Project Codes Required for FUSRAP. The following is a brief description of the budget data elements required to be entered into P2:

(a) Program Code: The Program Code links the FUSRAP projects in the CW-IFD budget with the P2 project and AMSCO in CEFMS. In most cases, there will be only one P2 project per Program code/CWIS, but there may be two or more P2 projects per Program Code/CWIS. Assigning the program code to each P2 project allows a matching of CW-IFD to P2 projects and AMSCOs.

(b) These codes need to be defined for each project:

- FUSRAP SITE ID NO: Defines the FUSRAP site location
- COMMAND INDICATOR CODE (CIC): EFSRP
- REGULATORY DRIVER: CERCLA

(3) Milestone Data Requirements.

(a) In keeping with the Civil Works Program Integration Division initiative of tracking milestones for projects, three tracking goals have been identified for FUSRAP:

- Eligibility Determination - The leading indicator for this goal is the completion of the PA/SI which will be “ENF 1”. The milestone is the start of the RI. This milestone is identified as “ENF 2”.
Remedy Selection - The leading indicator for this goal is the completion of the RI which will be “ENF 3.” The milestone is the signing of the Record of Decision (ROD). This milestone is identified as “ENF 4”.

• Remedial Action (RA) Completion - The leading indicator for this goal is the awarding of the initial construction contract, “ENF 5”. There are three milestones identified for this goal: (1) the completion of the RA (identified as “ENF 6”), (2) the completion of the site close out report (identified as “ENF 7”) and (3) project financial closeout (identified as “ENF 8”).

(b) Schedules need to be developed and entered into P2 for these goals and milestones, as applicable, from the current project phase to project financial completion/close-out. This information will be entered in the same format as the performance measure data requirements.

(4) CW-IFD Requirements. In addition to the common fields required in CW-IFD for all work packages, the following FUSRAP Performance Measures are to be entered:

(a) Program Phase. This field is located at the Program Code level. Select the Phase that represents the current phase of the project, according to paragraph VI-8 above.

(b) Budget Data Review: District and MSC Program Managers, Business Line Managers, Division Chiefs, Commanders, and other interested parties can begin review of the BY budget data as soon as it is added to CW-IFD by the project manager. Each District and MSC will be responsible for entering performance measures in CW-IFD and ranking their FUSRAP work packages 1 to ‘n’. Likewise, each MSC will be responsible for ranking their Districts’ work packages from 1 to ‘n’.

(c) At the annual spring budget meeting, HQ will meet with the MSCs and Districts to review and evaluate each work package, and set the overall ranks. Budget amounts for each project and work package will also be determined at this time. Evaluation of Budget Increments/Work Packages: At the end of the review and approval process for each MSC, the budget data will be extracted. Once the data is extracted, each MSC will be responsible for adding performance measure data for each increment/work package.

H-1-11. Collections from Department of Justice Settlements. Occasionally the Government is able recover some of the cleanup costs from the Responsible Party(ies). The Department of Justice is generally the agency which undertakes such actions at the request of USACE, and returns the collected funds to FUSRAP. These funds can then be used for other FUSRAP projects, as determined by the Business Line Manager. The following is excerpted from the CERM-F policy for processing FUSRAP settlement collections, per memorandum of 7 April 2016.

NOTE: All Field Operating Activities (FOA’s) must process all Civil Works Activity collections pertaining to Department of Justice (DOJ) settlements related to the Program FUSRAP as standard appropriation refunds against the original disbursement that funded the work. Subsequently, the expense will be reversed, the obligation de-obligated, the commitment de-committed, thus creating funds available on the FOA’s database. CECW/CERM-BC will then issue a revocation Funding Authorization Document (FAD) to revoke the funds back to Headquarters S0 data base. Once revoked, CECW/CERM-BC will move the funds to AMSCO 190096 (Direct) for redistribution. The authority to process these refunds for FUSRAP environmental liabilities is found in Public Law 106-60.

H-1-12. Project Justification Sheet (J-Sheet) Requirements. Districts are required to submit a justification fact sheet (J-Sheet) for each project. The J-Sheet will be due according to the schedule in TABLE 2 in the MAIN part of this EC. J-sheet format will adhere to the following example.

Figure H-1.1

FUSRAP J-Sheet Template

Figure H-1-1 Fusrap
J-Sheet Template.doc

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APPENDIX I

Revolving Fund
Plant Replacement and Improvement Program (PRIP)

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ANNEX I

Plant, Revolving Fund
Plant Replacement and Improvement Program (PRIP)

I-1-1. Purpose and Scope. This appendix provides policy and general procedural guidance for Plant Replacement and Improvement Program (PRIP) development.

a. To provide a uniform approach for program development and justification, the various plant items have been grouped into categories. Guidance for the electronic transmission of automated data for submittal of limited program recommendations is contained in the 1130 series of Engineer Regulations (ERs). Procedures for preparing input, for generating these reports, and for updating data are also included in the ER 1130 series. From time to time, additional detailed guidance will be provided by CERM-B in supplemental memoranda.

b. Both large and small projects are reviewed by the HQ Prioritization Group which makes recommendations to the Senior Program Budget Advisory Committee regarding inclusion in the program. Good planning dictates that justification, economic analysis, estimates, and other submission materials are prepared well in advance of this budget review, since it is only one year away from project execution. Submitting projects outside the normal budget cycle is discouraged except under extraordinary circumstances.

I-1-2. Program Development Concepts.

a. Categories. All plant items should be identified by category. Detailed definitions for the categories and subcategories can be found in Appendix G of ER 37-1-29, Financial Administration and Financial Management of Capital Investments. The categories and subcategories authorized for use with this program submission are in TABLE 3 CCS Codes located in the MAIN part of this EC.

b. Major and Minor Items. For programming purposes all items of plant will be classified as either major or minor items. Major Items will be further classified as either new or continuing items.

(1) Major Items. New Major Items consist of those items which exceed HQUSACE authority and which require submittal through the Assistant Secretary of the Army (CW) to the Office of Management and Budget (OMB) and the Congressional Committees on Appropriations for concurrence. The limit of Chief of Engineers authority is $5,000,000. Continuing Major Items consist of those acquisitions costing more than $5,000,000, which were previously submitted to and concurred in by OMB; and authorized by the Congressional committees. An update will be submitted on all continuing major items with scheduled obligations in the BY. Continuing Major Items with cost increases of 20% or more require re-authorization. Documentation to support the increase will be submitted along with an updated Economic Analysis. In the absence of Congressional action on the current year PRIP budget request, the President's current year program will be used for planning purposes with the assumption that the program request for continuing items and new starts will be enacted by 1 October of the current year.

(2) Minor Items. For the BY, minor items are those items which exceed the capitalization threshold of $250,000 but which do not exceed the Chief of Engineers authority level.

I-1-3. Program and Budget Guidance.

a. Requirements. Major Subordinate Command (MSC) Commanders will develop and submit a total PRIP for their command to include district requirements. This will be submitted yearly according to CERM-B guidance provided separately. Tabulation of program requirements will reflect the total MSC program and will show both MSC and district priorities for each item of plant. Each item of plant (major and minor) will be submitted with full justification. This justification will be submitted on ENG Form 4613-R for major items and ENG Form 4943-R for minor items (see ILLUSTRATION I-1.1). In addition, major item new starts proposed for the BY will be submitted according to ER 37-1-29 and are to be accompanied by economic and affordability analyses. Cost estimates and obligation plans should be provided for all new projects and reviewed and updated annually for continuing projects and projects on hold awaiting Congressional authorization using the form in ILLUSTRATION I-1.3. A five year PRIP plan will be submitted annually, showing the current year, the program year, and the follow- on three out-years using ENG Form 1978-R or an approved electronic Format (see ILLUSTRATION I-1.2). The PRIP plan will be updated only whenever significant changes occur. A copy of the update and changes will be forwarded to CERM-B.

b. Out –of-Cycle Requests. Out-of-cycle requests and notifications for project increases of greater than 20% that require Congressional notification and approval must be kept to a minimum. Out-of-cycle requests will only be considered if it is of an emergency nature or has extraordinary circumstances. Out-of cycle submissions that are a result of poor planning or failure to update during the regular yearly budget submission will not be approved for funding until the next yearly budget cycle. A five year PRIP plan will be submitted annually, showing the current year, the program year, and the follow- on three out-years using ENG Form 1978-R or an approved electronic Format (see ILLUSTRATION I-1.2). The PRIP plan will be updated only whenever significant changes occur. A copy of the update and changes will be forwarded to CERM-B.

I-1-4. Submission Requirements and Dates. See TABLE 2 in the MAIN part of this EC.

Figure I-1.1

ENG Forms 4613-R and 4943-R

Figure I-1-1 Eng Forms 4613.xlsx

Figure I-1.2

Five Year Plan

Figure I-1-2 Five Year Plan.xlsx

Figure I-1.3

Obligation Plan

Figure I-3 OBLIGATIONS.xlsx

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APPENDIX J

Remaining Items (I, C, O&M and MR&T)

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SUB-APPENDIX J-1

Remaining Items

General

J-1-1. Applicability. This appendix provides guidance for the development of budget and allocation strategy recommendations for the Remaining Items (RIs) programs. It covers budget development and allocation strategy guidance for all RIs in the I, C, O&M, and MR&T appropriation accounts (accounts).

J-1-2. Definitions. RIs are programs, projects, or activities (PPA) customarily listed as line items with allocations in the Statement of Managers table following the projects listed under states. Additionally, RI programs are funded within either the I, C, O&M, or MR&T accounts. There are three types of RI programs, which include the following:

a. “Programmatic Remaining Item.” A RI for which all funding is obligated and expended under the same Program Code (AMSCO) for the specific RI.

b. “Parent Remaining Item.” The Parent RI is defined by a unique CCS or set of CCS codes. Each project or activity has its own Program Code, and all projects and activities in the Parent Program, including the HQUSACE “Master Program Code,” share the same unique CCS or set of CCS. The Parent Program (that is, the CCS or set of CCS) is a PPA, but the constituent projects and activities are not. Funding is reallocated using the “RLC” transaction code to and from a Master Program Code for the Parent and among "children" that all are authorized as part of the Parent and have their own Program Codes.

c. “Remaining Item Funding Pot.” A conduit for funding multiple PPAs. The funding is passed through to recipient PPAs using the “ALL” transaction code and becomes part of the Baseline for the recipient PPAs. A Project Funding Pot is created either as a Line Item, in which case it is a PPA, or as a convenience to manage in which case it is not a PPA. Funding is reallocated from the Master Program Code funding pot to a specifically authorized study or project at the direction of the Program Manager.

d. A complete listing of the RI programs portfolio and pertinent information is located under Remaining Items at
https://intranet.usace.army.mil/hq/cecw/BudgetEC/FY19/Remaining%20Items%20Pertinent%20Information.xlsx

J-1-3. Management Structure. RI programs are mostly managed at HQUSACE unlike most PPAs, which are managed in the field. Exceptions to this are RIs managed at either the Institute for Water Resources (IWR) or Engineer Research and Development Center (ERDC) laboratories, or some more regional-type RIs (e.g. Restoration of Abandoned Mines [RAMs]). There are four key members involved in the management of each RI program and consist of the following:

a. Champion: This is the HQUSACE Senior Executive Service (SES) responsible for oversight of the respective RI program.

b. Proponent: This is typically the HQUSACE (or laboratory) employee that serves as the SES’s representative in overall management and oversight of the RI program. Their duties include formulation of RI program budget recommendations, budget defense, monitoring RI program execution, and resolving execution challenges and/or policy conflicts.

c. Program Manager: This is typically the subject matter expert (SME) of the RI program and assists the Proponent in their tasks, mainly execution.

d. Remaining Items Integrator: This individual coordinates and facilitates decision-making on the portfolio of RIs in budget development, budget defense, budget execution and allocation strategy development processes in conjunction with the RI proponents.

J-1-4. Program Considerations. At present, HQUSACE is tracking approximately 88 programs in the portfolio of RI programs. For budget development and allocation strategy purposes, not all of these programs will be included in the FY20 budget recommendation. Reasons for exclusion from the FY20 budget recommendation may include, but not be limited to: the RI program is inactive during FY20 with no work projected; the RI program is sustained by prior years' carry-in funding; the RI program is funded by additional funds appropriated in a specific account's funding pot; or Senior Leaders above HQUSACE-level do not support the program for FY20. In coordination with the RI Integrator, the Proponents will balance Champion's priorities and guidance, HQUSACE Business Line Managers (BLM) input, MSC's recommendations, District capabilities, and prior years' program execution when developing a budget recommendation for consideration in the FY20 budget or allocation strategy.

J-1-5. Program Procedure.

a. The activities covered by this SUB-APPENDIX are programmed mainly by CECW, ERDC or IWR. A district or Major Subordinate Command (MSC) may manage RI programs that are regional in nature (e.g. RAMS) or where the majority of the work is executed. These Proponents (with support from the RI Integrator) will prepare and defend the Justification sheet (refer to section J-1-9 below).

b. Below are major RI milestones anticipated for the FY20 budget development and allocation strategy cycle. A specific schedule will be published separately. However, a roadmap for RI Proponents on RI funding and execution is included as Figure J-1.

(1) Proponents initiate coordination with MSCs, IWR, ERDC, and Districts to develop FY20 RI Programs budget and allocation strategy recommendations based upon guidance within this appendix;

(2) Chief of the Programs Integration Division (PID) issues guidance to Champions regarding RI program budget development and allocation strategy development;

(3) HQUSACE Deputy Division Chiefs or their representatives conduct RI program line item reviews;

(4) Chief, PID submits proposed FY20 budget recommendation or allocation strategy for all accounts (including the RIs program) to the Chief of Engineers for his review/approval;

(5) Chief of Engineers submits budget recommendations to ASA(CW);

(6) Champions convene preparatory sessions to review and approve read ahead data for ASA(CW) – Management & Budget (M&B) meeting;

(7) RI Integrator initiates coordination with Proponents to begin compiling and assessing program data for M&B read ahead materials;

(8) An allocation strategy is developed by the appropriate account manager in coordination with the RI Integrator and Proponent;

c. If a division is experiencing conditions that would materially affect its budget development and allocation strategy requirements for the activities covered, the Division Commander should submit a brief letter to HQUSACE, CECW-IP RI Integrator, outlining the changed conditions.

d. Some requests for assistance will not fit clearly into one of the four appropriation accounts, but the proponent should be sure that, to the extent possible, the capabilities are identified in the appropriate account and that activities in the four accounts are not duplicative.

J-1-6. Submission Requirements. FY20 budget submission requirements will vary dependent upon the Proponent's requirements for each RI program. Refer to the RI under the appropriate account below for specific guidance for budget development and allocation strategy elements for each program.

J-1-7. Data Organization and Prioritization. RI programs nominated for budget development and allocation strategy will use the following for the organization of data and prioritization in the respective account: The phase across all accounts will be *RI*. For the I, MR&T-I, O&M and MR&T-M accounts, work packages will be entered as a *Partial Mission Level of Performanc*e; for the C account, work packages will be entered as *Increment 2.* Work Packages that are included in the final funding decision will be ranked as 0.7. Proponents/Program Managers should ensure they reflect the appropriate category and rank when they enter RIs data into CW-IFD.

J-1-8. Budget Development and Allocation Strategy. For each RI, the Proponent or Program Manager should load multiple work packages into CW-IFD. Each work package should represent a useful increment of work with defined outputs. The work packages taken together represent the capability for the RI. The budget process will result in selection of none, some, or all of the work packages. Where none or some are selected for the budget, the remainder will be considered for an allocation strategy.

J-1-9. J-Sheets. In general, J-sheet formats will follow those as submitted for the FY19 Budget Request. There are three separate formats: I and MR&T; C; and O&M accounts as provided in each accounts' appendix within this Engineering Circular (EC). When applicable, all J-Sheets will include: work to be completed during budget year (BY) -2; work expected to occur in BY-1; and work proposed in the current BY. Any set-asides, or sub-programs within a RI will also include this three-year snapshot description.

FUNDING & EXECUTION ROAD MAP FOR REMAINING ITEM PROPONENTS

- Ensure entry of work package data for budget
- Participate in line item reviews for budget
- Develop and espouse within-USACE budget recommendations
- Prepare justification materials
- Defend HQUSACE recommendations to higher authority
- Ensure that work package data are updated to reflect budget decisions
- "Parent" and multi-EROC Remaining Item) Prepare allocation plan based on budget
- Participate in budget defense, QFRs, etc.
- Ensure that work package data are updated for allocation strategy consideration (August)
- "Parent," budgeted "funding pot," or multi-EROC Remaining Item) Update allocation plan based on lesser of House or Senate amount, and authorize executing EROCs to execute planned work during CR (September)
- "Parent," budgeted "funding pot," or multi-EROC Remaining Item) Based on Conference, update CW-IFD, update allocation plan, prepare WAD table, and authorize executing EROCs to execute planned work pending apportionment
- For the allocation strategy, espouse Remaining Item to Remaining Item Integrator and Business Line Manager / Funding Pot owner
- Ensure that CW-IFD work package data on "allocation from funding pot," EROC, etc. are updated to reflect allocation strategy decisions
- "Parent" or budgeted "funding pot" Remaining Item) Prepare WAD table for allocation strategy funding
- Ensure that executing EROCs update schedules in Primavera and 2101 based on Conference and allocation strategy
- Monitor schedules and execution, reallocate or concur in reallocation of surplus funds, participate in program reviews, and defend program performance

Figure J.1 Funding & Execution Road Map for Remaining Items Proponents

SUB-APPENDIX J-2

Remaining Items

Investigations

J-2-1. Program Purposes. RI programs under Investigations may not directly contribute to a specifically authorized study within a state. However, many of the products or activities accomplished through coordination with other agencies, collection and study of data, and research and development provide the foundation for countless studies performed by the Corps and other Federal, state and local agencies across the country, which in turn, lowers the cost of studies. Similarly, large, nationwide RIs exist for flood risk and shoreline management programs as well as disposition studies. Specific RI programs in the I account are listed below:

J-2-2. Access to Water Data.

a. Program Objective. This program is used to develop standard business processes, procedures and database models to manage water quality and quantity data generated by the full range of Corps water resources activities in conjunction with the Environmental Protection Agency (EPA), the U.S. Geological Survey (USGS) and the National Oceanic and Atmospheric Administration (NOAA) Water Control and Water Quality Programs.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 328393, CCS: 180

(2) Initial funding requirements were developed in WRDA Implementation Guidance. Funding requirements are reviewed annually to ensure resources are available to execute and meet WRDA directive. The Proponent works with ERDC to ensure requirements are met and reviews the proposed budget and allocation strategy requirements submitted into CW-IFD by ERDC.

J-2-3. Automated Information Systems Support Tri-CADD.

a. Program Objective. This program addresses the Civil Works (CW) aspect of Computer Automated Design (CAD), Building Information Modeling (BIM) and Geospatial Information Systems (GIS) data standardization. The BIM, CAD, and GIS systems at field offices achieve maximum productivity when they take advantage of the economies of scale offered by sharing the development and use of common data standards, procedures, and applications.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053919, CCS: 294

(2) The Proponent works with ERDC/Army Geospatial Center (AGC) to ensure requirements are met and reviews the proposed budget and allocation strategy requirements submitted into CW-IFD by ERDC/AGC.

J-2-4. Coastal Field Data Collection.

a. Program Objective. This RI funds the collection of long-term data that are required to determine climatic changes that may impact Corps projects. Inaccurate and insufficient observation data results in project design errors for coastal navigation and storm damage reduction.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053836, CCS: 280

(2) Funding need is developed based on an average of annual operating expenses for the Field Research Facility including operation and maintenance of coastal ocean data systems, support vessels, field equipment and facilities to support work unit research on coastal ocean waves and shoreline impacts. The Annual RI budget request is generally insufficient to meet the operation and maintenance requirements of the Field Research Facility and is supplemented by reimbursable work performed for USACE Districts, Divisions and other Federal agencies. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-2-5. Committee on Marine Transportation Systems.

a. Program Objective. This program allows for critical participation with the Committee on Marine Transportation Systems (CMTS), ensures product development and maintenance of the website and the Corps' participation in the CMTS, various Integrated Action Teams (IATs) and the publication of maritime reports.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 126628, CCS: 291

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-6. Coordination with Other Water Resource Agencies. Note: Includes CALFED, Chesapeake Bay Program, Gulf of Mexico, Lake Tahoe, and Pacific Northwest Case.

a. Program Objective. The objective of this program is to enable efficient and effective coordination with agencies on water resources issues and problem areas of mutual concern that are general in nature, not part of a programmed project or study, and often support multi-agency, national initiatives and strategies. This item is funded equally by the AER, NAV, and FRM business lines. Coordination agencies include, but are not limited to the Department of Agriculture, Natural Resources Conservation Service; Department of Interior, Bureau of Reclamation; and Regional Planning Commissions and Committees Programs.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO 190103, multiple child AMSCOs (shown below), CCS Code 181 (starting in FY17, all consolidated programs within this line will use this CCS).

(2) Each MSC/District will provide capabilities and descriptions of work into a spreadsheet distributed by the HQ Program Manager. Descriptions of work will include specific activities/programs/coordinating forums in which the district plans to participate, not general statements about coordinating with other Federal agencies. For each component OTHER THAN the general Coord with Others (i.e., the specific programs that formerly were stand-alone RI's), the MSCs will also enter a work package(s) in CW-IFD stating capability and work package description, etc. The Program Manager summarizes this info and provides the supporting justification/documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into CW-IFD, which includes a description of proposed activities, budget, and schedule.

c. Consolidated Child Programs.

(1) Other Coord - Coordination with Other Agencies. Former Programmatic RI prior to consolidation of the programs below. The program's objective is to provide funds for the Corps to coordinate with other water resource agencies. AMSCO: 053907.

(2) CalFed. The program objective specifically includes Corps participation in the CALFED Bay-Delta Program solution process for the development of a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system. AMSCO: 053923.

(3) Lake Tahoe Federal Interagency Partnership. The program objective includes Corps participation in the partnership with other Federal agencies, according to Executive Order 13057 "Federal Actions in the Lake Tahoe Region", to ensure cooperation, support and synergy. AMSCO: 053931.

(4) Gulf of Mexico. The program objective specifically includes Corps participation in the Gulf of Mexico program, which is an interagency effort for resolving complex environmental problems associated with man's use of the Gulf of Mexico. This program is limited to divisions and subordinate districts bordering on the Gulf of Mexico. AMSCO: 017251.

(5) Pacific Northwest Forest Case. The program objective specifically includes Corps participation in the Pacific Northwest Forest Case Study, which is an interagency program initiated by the White House's Council on Environmental Quality for ecosystem management of the public lands within the range of the Northern Spotted Owl. AMSCO: 017252.

(6) Chesapeake Bay program. The program objective specifically includes Corps participation in the Chesapeake Bay program, which is an interagency program initiated by the U.S. Environmental Protection Agency, for the protection and restoration of the bay's natural resources. Work which requires Section 510 of the Water Resources Development Act of 1996 authorization is subject to the cost sharing of that authorization. AMSCO: 017253.

J-2-7. Disposition of Completed Projects.

a. Program Objectives. The study and analyses of potential divestitures meets one of the primary objectives in the Civil Works Strategic Plan and the USACE Campaign Plan FY 18-22: Operating and maintaining water resource infrastructure and a reliable waterborne transportation system to provide

maximum benefits to the nation. The funding from the Disposition of Completed Projects remaining item allows the Corps the flexibility to identify and investigate the highest priority disposals that result in end of lifecycle solutions. Asset end of life cycle decisions that best serve the Nation can be supported using consistent, transparent, and repeatable tools and processes to inform strategic maintenance; performance conditions and risk assessments, and identifying associated consequences; and using that information to prioritize investments. Cost savings can be derived from reductions of project operation and maintenance or divestiture of assets no longer providing benefits as part of a comprehensive Civil Works lifecycle portfolio management strategy, and potentially reduce Federal liability after disposal of the facility has been completed. This will result in more funds available for operation and maintenance of critical projects and ensuing the best use of limited funds.

b. Eligibility. MSCs will nominate assets for disposition studies during the budget development and allocation strategy process. HQUSACE will use this list of assets to select those suitable for disposition studies. The selection criteria will prioritize assets that require a negligible amount of work to prepare for disposal and where the cost of disposal is most likely to be economically justified. There is no legal requirement that these studies be cost shared. Further guidance regarding disposition studies can be found in the CECW-P memo dated 22 Aug 2016, Subject: “Interim Guidance on the Conduct of Disposition Studies”, and the CEMP-CR memo dated 28 Sept 2016, Subject: “Real Estate Policy Guidance Letter no. 33 – Interim Guidance on Disposition Studies”.

c. Requirement. Assets intended to be nominated for a Disposition Study should be synopsized in a Fact Sheet (see requirements below) and simultaneously submitted via the Operations chain and the Planning chain to the MSC Divestiture POC for consideration and consolidation. Fact Sheets are to be submitted to the HQUSACE Divestiture POC NLT 1 May 2018. The Fact Sheet will include the following:

(1) Brief project description, including identification of authorizing language and authorized purposes.

(2) Brief description of current project status (i.e., active or inactive (caretaker, standby, mothball), or other).

(3) Identification of:

(a) Anticipated end state and potential stakeholders with interest in taking ownership of the project

(b) An analysis of the probability of success in divesting the project

(c) Potential major issues which could affect the time, cost or ability to divest the project

(d) Estimate annual holding costs of project if no change occurs

(e) Any interest in a locally-led P3 within the end of lifecycle solution process

(4) Scope of effort, funding required for FY20, FY21, and FY22.

d. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 190097, CCS: 164

(2) The HQUSACE Divestiture Program Manager develops the budget requirement based on the number of proposed Disposition Studies, activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package and work plan in CW-IFD, which includes a description of proposed activities, budget, and schedule. The Program Manager will translate this information into an allocation plan and communicate the plan to the performing element.

J-2-8. Environmental Data Studies.

a. Program Objective. Supports maintenance and development of the CW Project Mitigation and ESA Compliance Database, a USACE-wide integrated tool designed to consolidate and report information on required environmental mitigation for CW projects and costs to comply with Endangered Species Act (ESA) biological opinions. Supports the Ecosystem Business Line Database - the sole database for USACE ecosystem restoration study and project information; facilitates knowledge sharing among personnel planning and executing ecosystem projects, tracking studies and projects, and responding to queries regarding the content and outputs of the USACE AER program; and Information required for program-level adaptive management serves as a learning tool for environmental compliance practitioners, facilitates long-term management of mitigation sites, and functions as a reporting tool for outside requirements and interested parties. The RI program also funds the preparation of the Annual Reports to Congress required by Section 906, WRDA 1986, as amended, and Section 2036, WRDA 2007.The RI program also funds the preparation of the Annual Report to Congress required by Section 2036, WRDA 2007.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053856, CCS: 292

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-9. FERC Licensing Activities.

a. Program Objective. Enables the review of pre-applications for Federal Energy Regulatory Commission (FERC) preliminary permit and license pre-applications for development of hydroelectric power at Corps and/or non-Corps projects to ascertain potential impacts to the Corps' water management responsibilities and mission in operating projects for flood risk management and water supply purposes. The objective of these activities is to provide support for and timely review of pre-applications consistent with regional and national priorities. Reviews are accomplished on a first come, first served basis by the appropriate Districts.

b. Eligibility. The pre-application reviews are eligible for consideration if they are for new or existing non-Corps operated facilities. These reviews could have an effect on ongoing projects under construction or being operated by the Corps and should be accomplished with available project funds under this program.

c. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053857, CCS: 172

(2) The Proponent/Program Manager develops the line item budget by consolidating a spreadsheet with requested funds from various Districts and Divisions and prepares work packages in CW-IFD, with a description of proposed activities, budget, and schedule. The activities are funded based on the number of historically completed reviews of licensing applications.

J-2-10. Flood Damage Data.

a. Program Objective. To continue to develop, verify and publish riverine and coastal depth-damage functions, compile data for additional damage categories such as evacuation, relocation or clean-up costs and to complete the certification and implementation of the road damage and traffic rerouting models, all of which are used for FRM studies across the Corps.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053918, CCS: 295

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J.2-11. Flood Plain Management Services (FPMS).

a. Program Objective. The Corps is authorized by Section 206 of the 1960 Flood Control Act, as amended, to provide information; compile and disseminate information on floods and flood damages, including identification of areas subject to inundation by floods of various magnitudes and frequencies; establish general criteria for guidance for the use of flood plain areas; and advise in planning to ameliorate flood hazards. Direct response and assistance are provided through the FPMS program to Federal and non-Federal interests and agencies, and private persons.

This support can be provided as work performed by the FPMS Units, Technical Services, Quick Response or Special Studies. FPMS topic specific technical services and support include the Non-Structural Alternatives for Managing Flood Risk program, Systems Approach to Geomorphic Engineering (SAGE), the National Nonstructural Committee and the National Hurricane Program.

b. Technical services and planning guidance are provided to State, regional and local governments, other non-Federal public agencies and Indian tribes without charge. These services and guidance are available to Federal agencies and private persons on a cost recovery basis. Support for the National Flood Insurance Program is available on a reimbursable basis. A requesting entity may choose to make voluntary contributions to expand the scope of requested serviced, assuming the services or assistance fall within the programmatic limits of FPMS and a letter agreement is executed.

c. FPMS funding accomplishments are to be shown for (1) District FPMS Units, (2) Quick Responses taking 10 minutes or less and provided without charge, (3) Technical Services, (4) Special Studies and (5) Specific Technical Services. A comprehensive accounting of Special Study and Specific Technical Services numbers and a list of Special Study and Specific Technical Services accomplishments completed in the BY is required by the HQ Program Manager. An estimated, cumulative number of responses to requests will be shown for Quick Responses and Technical Services.

d. Fiscal Year funds issued for this program will follow the performance based process described for Special Investigations in paragraph J-2-25 of this circular. FPMS program funds will be pro-rationed to fund the FPMS funded specific technical services programs, per Congress' direction.

e. CCS codes to track each of the set aside programs should be budgeted/funded per the following:

(1) 250, Flood Plain Management Services (HQ Parent).

(2) 251, FPMS Non-Structural Alternatives for Managing Flood Risk.

(3) 252, FPMS SAGE.

(4) 253, National Hurricane Program.

(5) 254, National Non-Structural Committee.

(6) 255, FPMS Basic Services Program.

f. It is important to adhere to the Program Code nomenclature where individual studies have individual program codes and the other FPMS activities use the established program codes of:

(1) National Non-Structural Committee - 082025

(2) District FPMS Units - 082030

(3) Quick Responses - 082045

(4) Technical Services – 082040

g. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO 190004, multiple child AMSCOs, CCS: 250 series

(2) The HQ FPMS Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s), enters the work package in CW-IFD, provides the supporting justification documentation to the Proponent and develops Allocation Plan(s). The budget and Allocation Plan(s) will be a function of program performance, program need, and Congressional intent. The Program Manager, Proponent and Champion determine the recommended budget request and that allocation amount is managed by the HQ and MSC Program Managers.

J-2-12. Hydrologic Studies.

a. Program Objectives. The technical information derived from this program improves hydrologic and hydraulic engineering data and methods used for the planning, design, construction, and operation of water resources projects. The program consists of various elements related with non-project specific hydrologic and hydraulic engineering studies such as: general hydrologic studies includes generalized hydrologic analyses of rainfall - runoff relationship, flood frequency, snowmelt studies, hydrograph development and routing at selected watersheds, model calibrations, and analyses of past floods and other studies. Sedimentation studies includes non-project sedimentation investigation activities. Supports streamflow data collection infrastructure including installation and operation of streamflow gages and resulting data sets are used for general hydrologic studies. The program also provides for flood investigation activities including investigation of hurricane surges; high water mark setting, measurement, and recordings. Hydrologic studies can also include Integrated Water Resources Science and Services (IWRSS) activities which brings four U.S. agencies with complementary water resources missions (USGS, NOAA, FEMA, and USACE) together to share resources to help solve the nation's water resources issues.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053820, CCS: 260

(2) The Proponent/Program Manager develops the line item budget by consolidating a spreadsheet with requested funds from various Districts and Divisions and prepares work packages into CW-IFD, with a description of proposed activities, budget, and schedule.

J-2-13. Interagency and International Support.

a. Program Objective. This program was authorized by Section 234 of the Water Resources Development Act (WRDA) of 1996. The objective of this program is to support activities of other Federal agencies and international organizations in addressing problems of national significance to the United States.

b. This program provides support for US Army Corps of Engineers to engage other Federal Departments or agencies, particularly for technical water security support to DoD in support of COCOM Theater Security Plans; DoS, USAID, and other Federal agencies with international missions; and domestic water security missions of USG organizations. Per WRDA 1996 as amended, the program can also support international organizations, foreign governments, and non-governmental organizations to gain mutual benefits through leveraging of skills and resources of all parties to achieve commonly desired outcomes. Such activities must be consistent with DoD goals and, if international, goals and policies of the DoS.

c. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053921, CCS: 178

(2) The Program Manager develops the budget requirement based on the priorities identified by the Proponent to successfully deliver the program's objectives. The Proponent provides supporting justification and outcomes documentation to the Program Manager. The Program Manager, Proponent, and Champion determine the recommended budget request and that amount is input by the Program

Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-14. Interagency Water Resource Development.

a. Program Objective. The interagency water resources development program is for Corps district activities, not otherwise funded, that require coordination effort with non-Federal interests. These activities include such things as meeting with City, County and state officials to help them solve water resources problems when they have sought advice or to determine whether or not Corps programs are available and should be used to address the problems. Funding for American Heritage River Navigators is included in this category and requirements for this effort should be separately noted and justified. Funds are also used to support efforts of the Great Lakes Coordination Committee, including improvements to their regional habitat restoration database. Funds will also be used to support USACE participation on several of the Great Lakes Water Quality Agreement Annexes.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO 014713, multiple children, CCS: 173

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into overarching work packages in CW-IFD, which include a description of proposed activities, budget, and schedule.

J-2-15. International Waters Studies.

a. Program Objective. This program contributes to better control, utilization, and orderly development of jointly - controlled water resources along the U.S. - Canadian boundary. It encompasses four boards and one committee established by the International Joint Commission (IJC) and in response to other U.S./Canadian cooperative efforts. IJC boards fall into two broad categories: boards of control, which are essentially permanent; and engineering or advisory boards, which are usually dissolved after completing their investigation.

b. Eligibility. Activities within the scope of authority of an appropriate Board and/or committee are eligible for funding.

c. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053900, CCS: 240

(2) The proponent/Program Manager develops the line item budget by consolidating requested funds from pertinent Districts/Divisions and prepares work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-2-16. Inventory of Dams Program.

a. Program Objective. Maintain and publish a nation-wide inventory of dams available to Federal and state dam safety agencies as well as to the general public.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program. In general, two work packages will be input into CW-IFD by the Proponent. One package is for budget development and the second is for the allocation strategy.

(1) Programmatic AMSCO: 014405, CCS: 174

(2) The program's budget and allocation strategy needs are driven by annual needs to coordinate with state and Federal dam safety agencies to provide their entire dam inventory using the web-based application, upgrade the GIS interface and increasing integration with other dam and levee safety resources. Modifications to the web-based data submittal tool continue to improve ease of access, security, and information updates by Federal and non-Federal dam safety agencies.

J-2-17. National Flood Risk Management Program.

a. Program Objective. The aim of the National Flood Risk Management Program (NFRMP) is to better position our nation’s economy, society, and natural landscapes to withstand, recover, and adapt to ever changing flood risks. The program cuts across USACE mission areas, business lines, and programs to promote best practices, leverage technical and programmatic expertise, and improve the agencies collective FRM capability and capacity. Given the shared nature of FRM, the program also reaches out beyond the USACE and uses its convening power to provide technical assistance and improve our support to others facing complex flood risk management challenges. Specific activities carried out under this program include participation on Federal agency teams including the Mitigation Framework Leadership Group (MitFLG), the Federal Interagency Floodplain Management Task Force (FIFM-TF), and Subcommittee on Ocean Science and Technology; support to 48 state led Silver Jackets teams including the District of Columbia; support to USACE Communities of Practice such as Dam Safety, Risk Management, and Planning; and assist in the execution of flood related programs such as Floodplain Management Services, Program Assistance to States, Levee Safety, as well as flood related business line and budget activities.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 133938, CCS: 179

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-18. National Shoreline Management Study.

a. Program Objective. Develops critical information to address future shoreline management needs and provides support and information utilized by MSCs throughout the Corps. Current efforts include supporting POD, NAD and SPD in development of long-term shoreline management strategies in VA, CA,

and HI within areas of responsibility (AOR). Recently, HQUSACE is taking a more active role and working to focus purpose on national and regional products needed in other key areas (i.e. SAD). Funds in this RI also help maintain the Coastal Systems Portfolio Initiative (CSPI) database.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053929, CCS: 179

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-19. Planning Assistance to States (PAS).

a. Program Objective. The PAS program is carried out as described in Appendix G, ER 1105-2-100, Planning Guidance Notebook, per the provisions of Section 22 of the WRDA 1974, as amended. This public law (42 U.S.C. 1962d-16) authorizes the Chief of Engineers to cooperate with States, Commonwealths, Territories, non-Federal interests working with States and Indian tribes in preparation of comprehensive water resources plan(s) for development, utilization and conservation of the water and related resources of drainage basins, watersheds or ecosystems, including plans to comprehensively address water resource challenges. The public law also authorizes the Chief of Engineers to cooperate with governmental agencies and non-Federal interests in providing technical assistance related to management of water resources and related land resources development identified in State water resources management documentation. Assistance is provided subject to requirements of the law.

b. Planning assistance should be coordinated and scheduled to ensure the continuation and completion of ongoing work and the timely initiation of new work. Funds issued for this program will follow the performance based process described for Special Investigations in para. J-2-25.

c. It is important to adhere to the Program Code nomenclature where individual studies have individual program codes and coordination activities use the program code of 190007.

d. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO: 190007, multiple child AMSCOs, CCS: 186

(2) The HQ PAS Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) enters the work package in CW-IFD, provides the supporting justification documentation to the Proponent and develops Allocation Plan(s). The budget and Allocation Plan(s) will be a function of program performance, program need, and Congressional intent. The Program Manager, Proponent and Champion determine the recommended budget request and that allocation amount is managed by the HQ and MSC Program Managers.

J-2-20. Planning Support Program.

a. Program Objective. The Planning Support Program funds three vital elements of the Planning Program. 1) Planning modernization is focused on delivery, implementation, training, and policy guidance/development of the planning portfolio. 2) Planning Associates Program is a master level training and leadership program designed to ensure that planners have the education to tackle the nation's planning challenges, by increasing competencies and leadership skills. 3) Planning Centers of Expertise (PCX) provide direct support and oversee the review process including development of review guides, training modules, model certification and the development of new guidance.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 151558, CCS: 296

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into overarching work packages in CW-IFD, which include a description of proposed activities, budget, and schedule.

J-2-21. Precipitation Studies.

a. Program Objective. This is the hydro-meteorological studies program conducted by the Corps of Engineers. These studies are not covered under regular CW I and O&M funding programs. The Corps performs analyses of storm rainfall and other meteorological data required to develop hydrologic criteria for use in planning, design and water control management of flood control and water resources development projects, and in floodplain management studies.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 088039, CCS: 220

(2) The Proponent/Program Manager develops the line item budget by consolidating requested funds from the Districts and Divisions and prepares work packages in CW-IFD, with a description of proposed activities, budget, and schedule. The activities are funded based on how the studies would support existing and anticipated projects.

J-2-22. Remote Sensing/Geographic Information System Support.

a. Program Objective. The Remote Sensing (RS)/GIS Center is the USACE Center of Expertise for Civil Works Remote Sensing and GIS technologies, providing mission essential support to CW programs. The Center provides cost-effective centralized management and support through technology transfer and applications development for Corps mission responsibilities in all business practice areas: navigation, flood risk management, hydropower, regulatory, environment, EM, recreation, water supply, and work for others.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 031293, CCS: 293

(2) An annual funding request is developed based on the average of yearly requests for services as RS/GIS Center of Expertise from district, division and HQUSACE personnel. Increases in funding are generated by new enterprise requirements identified by HQUSACE. The Proponent works with ERDC to ensure requirements are met and reviews the proposed budget and allocation strategy requirements submitted by ERDC in CW-IFD.

J-2-23. Research and Development (R&D).

a. Program Objective. This R&D area provides advanced and innovative tools and technology for the Corps to help address the significant challenges of meeting the Civil Works Program, including; assist in providing safe and resilient communities and infrastructure; help facilitate commercial navigation in an environmentally and economically sustainable fashion; restore degraded aquatic ecosystems and prevent future environmental losses; and implement effective, reliable, and adaptive life-cycle performance management infrastructure. R&D delivers efficient and effective capabilities to plan, design, construct, operate, maintain, and upgrade transportation projects in inland and coastal locations and in all climates, from warm to ice-affected. Engineering and environmental aspects are integrated in the development of processes and design models, decision support software, infrastructure condition assessment techniques, risk frameworks, infrastructure and design guidance, and innovative monitoring, operation and maintenance technologies.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program. In general, multiple work packages will be input into CW-IFD by the ERDC Programs Office. . One package is for budget development. Multiple packages may be needed for the allocation strategy since R&D crosses the three main CW business lines; Navigation, Flood Risk Management, and Environment.

(1) Parent AMSCO: 190008, child AMSCOs (031342 – Ecosystem Management & Restoration, 031398 – Flood & Coastal Systems, 031391 – Navigation Systems), CCS: 300 series

(2) The R&D Program is budgeted and managed according to the three main CW Business Lines: NAV, FRM and AER. Strategic direction for the Program is established by the Civil Works R&D Steering Committee, and articulated in the CW R&D Strategic Plan. Research initiatives are derived from Statements of Need (SONs) submitted by field subject matter experts and independent technology advisory groups. The Statements are prioritized by Research Area Review Groups and Communities of Practice (COPs) and recommended to the Business Line Manager (BLM) for each of the three business areas. The Steering Committee approves the proposed budget and research initiatives.

J-2-24. Scientific and Technical Information Centers.

a. Program Objective. Public Law 99-802, Federal Technology Transfer Act of 1986, requires technology transfer from Federal agencies to the private sector. In addition, both the Department of Defense and the Department of the Army have objectives of supporting the information needs of engineers and scientists and eliminating unnecessary duplication of R&D.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053850, CCS: 270

(2) Budget development and allocation strategy funding is determined by the Assistant Director for CW R&D for support to five Information Analysis Centers in ERDC. These Centers perform technology transfer to end users through information publication and on-call assistance. Funding also is derived from CW BLM support to specific critical technical information dissemination initiatives, such as Knowledge Management. The Proponent works with ERDC to ensure requirements are met and reviews the proposed budget and allocation strategy requirements submitted by ERDC in CW-IFD.

J-2-25. Special Investigations.

a. Program objective. This RI is used for critical field coordination prior to initiation of an active study or project. These funds are provided for the field to respond to phone calls and various special requests by local interests to conduct limited scope investigations of flooding and potential ecosystem restoration at multiple locations where a previously studied and/or authorized project does not exist as well as to attend meetings of local interest and other agencies during the preliminary stages of project investigations. Actions that assist with Integrated Water Resource Management can be accomplished in this program such as required education and expectation setting for potential sponsors. The program specifically includes funding for potential new study screening. This funding allows the District to conduct a rigorous screening process to ensure that the most viable studies are recommended as New Start studies. District staff will participate in this screening process to identify appropriate non-Federal sponsors, obtain a Letter of Intent, and ensure that study authority exists in order to develop a viable portfolio of new start studies. Funds will not be used to perform any study specific analysis.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 017250, CCS: 171

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-26. Stream Gaging.

a. Program Objective. Cooperative effort with USGS to collect stream gauging data for non-project sites. The Corps established this continuing, cooperative program in March 1928, so that stream flow data would be available to meet special needs concerning the Corps water resources responsibilities.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053890, CCS: 210

(2) The proponent/Program Manager develops the line item budget by consolidating requested funds from the Districts and prepares work packages in CW-IFD, with a description of proposed activities, budget, and schedule. The activities are funded based on past years' funding to continue collection of stream gaging data for the sites.

J-2-27. Transportation Systems.

a. Program Objective. This program supports districts, divisions and HQ in accomplishing navigation project planning and evaluating responsibilities through the provision of information and technical support. It is continuing to ensure the development of viable and practical analytical techniques, sources of information, navigation data, forecasts, tools and methods.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 053841, CCS: 291

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-28. Tribal Partnership Program.

a. Program Objective. As currently authorized, the Section 203 program is a study and construction authority. Under this authority, the Secretary may carry out activities related to the study, design, and construction of water resources development projects, that substantially benefit Federally-recognized Indian Tribes and that are located primarily within Indian country (including lands within the jurisdictional area of an Oklahoma Tribe) or in proximity to Alaska Native Villages. Authorized activities include: projects for flood damage reduction, environmental restoration and protection, and preservation of cultural and natural resources; watershed assessments and planning activities; letter reports; and other projects as the Secretary, in cooperation with Indian Tribes and the heads of other federal agencies, determines to be appropriate.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 076371, CCS: 179

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-2-29. Water Resources Priorities Study.

a. Program Objective. This study is authorized by Section 2032 of the WRDA 2007. It contains a technical component focused on characterizing national and regional flood risks and a policy component examining the potential influence of Federal FRM programs on local land use and FRM choices.

b. Budget Development and Allocation Strategy. This RI has not been funded in recent years. However, the following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 190025, CCS: 179

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the program's objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request and that amount is input by the Program Manager into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

SUB-APPENDIX J-3

Remaining Items

Construction

J-3-1. Program Purposes. RI programs under Construction may not directly contribute to a specifically authorized project within a state. However, it does include nationwide programs such as the Continuing Authorities Programs, which allows for the planning, design and construction of projects for specific purposes that do not require Congressional authorization; other programs focused on estuary restoration; the control and spread of invasive species; the dam safety program; and other expenses such as the Inland Waterways Users Board and employee compensation. Specific RI programs in the C account are listed below:

J-3-2. Aquatic Plant Control Program.

a. Program Objective. Continued research efforts to further develop ecologically based, integrated plant management strategies for invasive aquatic plants (i.e., Eurasian watermilfoil, hydrilla, etc.); control technologies for preventing the initial introduction and spread of invasive aquatic plant species over large acreages; replacing problem invasive aquatic plants with native species (providing much-improved aquatic habitat for fish and wildlife); and continuing research on biological and chemical control technologies; develop and implement a watercraft inspection station program with the Columbia Basin states to protect Corps infrastructure in the basin from new invasive species infestations. Develop a protocol for early detection and rapid response to new infestations of invasive species with the Columbia basin states.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 075098, CCS: 740

(2) Annual budgets and allocation strategies are developed based on field needs and requirements generated through field participation in annual field review and through the Corps' Invasive Species Leadership Team. The program is executed by the Program Manager at ERDC-Environmental Laboratory with oversight and direction provided by the HQ Natural Resources proponent. The Program Managers develops and manages the research projects and tech transfer to address prioritized needs and requirements. The program is annually reviewed to ensure the program is engaged in sound science, meeting field needs, producing valuable products, and providing technology transfer of products to end users. Multiple work packages with a description of proposed activities, budget, and schedule are developed by the Program Managers and input into CW-IFD by the Proponent.

J-3-3. Continuing Authorities Projects Not Requiring Specific Legislation.

a. Budget Development and Allocation Strategy. The following data attributes and process should be used for all Sections of this RI program.

(1) See below for the AMSCO and CCS for each CAP section, respectively.

(2) Budget Development. The HQ Program Manager will be responsible for preparing all budget related submittals for all CAP Sections that are allowed to submit a budget request. The submittals include population of CW-IFD with work packages for all Below Ceiling, Ceiling and Above Ceiling requirements

and preparation of the J-Sheet and other supporting documentation. The Program Manager will utilize current project level capabilities and schedules, maintained in the CAP Database, to develop the Section level work packages. Throughout the budget development and defense process, revised capabilities will be provided, upon request, to the office of ASA(CW) and the appropriation committees.

(3) Allocation Strategy Development. Prior to the beginning of the Program Year (PY), the CAP database will be used to identify each project/phase that is eligible to receive an allocation as well as those project/phases that will become eligible to receive an allocation during the fiscal year. The allocation will be revised as needed as the House, Senate and Conference Reports are developed. All CAP sections, except Section 208, are usually funded by Congress in the annual appropriations. Funding priorities are identified in Appendix B of the Annual Execution EC.

b. Aquatic Ecosystem Restoration (Section 206), Budgeted.

(1) Program Objective. Projects that will improve the quality of the environment, are in the public interest, and are cost-effective.

(2) Parent AMSCO 902732, multiple child AMSCOs, CCS: 732

c. Beneficial Uses of Dredged Material (Section 204), Budgeted.

(1) Program Objective. Regional sediment management and beneficial uses of dredged material from new or existing Federal projects for the purpose of ecosystem restoration, FRM, HSDR.

(2) Parent AMSCO 902792, multiple child AMSCOs, CCS: 792

d. Flood Damage Reduction (Section 205), Budgeted.

(1) Program Objective. Local protection from flooding by non-structural measures such as flood warning systems, or flood proofing; or by structural flood damage reduction features such as levees, diversion channels, or impoundments.

(2) Parent AMSCO 902516, multiple child AMSCOs, CCS: 516

e. Project Modifications for Improvement to the Environment (Section 1135), Budgeted.

(1) Program Objective. Modifications of USACE constructed water resources projects to improve the quality of the environment. Also, restoration projects at locations where an existing Corps project contributed to the degradation.

(2) Parent AMSCO 902722, multiple child AMSCOs, CCS: 722

f. Emergency Stream Bank and Shoreline Protection (Section 14), Not Budgeted.

(1) Program Objective. Emergency stream bank and shoreline protection for public facilities, such as roads, bridges, hospitals, schools, and water & sewage treatment plants, that are in imminent danger of failing.

(2) Parent AMSCO 902517, multiple child AMSCOs, CCS: 517

(3) This program is not being considered for the FY20 budget.

g. Hurricane and Storm Damage Reduction - Beach Erosion (Section 103), Not Budgeted.

(1) Program Objective. Protection of public and private properties and facilities against damages caused by storm driven waves and currents by the construction of revetments, groins, and jetties, and may also include periodic sand replenishment.

(2) Parent AMSCO 902420, multiple child AMSCOs CCS: 420

(3) This program is not being considered for the FY20 budget.

h. Navigation Improvements (Section 107), Not Budgeted.

(1) Program Objective. Improvements to navigation including deepening and widening of channels, turning basins, and anchorages, and construction of navigation structures.

(2) Parent AMSCO 902216, multiple child AMSCOs, CCS: 216

(3) This program is not being considered for the FY20 budget.

i. Mitigation to Shore Damage Attributable to Navigation Works (Section 111), Budgeted.

(1) Program Objective. Prevention or mitigation of erosion damages to public or privately owned shores along the coastline when the damages are a result of a Federal navigation project.

(2) Parent AMSCO 902232, multiple child AMSCOs, CCS: 232

j. Snagging and Clearing for Flood Damage Reduction (Section 208), Not Budgeted and no longer funded in the annual appropriations.

(1) Program Objective. Local protection from flooding by channel clearing and excavation, with limited embankment construction by use of materials from the clearing operation only. These projects can be funded under the Section 205 program.

(2) Parent AMSCO 902518, multiple child AMSCOs, CCS: 518

(3) This program is not being considered for the FY20 budget.

J-3-4. Dam Safety and Seepage/Stability Correction Program.

a. Program Objective. The Dam Safety Seepage and Stability Correction Program (WEDGE) provides funding for non-routine Dam Safety studies, including Issue Evaluation Studies (IES) and Dam Safety Modification Studies and (PED) for high risk dams in the Corps. The overall objective of the program is to reduce life safety risk for the projects within the USACE portfolio. The studies establish the existing risk condition of the dam to determine if further study is required to reduce life safety risk, identify cost effective risk management alternatives for corrective actions on dams that pose an unacceptable life safety or economic risk, and allow continuation of pre-construction activities such as final design, plans and specifications, and contract solicitation up to award while the project awaits a specific line item appropriation.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 190010, CCS: 640, 541, 641, 241, 542, 642, 242

(2) The CG WEDGE remaining item is used for non-routine dam safety studies that are a component of the USACE Dam Safety Program. The proponent for this remaining item is the HQUSACE Dam Safety Officer. The Risk Management Center (RMC) serves as the lead to manage the studies, provides appropriate expertise to the studies, and distributes the funds to project teams working on the highest priority projects in the dam safety portfolio. Funding needs are driven by the requirements of higher level risk assessments, modification studies, and pre-construction engineer and design PED activities. Individual allocation strategies for each project (which include, scope, schedule, budget, earned value management, and key milestones) are developed by the technical teams and approved by the RMC. The Program ManagerRMC inputs work packages into CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-3-5. Employees' Compensation.

a. Program Objective. Employees Compensation (Reimbursement Payments to the Department of Labor). Conducted under the general authority of Public Law 94-273, approved April 21, 1976, 5 USC 8147b.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO 190034, multiple child AMSCOs, CCS: 750

(2) The annual budget estimates a request for an appropriation equal to costs previously paid from the Employees Compensation Fund on account of injury or death of employees or persons under the agency's jurisdiction. The Program Manager inputs an overarching work package into CW-IFD.

J-3-6. Estuary Restoration Program.

a. Program Objective. The objective of the Estuary Habitat Restoration Program (ERHP) is to implement actions required by the Estuary Restoration Act (ERA) of 2000, Public Law 106-457, Title I, as amended, to promote the restoration of estuary habitat; to develop a national Estuary Habitat Restoration Strategy; to provide Federal assistance for and promote efficient financing of estuary habitat restoration projects; and to develop and enhance monitoring, data sharing, and research capabilities. The ERA authorized a program under which the Secretary of the Army may carry out projects and provide technical assistance to meet the restoration goal of restoring 1,000,000 acres of habitat. Costs of projects funded under the ERA must be shared with non-Federal parties. Non-Federal responsibilities and project selection criteria are discussed in the ERA.

The ERA established an “Estuary Habitat Restoration Council” (Council) consisting of representatives of the National Oceanic and Atmospheric Administration (NOAA), Environmental Protection Agency (EPA), Department of the Interior (U.S. Fish and Wildlife Service), Department of Agriculture, and the Department of the Army. The ERA authorizes funds to be appropriated to all of the Council member agencies for implementation of projects. Projects carried out by any Council agencies must be approved by the Council. The last set of projects were approved by the Council and recommended for funding by the ASA(CW) in 2013.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO 150575, multiple child AMSCOs, CCS: 737

(2) For projects that have previously received funding under this program and require additional funding to complete (either within or above the original amount approved), the district/MSC should submit a work package in CW-IFD for the necessary amount and notify the Program Manager. The Program manager will assess the availability of funds within the program. Note that funds requested above the original amount approved may require approval of the Council.

The process for soliciting and selecting new projects under the Estuary Habitat Restoration Program is unique within USACE. If sufficient funds are appropriated and/or available to obligate, the Council solicits project proposals through an announcement for Federal Funding Opportunity with a specific criteria, application elements, and a due date. Proposals are reviewed by the Council, who provides a ranked list of projects it recommends for funding. The Department of the Army may approve projects on that list for funding and execution by USACE and/or other Council agencies. Cost sharing for this program is not specified, but the Federal share (from all Federal sources combined) cannot exceed 65%.

J-3-7. Inland Waterways Users Board - Board Expense.

a. Program Objective. To conduct all required meetings and related activities to comply with law, including meeting costs and committee members' travel necessary to participate in the meetings per the charter and law.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 076175, CCS: 250

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-3-8. Inland Waterways Users Board - Corps Expense.

a. Program Objective. As the sponsor agency, support of this congressionally mandated Federal advisory committee, including personnel and other costs to coordinate, attend, and provide analytical support for all necessary meetings of the Board per their charter, and in support of other inland marine transportation issues.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 076183, CCS: 250

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-3-9. Restoration of Abandoned Mines (RAMs).

a. Program Objective. The RAMs Program utilizes USACE environmental authorities to provide technical, planning, and design assistance to Federal and non-Federal interests in carrying out projects to address water quality problems caused by drainage and related activities from abandoned and inactive non-coal mines.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 076322, CCS: 900

(2) This program is not being considered for the FY20 budget. The Program Manager inputs work packages into CW-IFD for allocation strategy considerations.

J-3-10. Shoreline Erosion Control Development and Demonstration Program.

a. Program Objective. Conduct a national shoreline erosion control development and demonstration program according to Section 2038 of the Water Resources Development Act of 2007, to include as specifically directed, demonstrations of the effectiveness of natural features.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 031323, CCS: 430

(2) This program is not being considered for the FY20 budget or allocation strategy.

SUB-APPENDIX J-4

Remaining Items

Operation & Maintenance

J-4-1. Program Purposes. RI programs under Operation and Maintenance may not directly contribute to a specifically authorized project within a state. However, many of the products or activities accomplished through these programs support O&M across all business lines of the Corps such as flood risk management, navigation, environment, hydropower, water supply, recreation and disaster response and EM. Specific RI programs in the O&M account are listed below:

J-4-2. Aquatic Nuisance Control Research.

a. Program Objective. The Aquatic Nuisance Control Research Program (ANCRP) provides Corps managers and operational personnel with innovative technologies regarding risk assessment, prevention strategies, species life history/ecological data, and cost-effective, environmentally-sound options for managing aquatic nuisance species (ANS).

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008284, CCS: 495

(2) The ANCRP supports USACE Operations with oversight provided by the Chief of Operations, HQUSACE. Annual budgets and allocation strategies are developed based on field needs and requirements generated through field participation in annual field review and the Corps' Invasive Species Leadership Team. The program is executed by the Program Manager at ERDC-Environmental Laboratory with oversight and direction provided by the Proponent. The Program Manager develops and manages the research projects and tech transfer to address prioritized needs and requirements. The program is annually reviewed to ensure the program is engaged in sound science, meeting field needs, producing valuable products, and providing technology transfer of products to end users. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-4-3. Asset Management/Facilities and Equipment Maintenance (FEM).

a. Program Objective. In conjunction with lifecycle portfolio management objectives, develop overall assessment of current USACE water resources infrastructure portfolio to determine appropriate and effective divestiture strategies and potential streamlined procedures. This RI currently consists of Asset Management (Lifecycle Portfolio Management) and Cybersecurity activities.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008329, CCS: 640

(2) The associated activities develop their initial budget needs independently based on the applicable overarching USACE Campaign Plan objectives & targets, and then are combined by the Proponent into distinct work packages in CW-IFD that total the needs. These are broken out by base-level

requirements to accomplish minimal needs, and also by higher-level requirements to accomplish the full planned program.

J-4-4. Civil Works Water Management System (CWWMS).

a. Program Objective. This program is to enhance the operational decision making for floods, droughts, emergency operations, planning, and real-time operations. This will advance the implementation of the Corps Water Management System (CWMS) nationwide, including developing the hydrologic, hydraulic, and consequence models required for a watershed approach to effectively meet authorized purposes.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 455636, CCS: 640

(2) The Proponent evaluates the scope of uncompleted projects and estimates the work that could be completed either by contract or available in-house resources. From that the Proponent develops total funding requirements and work to balance this against the needs of the program for FY target completion.

J-4-5. Coastal Data Information Program (CDIP). – AKA CODS.

a. Program Objective. Ocean observations are used to validate numerical hindcast models that calculate wave information over 30 to 50 year periods on the Atlantic & Pacific coasts, Gulf of Mexico and Great Lakes. This wave climate information is combined with storm wave information producing validated long-term and storm waves that drive our next generation risk-based coastal models.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 190012, CCS: 110

(2) Funding need is based on the average of annual expenses for operation of coastal ocean wave data buoys through collaboration with National Oceanic and Atmospheric Administration's National Data Buoy Center and Scripps Institution of Oceanography that maintains a network of willow-water coastal gauges. Funding requirement includes annual update of Wave Information Studies (WIS) that provides high-quality coastal wave information, wave analysis products, and decision support tools to USACE Districts and Divisions. Data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-4-6. Coastal Inlet Research Program (CIRP).

a. Program Objective. The Coastal Inlet Research Program provides tools to engineers and decision makers for developing resilient solutions and practices to reduce the cost of maintenance and operation of Federal navigation projects.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 060000, CCS: 110

(2) The CIRP supports USACE Navigation Operation & Maintenance with oversight provided by the Navigation BLM, HQUSACE. Research initiatives are derived from Statements of Need (SONs) submitted by field subject matter experts and independent technology advisory groups. The Statements are prioritized by Research Area Review Groups and Communities of Practice (COPs) and recommended to the Business Line Manager (BLM). CIRP is executed by the Program Manager at ERDC-Coastal & Hydraulics Laboratory with oversight and direction provided by HQUSACE Navigation Business Line Leadership. The Program Manager develops and manages the research projects and tech transfer to address prioritized needs and requirements, with Project Delivery Teams (PDTs) including a CoP proponent engaged in delivery of the research products. The program is annually reviewed during In Progress Reviews with the Technical Director and RARG meetings with the CoP to ensure the program is engaged in sound science, meeting field needs, producing outcomes as needed to address the CoP needs, and providing technology transfer of products to end users. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-4-7. Cultural Resources. Note: Formerly Cultural Resources (NAGPRA/CURATION).

a. Program Objective. According to policy issued in 1994 for the creation of the Center of Expertise, collections under Section 5 through 7 of the Native American Graves Protection and Repatriation Act (NAGPRA) are to be managed centrally by the center to leverage expertise and efficiencies.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008252, CCS: 640

(2) How to budget through the Proponent:

(a) Funding requirements for activities to ensure compliance with Section 5 – 7 of the NAGPRA (PL 101-601) and with portions of 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, will be budgeted as a Remaining Items activity by HQUSACE and thus should not be included in the general MSC budget submittal.

(b) Specific guidance on budget year activities will be provided in annual guidance by the Mandatory Center of Expertise (MCX) on how and when to make requests for funding of activities to ensure compliance with Section 5 – 7 of NAGPRA and with portions of 36 CFR Part 79.

(c) All of the requirements will be aggregated by the MCX into the budget as a separate line item funded across business lines and submitted by the HQ Environmental Stewardship BLM for inclusion and review by Operations leadership.

J-4-8. Dredge McFarland Ready Reserve.

a. Program Objective. The Ready Reserve Remaining Item funds the operation and maintenance of the Dredge McFarland during Ready Reserve status with sufficient crew to respond within 72 hours when directed by higher authority for urgent and emergency purposes.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 330117, CCS: 111

(2) The Program Manager, the Philadelphia District, develops the budget requirement based on the activities required to keep the Dredge McFarland at the dock in a Ready Reserve status according to Section 2047 of WRDA 2007, and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-9. Dredge Wheeler Ready Reserve.

a. Program Objective. The Ready Reserve Remaining Item funds the operation and maintenance of the Dredge Wheeler during Ready Reserve status with sufficient crew to respond within 72 hours when directed by higher authority for urgent and emergency purposes.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008304, CCS: 111

(2) The Program Manager, the New Orleans District, develops the budget requirement based on the activities required to keep the Dredge Wheeler at the dock in a Ready Reserve status according to Section 237 of WRDA 1996, and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-10. Dredging Data and Lock Performance Monitoring System.

a. Program Objective. Maintains the authoritative lock and dredging data collection and reporting systems Lock Performance Monitoring System and Dredging Information System (LPMS and DIS), Notices To Navigation Interests (NTNI) and continuing dredging data analysis to comply with statutory requirements for performance measures, prioritization and expenditure justifications on navigation infrastructure and essential data for navigation analysis.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 088926, CCS: 640

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-11. Dredging Operations and Environmental Research (DOER).

a. Program Objective. The Dredging Operations and Environmental Research (DOER) program is the only research program in the Federal government that addresses the science, engineering, and technology needs related to dredging and managing between 200 and 300 million cubic yards of sediment that must be removed from navigation channels, ports, and harbors in the United States every year.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 089500 CCS: 110

(2) The DOER program supports the USACE navigation program with oversight provided by the USACE HQ Ops. Research initiatives are derived from Statements of Need (SONs) submitted by field subject matter experts and independent technology advisory groups. The Statements are prioritized by Research Area Review Groups and Communities of Practice (COPs) and recommended to the Business Line Manager (BLM). The DOER Program Manager develops and manages the research projects to address ongoing priorities with Proponent's oversight. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-4-12. Dredging Operations Technical Support Program (DOTS).

a. Program Objective. The Dredging Operations Technical Support (DOTS) Program fosters a "one-door-to-the-Corps" clearinghouse for access to comprehensive information on technology related to navigation O&M functions, including technology demonstrations and training essential to all stakeholders involved in Federal and permitted navigation projects.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 086000, CCS: 110

(2) The DOTS program supports the USACE dredging and navigation programs with oversight provided by the USACE HQ Ops. DOTS supports USACE districts and divisions by providing 2-weeks or less science and engineering assistance related to dredging and navigation issues. Technology transfer activities include training opportunities, databases and models, guidance development, and peer-reviewed publications. The DOTS Program Manager develops the budget along with HQ OPs based on historical and anticipated technical response needs that address ongoing USACE navigation and dredging priorities across multiple functional areas from USACE districts and divisions. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-4-13. Earthquake Hazards Reduction Program.

a. Program Objective. This program is used to assess seismic risk of existing USACE Civil Works owned and leased buildings per requirements in Public law 101-614, The National Earthquake Hazards Reduction Program Reauthorization Act of 2004, and Executive Order 13717, establishing a Federal Earthquake Risk Management Standard. The program is also used to assess overall USACE compliance with Earthquake Hazard Reduction public law and Executive Orders.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008248, CCS: 640

(2) The Earthquake Hazards Reduction Program is budgeted and managed to meet the intent of the public law. Strategic direction for the program is established by the Proponent in conjunction with recommendations from the Seismic Safety Committee. Initiatives are derived from interpretation of new,

and examination of, existing seismic criteria and methods are developed that will ultimately decrease risk to USACE infrastructure, and decrease life risk to its occupants, in the event of an earthquake. The majority of the initiatives are multi-year projects and estimated costs for specific annual activities are consolidated by the Program Manager into an overarching work package and input into CW-IFD.

J-4-14. Facility Protection.

a. Program Objective. Implements security risk assessment and prioritization efforts for USACE Civil Works portfolio of projects to identify effective risk mitigation strategies to minimize physical security risks, maximize the return on investment, and enhance its protection and resilience. This RI supports the Critical Infrastructure Protection and Resilience Program activities.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 081369, CCS: 640

(2) National policy, USACE regulatory requirements, and USACE Campaign Plan goals set forth the objectives and targets for the overall strategic program. The activities supporting these provide the basis for initial budget needs, and are based on historical costs for implementation. Estimated costs are consolidated by the Proponent into an overarching work package in CW-IFD, which includes a description of proposed activities, budget, and schedule.

J-4-15. Fish & Wildlife Operating Fish Hatchery Reimbursement.

a. Program Objective. Specific line item to off-set impacts of Corps Flood Risk Management and Hydropower activities by rearing and stocking approximately 12 million fish at 17 Federal Hatcheries to 45 different receiving waters impacted by 37 Corps dams.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 329431, CCS: 640

(2) The Proponent works closely with the FWS to annually evaluate the cost of Corps mitigation at the National Fish Hatchery Systems by reviewing past expenditures and mitigation needs as identified through state fisheries agencies. Under the guidance of the current MOA for this activity, a final budget request for Corps mitigation will be recommended and entered into CW-IFD by the Proponent.

J-4-16. Harbor Maintenance Fee Data Collection.

a. Program Objective. Statutory mandate to collect domestic waterborne shipper information and U.S. foreign & domestic vessel movements subject to the HMT.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008265, CCS: 491

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-17. Inland Waterway Navigation Charts.

a. Program Objective. Inland Electronic Navigation Charts (IENCs) are large-scale, accurate, and up-to-date products that enable electronic charting systems to provide accurate and real-time display of vessel positions relative to waterway features, improve voyage planning and monitoring, aid in new personnel training tools and integrated displays of river charts, radar and Automatic Identification Systems (AIS) overlays.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008315, CCS: 640

(2) Initial funding requirement developed in WRDA Implementation Guidance. Funding requirement reflects maintenance costs based on the previous year program. Any increases in funding are generated by new requirements identified through the Navigation BLM at HQUSACE. The Proponent works with AGC/LRL to ensure requirements are met and reviews the proposed budget and allocation strategy requirements submitted by AGC/LRL in CW-IFD.

J-4-18. Inspection of Completed Federal Flood Control Projects.

a. Program Objective. Funding associated with this remaining item is used to implement activities associated with the USACE Levee Safety Program. The USACE Levee Safety Program has the mission to work with stakeholders to assess, manage, and communicate risks to people, the economy, and the environment associated with the presence of levee systems.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this remaining item.

(1) Programmatic AMSCO: 030767, CCS: 221

(2) The proponent for this remaining item is the HQUSACE Deputy DSO/LSO with the Risk Management Center (RMC) serving as the lead to manage and distribute the funds. HQ/RMC will develop and submit the capability needs for budget development.

(3) Programmatic activities funded by this remaining item include program management activities (e.g. Levee Safety Steering Committee, Levee Senior Oversight Group, Risk Management Center review plan support, and levee investment plan); data management (e.g. consequence and inundation support); policy development; risk assessments; technical competency and training (e.g. consequence training, risk analysis training, developmental positions, case histories, best practices training); and, community of practice support (e.g. international activities associated with memorandum of agreements).

(4) WCC 60224-60226 will be used as appropriate.

J-4-19. Interagency Performance Evaluation Task Force/Hurricane Protection Decision Chronology (IPET/HPDC) Lessons Learned Implementation.

a. Program Objective. Work to implement updated risk and reliability concepts to operation and major maintenance, including methods, models, guidance to assess engineering and operational reliability of projects, integrate risk analysis concepts, and improve professional and technical competence to mitigate consequences of extreme events.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program. In general, two work packages will be input into CW-IFD by the Program Manager. One package is for budget development and the second is for the allocation strategy.

(1) Programmatic AMSCO: 145759, CCS: 210

(2) The Interagency Performance Evaluation Task Force/Hurricane Protection Decision Chronology (IPET/HPDC) Lessons Learned Implementation Program budget and allocation strategy are based on internal and external analyses of natural disasters and extreme events that identify knowledge, process, and professional and technical competence gaps that hinder USACE Civil Works ability to provide quality water resources solutions. The Civil Works deputies set the future direction to address these gaps in an expeditious manner and oversee the program manager to execute the program. The bulk of the activities are multi-year projects designed to achieve specific strategic outcomes as well as tactical priorities within the program that may shift if/when senior leaders reprioritize.

J-4-20. Monitoring of Completed Navigation Projects (MCNP).

a. Program Objective. This program collects valuable navigation data, documents successful designs, disseminates data and lessons learned on projects with problems, and provides upgraded field guidance for solutions that will reduce life-cycle costs on a national scale.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008321, CCS: 110

(2) MCNP monitors navigation structures with (1) unique features, and/or (2) documented deficiencies. Nominations for new monitoring projects are solicited from USACE Divisions and Districts by HQUSACE as O&M funding becomes available, per ER 1110-2-8151. Nominations for new MCNP studies are evaluated and prioritized by CECW according to criteria of ER 1110-2-8151. Site-specific monitoring produces generic results with conclusions applicable to a regional and/or national basis. HQUSACE responsibility for the MCNP Program is managed by the CECW Operations and Regulatory Division, Navigation Branch. The Coastal and Hydraulics Laboratory (CHL) of the ERDC is responsible for day-to-day technical accomplishment and administrative management of the MCNP Program, and support of HQUSACE review and technology transfer. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

J-4-21. National Coastal Mapping Program.

a. Program Objective. The National Coastal Mapping Program produces regional, recurring, high-resolution, high-accuracy data and information products in direct support of Regional Sediment Management for the Navigation Business Line. The data and products quantify rates of change for

engineering, environmental, and structural aspects of USACE Navigation, Flood Risk Management, and Ecosystem Restoration projects, and the surrounding shorelines, enabling a resilient, systems approach to coastal project management. This readily available data and information resource also assists districts in meeting Smart Planning schedule and cost goals, serves as the "pre-event" condition for determining impacts to coastal projects and regions for EM, and provides data and information to quantify the success of coastal resilience measures.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008242, CCS: 110

(2) The National Coastal Mapping Program (NCMP) (NCMP) supports USACE Navigation with oversight provided by the Chief of Navigation, HQUSACE. The Annual budget is set by HQ and work packages are developed through the 3 following activities. 1) Districts participate in planning meetings for each year's mapping activities and provide input on both the data collection plan and desired information products. 2) The Coastal Working Group of the USACE Hydraulics, Hydrology, and Coastal Community of Practice guides development of new data and products within the program. 3) Routine coastal mapping operations drive requirements for sensor and software evolution. The program is executed by the Program Manager with oversight and direction provided by the HQ Navigation BLM. The Program Manager develops and manages the operations, research, and development to address needs and requirements identified through the mechanisms above. The program is annually reviewed to ensure the program is engaged in sound science, meeting field needs, producing valuable products, and providing technology transfer of products to end users.

J-4-22. National Dam Safety Program (Portfolio Risk Assessment).

a. Program Objective. Direct and manage Corps-wide Portfolio Risk Assessment (PRA) efforts through the RMC and implement a risk program for all Corps dams, including recurring mapping and interim risk reduction work.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 088935, CCS: 640

(2) The program's budget and allocation strategy needs are driven by projections in five categories of projects: program management, technical competency & training, data management, policy development and guidance, tools and methodology, and risk management and assessment and risk analysis. The majority of the work is in the risk management and assessment and risk analysis category, which performs decennial periodic assessments on each of the significant hazard or high hazard dams and appurtenant structures in the USACE inventory, which includes training facilitators and inspectors, conducting the assessments, and performing portfolio risk analysis to assess and manage the risk. Projects in the other categories keep the program functioning and current with best practices and lessons learned to help reduce risks to life and property from failure of a Corps dam. Individual packages for each of these activities (with scope, schedule, and budget) are developed by technical leads and submitted for ranking and prioritization by HQ and the RMC.

J-4-23. National Emergency Preparedness Program (NEPP).

a. Program Objective. Provide for preparedness activities the Corps undertakes in order to respond to man-made disasters or acts of terrorism and supports continuity of operations and government.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Parent AMSCO 084910, multiple child AMSCOs, CCS: 500 series

(2) This National Program is outlined under several Presidential Executive Orders and Statutes, including the Robert T. Stafford Disaster Relief and Emergency Assistance Act. Goals and objectives are defined in the Civil Works Strategic Plan. The cited executive directives assigned significant responsibilities for preparation (planning, training and exercises) to the Corps. Each Division and District develops their work package in CW-IFD according to guidelines provided by HQ Office of Homeland Security (OHS). Work Packages description of activities are as follows: CCS 510, Continuity of Operations Planning; CCS 520, Catastrophic Disaster Response Planning; and CCS 530 Emergency Operations Center Support, includes activities associated with operation and maintenance of EOC facilities. HQ develops work packages to include CCS 500 National level Planning and CCS 560 for training and exercises with budgets; and ranks all work packages.

J-4-24. National (Levee) Flood Inventory.

a. Program Objective. This remaining item focuses on activities specific to Title IX of WRDA 2007, as amended. Specifically, WRDA 2007, as amended, includes the development and maintenance of the National Levee Database (NLD); a one-time inventory and review of all levees in the Nation; reestablishment of the National Committee on Levee Safety (NCLS) in an advisory role; development of voluntary national technical levee guidelines; development of technical assistance and training materials to incentivize the creation of state and Tribal levee safety programs; and development of three reports to Congress related to levee safety challenges.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 030745, CCS: 640

(2) The proponent for this remaining item is the HQUSACE Deputy DSO/LSO with the Risk Management Center (RMC) serving as the lead to manage and distribute the funds. HQ/RMC will develop and submit the capability needs for budget development.

(3) Priority activities for this remaining item are NLD upgrades and software enhancements and revisions to improve functionality and usability based on user feedback and O&M activities for the NLD to include supporting additional data integration into the NLD, maintaining the current data set, and supporting NLD related tools such as the Levee Inventory System and Levee Screening Tool. In addition USACE will continue with the nation-wide inventory and review of levees to be included in the NLD, which will be provided by a combination of data collection efforts and volunteer sources such as state agencies, other Federal agencies, local communities, and tribes. Individual work packages for activities (with scope, schedule, and budget) are developed by technical leads assigned by HQ.

(4) WCC 60226 will be used for work under this remaining item.

J-4-25. National (Multiple Project) Natural Resources Management Activities.

a. Program Objective. National (Multiple Project) Natural Resources Management (NRM) Activities was established by ER 1130-2-550, Chapter 15, to support numerous national Recreation Programs such as, Water and Public Safety, NRM Uniforms, Signs, Partnerships, Volunteer Clearinghouse, Sustainability & Environmental Management, and Printing & Publishing.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008270, CCS: 640

(2) This RI is owned and developed by the HQ Rec BLM and managed by individual program managers. Each program funded under this Remaining Item is evaluated based on its influence and criticality to mission execution. Evaluation factors such as life safety, administration priorities, program priorities, legal mandates, and overall value are considered. The costs for each program supported by this RI are developed and rolled up into a single budget proposal adequate to fund the critical components.

J-4-26. National Portfolio Assessment for Reallocations.

a. Program Objective. Funding for the National Portfolio Assessment for Reallocations addresses risks related to inconsistencies in policy and practices for water supply withdrawals at multipurpose reservoir projects across the Corps and understanding overall status and challenges in adapting operation of reservoir projects to changing conditions.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 151527, CCS: 640

(2) The National Portfolio Assessment for Reallocations program budget is based on strategic needs and initiatives identified by the Water Supply Business Line Manager (WSBLM) in coordination with HQUSACE and the Office of the ASA(CW). Currently the budget has two components: programmatic next steps identified in the 2016 Status and Challenges for USACE Reservoirs report and conducting initial assessments of potential reallocation opportunities. Beginning with the FY20budget development, initial assessment needs will be identified by the field through work package submittals as indicated in the Water Supply section of the Program Development Manual. Next step activities are identified and recommended by the WSBLM in the budget justification sheet and address tactical objectives aligned with known strategic needs and initiatives, as well as emerging issues and priorities in response to changing conditions and needs. Both components are prioritized and recommended by the WSBLM in coordination as part of the overall water supply budget development.

J-4-27. Optimization Tools for Navigation.

a. Program Objective. Continue data collection for and maintenance of the National Navigation Operation & Maintenance Performance Evaluation Assessment System (NNOMPEAS) and the Channel Analysis Design Evaluation Tool (CADET) necessary to determine return on investment to perform budget justifications for Navigation coastal projects, and for plan formulation for Navigation projects.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 088933, CCS: 640

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-28. Performance-Based Budgeting Support Program. Note: Includes Program Development Technical Support.

a. Program Objective. Efforts focus on the refinement of corporate performance principles; and program and project level performance measures that focus on anticipated performance and output at different levels of funding. Aligns and integrates with the O&M business processes - navigation, hydropower, flood risk management, recreation, water supply and environmental stewardship.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008258, CCS: 640

(2) Headquarters provides the program manager a list of priorities for initiatives that support missions across multiple business lines. BLMs and their technical leads propose scopes of work to the program manager for support in one or more of the six decision support activity categories: (a) develop reports to communicate budget decisions; (b) identify new and existing data sources; (c) collect and validate quality budget data; (d) integrate data to minimize data interoperability concerns; (e) automate budget data to minimize data entry in the field; and (f) analyze data to support prioritization and decision support. The program manager compiles the requests to develop work packages that support HQ and BLM priorities. The Proponent reviews the total funding requirements and provides a final recommendation to accomplish the requirements of the program from national and business line perspectives.

J-4-29. Protection of Navigation.

a. Program Objective. Ability to remove sunken vessels impacting the Federal navigation channel, for projects without funding or with minimal funding, and measures to clear or remove unreasonable obstructions to navigable channels and waterways.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Removal of Sunken Vessels. Funding Pot AMSCO: 190021, CCS: 410

(2) Clearing and Straightening Channels. Funding Pot AMSCO: 190020, CCS: 420

(a) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that

amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-30. Recreation Management Support Program. Note: Includes support for Recreation One Stop Recreation Reservation Service.

a. Program Objective. The Recreation Management Support Program (RMSP) was established by ER 1130-2-550, Chapter 15, to support the national Recreation Program by providing technical expertise and assistance through the development of a variety of tools and metrics, data analysis and interpretation, economic analysis and studies, and focused management studies that in turn supports strategic planning, identification of operational efficiencies, and budgetary investment priorities and strategies.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 007855, CCS: 640

(2) This RI is owned by the HQ Recreation BLM, and is developed in collaboration with support proponents at IWR and ERDC. The level and types of support requirements are evaluated on an annual basis and costs to deliver the support requirements are determined. The Program Manager inputs work packages into CW-IFD.

J-4-31. Regional Sediment Management Program (RSMP). Note: Includes work previously performed under the Great Lakes Tributary Model.

a. Program Objective. The RSMP objectives are to establish regional management strategies that link the sediment management actions at authorized Corps of Engineers projects with one another, and to coordinate management activities with other Federal agencies, State, and local governments within the boundaries of physical systems including inland watersheds, rivers, estuaries, and the coast.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008303, CCS: 110

(2) The RSMP supports USACE NAV, FRM and AER Business Lines with oversight provided by the HQUSACE Navigation BLM. Annual budgets and allocation strategies are developed based on field needs and requirements generated through field participation in annual RSMP In-Progress Review, Coastal Working Group and Inland Working Group Meetings, and the Navigation and Flood Risk Management Research Area Review Group meetings. The program is executed by the Program Manager at ERDC-Coastal and Hydraulics Laboratory with oversight and direction provided by the HQ Navigation proponent. The RSMP provides a direct link with the other research programs to test and transfer products and technologies to Districts for implementing RSMP principles and practices. The R&D programs receive District feedback on products and technologies to make improvements in order to meet District needs. The Program Manager develops and manages the research and District projects, and tech transfer to address prioritized needs and requirements. The program is annually reviewed to ensure the program is engaged in sound science, meeting field needs, producing valuable products, and providing technology transfer of products to end users. The Program Manager inputs work packages into CW-IFD.

J-4-32. Response to Climate Change at Corps Projects.

a. Program Objective. Develops practical, nationally consistent, and cost-effective methods, tools, and planning and engineering guidance to ensure that our existing and proposed natural and built infrastructure and supply chain are resilient and robust to a range of potential future changes.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 329421, CCS: 640

(2) The Responses to Climate Change Program budget and allocation strategy are based on the USACE Climate Change Adaptation Plan. The Plan is overseen by the Chief of E&C, who serves as the Chair of the Committee on Climate Preparedness and Resilience, and is executed by the lead of the Climate Preparedness and Resilience Community of Practice. Portions of the plan are briefed through ASA(CW) and submitted to the Council on Environmental Quality and Office of Management and Budget for approval. The bulk of the activities are multi-year projects designed to achieve specific strategic outcomes. Tactical priorities within the program may shift as the Administration, ASA(CW), and senior leaders consider changing conditions. The Program Manager inputs work packages into CW-IFD.

J-4-33. Review of Non-Federal Alterations of Civil Works Projects (Section 408).

a. Program Objective. Provides authorization to grant permission to other entities for the permanent or temporary alteration or use of any USACE Civil Works project. This authority provides a mechanism to alter/improve existing USACE Civil Works projects. Funds are used by USACE to process decisions of these requests.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this remaining item. In general, one work package will be inputted into CW-IFD by IWR for budget development. All additional capability beyond the budget amount will be captured by an additional work package for the allocation strategy and input into CW-IFD by IWR.

(1) Programmatic AMSCO: 190093, CCS: 408. Section 408 activities will use WCC 60223.

(2) Activities associated with processing requests to alter any USACE Civil Works projects under Section 408 will be prioritized and centrally funded from this remaining item. Such activities include data management, program management, coordination, reviewing and processing requests, creating funding agreements, generating categorical permissions and developing review plans.

(3) Section 408 requests for non-Federal hydropower development are to be excluded from this remaining item. Section 408 activities related to hydropower will continue to be funded from Federal Energy Regulatory Commission (FERC) licensees' annual payments through the Maintenance & Operation of Dams account. District should request funding for these activities in coordination with their designated FERC hydropower coordinators.

(4) This remaining item cannot be used for Department of the Army Regulatory Program activities associated with Section 10/404/103 reviews. Regulatory funds can only be used for a Section 10/404/103 action, which may include those actions with an associated Section 408 request. Regulatory staff can use Regulatory funds to participate in joint meetings and internally coordinate portions of shared documents when a Section 408 request also requires a Section 10/404/103 action. Regulatory funds cannot be used to

develop or coordinate any components of the Section 408 request independent of a Section 10/404/103 action.

(5) Monitoring and enforcement activities associated with approved Section 408 will not be funded from this remaining item and should be funded from the appropriate funding source associated with monitoring the specific USACE project (e.g. Inspection of Completed Works (ICW), MR&T, or Project Condition Surveys funding). Regulatory funds cannot be used for Section 408 enforcement actions even if a Section 10/404/103 violation may have occurred.

(6) The HQ proponent for this remaining item is the Chief, Engineering and Construction with the Risk Management Center (RMC) responsible for managing and distributing the funds. The RMC will coordinate with districts and divisions to develop the total budget capability amount. Once appropriations is received, the RMC will distribute and redistribute funding based on Section 408 requests received and actual expenditures to optimize the efficiency of the use of funding. Management and monitoring of funds will be accomplished through the Section 408 coordinators.

c. Contributed funds accepted through funding agreements from non-federal public or private entities to evaluate Section 408 requests, including authorities pertaining to Section 1156(a)(2) of WRDA 2016, Section 214 of WRDA 2000, and 23 USC 139j, will recorded in 096X8862. Each FOA must record contributions in CEFMS as a cost share control record (CSCR) as follows

(1) As a cost share advance account citing appropriation 096X8862 and collect type code LCSA

(2) The cost share advance account will cite AMSCO 190093 and CCS 408. The CSCR must link to a zero dollar federal funding account citing appropriation 096X3123 and CCS 408.

(3) The Regulatory Program processes funds received through funding agreements using a different process. There may be cases when there is one funding agreement that covers Section 408 and Regulatory actions. In these cases, the two different processes should still be followed for the funding amount pertaining to each program. In other words, the funding associated with Section 408 activities will use the process described above, and the funding associated with Regulatory Program actions will be processed using Regulatory Program current procedures.

J-4-34. Stewardship Support Program.

a. Program Objective. The Stewardship Support Program was established by regulation in FY 02 to provide broad support to Environment Stewardship function at operating projects by assisting in the identification of national program needs, the development of new national program activities, strategic program planning, and the recommendation of national stewardship program funding priorities. Support will be provided in refining the Environment Stewardship business program strategic plan and goals, and budget processes, to address the targeted outcomes of the overall Corps CW Strategic Plan, using input from the Stewardship Advisory Team, other associated Corps business programs and stakeholders. The program provides support for over 200 data elements for over 400 projects in OMBIL to provide performance tracking under the GPRA.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 150609, CCS: 640

(2) This RI is owned by the HQ Environmental Stewardship (ENS) BLM, and is developed in collaboration with support proponents at IWR and ERDC. The level and types of support requirements are evaluated on an annual basis and costs to deliver the support requirements based on new policies, administration initiatives, needs of the field and to meet the Civil Works Strategic Plan goals and objectives. The Program Manager inputs work packages into CW-IFD.

J-4-35. Sustainable Rivers Program (SRP).

a. Program Objective. The Sustainable Rivers Program's (SRP) fundamental goal is to advance, implement, and incorporate environmental flow strategies at Corps reservoirs.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 190099, CCS 640

(2) The Sustainable Rivers Program budget is developed by the Program Manager with input from Corps HQ and District and Division staff engaged in the Program. The Program Manager uses this information to define Program budget requests, Program capabilities, and mission-critical work, all of which are updated as needed to remain synchronized with changes in Administration, ASA(CW), and senior leader priorities. With 66 reservoirs on 16 river58 reservoirs in 14 river basins engaged, Sustainable Rivers is the most large-scale and comprehensive environmental flows effort of the Corps. All Program work is related to the advancement, implementation, and incorporation of environmental flow strategies at Corps reservoirs. The Program is overseen by the AER BLM under the Chief of Planning. The Program Manager inputs work packages into CW-IFD.

J-4-36. Veteran's Curation Program and Collections Management. Note: Formerly Cultural Resources (NAGPRA/CURATION).

a. Program Objective. The Veterans Curation Program serves as a primary means of rehabilitating and processing collections to meet Federal standards. The program also works to ensure compliance with portions of 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 190098, CCS: 640

(2) How to budget through the Proponent:

(a) Funding requirements for VCP and curation activities to ensure compliance with portions 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, will be budgeted as a Remaining Items activity by HQUSACE and thus should not be included in the general MSC budget submittal.

(b) Specific requirements for VCP and curation activities will be annually compiled by the Mandatory Center of Expertise (MCX) in collaboration with Districts and MSCs.

(c) All of the requirements will be aggregated by the MCX into the budget as a separate line item funded across business lines and provided to the ENS BLM for inclusion into the RI Operations budget for review by leadership. The Program Manager inputs work packages into CW-IFD.

J-4-37. Waterborne Commerce Statistics.

a. Program Objective. Data collection, database administration and management of the authoritative system of record to collect, process, perform quality controls, distribute and archive U.S. domestic and foreign vessel trip and cargo data, U.S. navigation infrastructure inventory, and documentation of U.S. vessels available for operation in waterborne commerce to comply with statutory mandate/requirements.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 017460, CCS: 492

(2) The Program Manager develops the budget requirement based on the activities required to successfully deliver the activities objective(s) and provides the supporting justification documentation to the Proponent. The Program Manager and Proponent determine the recommended budget request and that amount is entered by the Program Manager into work packages in CW-IFD, with a description of proposed activities, budget, and schedule.

J-4-38. Water Operations Technical Support (WOTS).

a. Program Objective. Providing the technology and knowledge base necessary to broadly address environmental requirements at Corps reservoirs, navigation locks, harbors, hydropower projects, and 25,000 miles of inland and coastal waterways according to laws and regulations can best be accomplished through a comprehensive centralized program that will maximize cost effectiveness, and ensure broad dissemination and implementation of technology and information. Beginning in FY2015, WOTS also included research and development of Forecast Informed Reservoir Operations (FIRO), an effort investigating the feasibility of using predictive capabilities of atmospheric river events to inform reservoir operations at Corps dams in the Western United States.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 008241, CCS: 290

(2) The WOTS Program supports the USACE navigation program with oversight provided by the USACE HQ Ops. WOTS supports USACE districts and divisions by providing 1-week or less engineering and science assistance related to environmental and water quality management at Ops projects. Technology transfer activities include training opportunities, databases and models, water operations guidance development, and peer-reviewed publications. The WOTS program manager develops and manages the technical responses and activities from multiple functional areas from across USACE districts and divisions. The WOTS Program Manager develops the budget along with HQ Ops based on historical and anticipated technical response needs that address ongoing USACE water operation issues at reservoir and waterway projects. Work package data is entered and maintained in CW-IFD by the ERDC Programs Office.

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SUB-APPENDIX J-5

Remaining Items

Mississippi River & Tributaries

J-5-1. Program Purposes. RI programs under Mississippi River & Tributaries may not directly contribute to a specifically authorized study or project within a state. However, many of the products or activities accomplished through coordination collection and study of basic data used for studies and mapping are used for studies and/or in support of the lands and waters within the MR&T region, providing critical information for the Corps and other Federal, state and local agencies across the country. Collaboration of the Mississippi River Commission is also funded within the MR&T account. Specific RI programs in the MR&T account are listed below.

J-5-2. Collection and Study of Basic Data (Investigations).

a. Program Objective. The program includes data gathering and study activities encompassing all of the Lower Mississippi River Basin. The collection of essential basic data are subsequently used in the planning and design of projects that comprise the Mississippi River and Tributaries program.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 081900, CCS: 120, 121

(2) The budget and allocation strategy packages are derived by the Districts/MSC through coordination with the Program Manager, who develops the budget recommendation based on the activities necessary to successfully deliver the programs' objective(s). The Program Manager also provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request or allocation strategy and the Program Manager oversees the reconciliation of that amount in CW-IFD, including updates to descriptions of proposed activities, budget, and schedule, as necessary. A program analyst at within MVD is responsible for input into CW-IFD for both the budget and allocation strategy.

J-5-3. Mapping (Maintenance).

a. Program Objective. This Federal program provides for up-to-date topographic maps of the alluvial valley in the furtherance of the control of floods within the Mississippi River and Tributaries.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program.

(1) Programmatic AMSCO: 010600, CCS: 420

(2) The budget and allocation strategy packages are derived by the Districts/MSC through coordination with the Program Manager, who develops the budget recommendation based on the activities necessary to successfully deliver the programs' objective(s). The Program Manager also provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request or allocation strategy and the Program Manager oversees the reconciliation of that amount in CW-IFD, including updates to descriptions of proposed activities, budget,

and schedule, as necessary. A program analyst at within MVD is responsible for input into CW-IFD for both budget and allocation strategy.

J-5-4. Mississippi River Commission (MRC).

a. Program Objective. The Mississippi River Commission is responsible for Mississippi River and Tributaries policy and work recommendations, studying and reporting upon the need to modify or add to the project within its jurisdiction.

b. Budget Development and Allocation Strategy. The following data attributes and process should be used for this RI program. The MRC RI should be categorized similar to the MR&T Mapping (Maintenance) RI (i.e. work packages will be entered as *Administrative and Technical Support* with a *Partial Mission Level of Performance*).

(1) Programmatic AMSCO: 454248, CCS: 420

(2) The budget and allocation strategy packages are derived by the Districts/MSC through coordination with the Program Manager, who develops the budget recommendation based on the activities necessary to successfully deliver the programs' objective(s). The Program Manager also provides the supporting justification documentation to the Proponent. The Program Manager, Proponent and Champion determine the recommended budget request or allocation strategy and the Program Manager oversees the reconciliation of that amount in CW-IFD, including updates to descriptions of proposed activities, budget, and schedule, as necessary. A program analyst at MVD is responsible for input into CW-IFD for both budget and allocation strategy.

Glossary

Terms and Abbreviations

General. This glossary contains definitions of terms and CWIF-D codes used in the budget development process. Note that due to the extent of some definitions that are specific to major accounts (I, CG, O&M) or Business Lines, many definitions have been retained in the Appendices of this EC and the Program Development Manuel.

Definitions of budget increments / Levels of Performance are located in this EC as follows:

Construction (including MR&T) – APPENDIX D, paragraph D-2-3.

Operation and Maintenance – APPENDIX E, paragraph E-3-3

FUSRAP – APPENDIX H, paragraph H-9.

Acronyms. Acronyms used throughout this document are defined in APPENDIX B of this EC.

Activity. A component of work performed during the course of a project. An activity could be a process (e.g. Collection of data) or lead to a deliverable (write a report). Activities are the building blocks of the CWIF-D system – they have assigned durations, resources, and relationships.

Benefit Cost Ratio (BCR). A benefit-cost analysis which is performed to calculate and compare benefits and costs for a project to determine whether the project is a sound investment (justification/feasibility) and to see how it compares with other competing projects (ranking/priority assignment). BCR computations must be based on benefits in the latest approved economic analysis and must be no older than 3 years for New Start construction projects and no more than five years for continuing construction projects. Note distinctions of the different BCRs below:

- BCR AT APPLICABLE RATE: The BCR is the ratio of benefits to costs of all project purposes, from the last approved report or updated for budget purposes, evaluated at the applicable discount rate. If the BCR is not reported, put NA in the field and explain why in the REMARKS.
- BCR Current –The BCR with most current updated costs/benefits.
- BCR @ 7% - Using a discount rate allows for comparison of benefits and costs accruing at different points in time. The benefit-cost analysis uses discounting procedures to normalize financial outcomes over time.
- BCR National Economic Development Plan (BCR-NED) – The objective in formulating the National Economic Development Plan is to maximize the difference between monetized benefits and costs. Benefits are increases in the net value of national outputs (goods and services) and vary by type of water resource project. The costs (opportunity costs) are the costs of the resources required or displaced to achieve the plan, such as concrete and steel for building a floodwall.
- BCR – Locally Preferred Plan (BCR-LPP) – A Sponsor may support formulation of an alternative plan with a scope that results in a decrease in the difference between monetized benefits and costs compared to the National Economic Development Plan

Capability. Capability is defined as the estimate for the amount of additional, new funding (over and above projected or actual unobligated carry-in) that, if provided in the applicable fiscal year, can either be obligated or committed for a contract solicitation effectively and efficiently in that fiscal year, consistent with law and

policy, assuming that all projected or actual uncommitted carry-in to that fiscal year is obligated or committed first. (not to be confused with definition for Enterprise-Wide Capability)

- Capability on a contract work package proposed for funding in the BY does not include out-year costs of engineering and design (E&D), supervision and administration (S&A), or contingencies on the contract. The exception is that out-year E&D, S&A, and contingencies should be included if the BY is the last year that contracts are planned to be funded on the project or the study phase, since in this case including them would enable full funding of the project or phase. Furthermore, once the allocations in the President's Budget for a given FY (which becomes BY-1) have been finalized, the capability estimate for an unbudgeted, fully funded contract work package should be adjusted to include out-year E&D, S&A, and contingencies, among other adjustments, because future-FY funding is not certain if the unbudgeted work package is funded in a BY-1 work plan.

- Capability is stated in terms of obligations and commitments for contract solicitations, not expenditures. Capability and “Amount That Could Be Used” are identical, where “used” means obligated or committed for a contract solicitation. Project capability for a FY is the sum of its work package capabilities for that FY.

Caretaker Status. Real or personal property at a project site, in part or in whole that is currently not utilized or occupied for current program authorized purposes. This status is applied to inactive assets (see Inactive Facility) for which there are no reactivation plans. Facility systems and collateral equipment may be considered for excess; corresponding to the Federal Real Property Indicator status “excess” and “dispose”. Caretaker status is distinct from “standby” or “mothball” status and is defined at the project or project site level, not the feature level.

Component Renewal. The renewal or replacement of major asset components (roofs, large HVAC, lock gates and mechanisms, spillways gates, etc.). The work almost always exceeds Capital thresholds and generally has a frequency of greater than seven to ten years but is not a capital improvement.

Common Operation and Maintenance. Includes work that is commonly performed at similar projects such as operation at all performance levels, preventive maintenance, budget development, financial and execution management, environmental monitoring and mitigation, and other things necessary to support operation, recurring maintenance, and small scale corrective maintenance of the project. Budget requests for O&M in this category do not resource O&M work which is necessary to support facility performance in future budget years. Common O&M includes work in programmatic activities, administrative and technical support, and legal & environmental mandates. Common O&M is distinct from Specific Work Activities in budget formulation. Common O&M is separated into three “Buckets”: Programmatic Activities, which are activities performed by personnel located at the physical project site; Administrative and Technical Support, which are activities performed by personnel not located at the physical project site (e.g., District Office, Area Office, etc.); and Legal and Environmental Mandates, which includes all legal and environmental mandates (e.g., NAGPRA, BiOps, NEPA, etc.).

Corrective Maintenance. The repair or renewal of an item which has failed or is about to fail.

Critical Work Activities/Packages. Each MSC is responsible for evaluating individual work activities/packages to determine their level of importance with regard to funding in the BY budget. In addition, MSCs must be able to fully justify work activities/packages that are identified as "critical" to their needs. The supporting justification for critical work activities/packages must demonstrate failure to perform the work would be critical to the functioning of the project to accomplish its mission; would endanger the health and safety of the public or project employees, or would result in substantial losses. Equipment,

assets, facilities or components where failure would directly impede the accomplishment of the assigned mission; would endanger the health and safety of the public or project employees; or would result in substantial losses are considered critical assets. The justification for critical work activities/packages must be supported by a risk vs consequence “type” analysis. All "operation", "maintenance" and "joint cost" work activities/packages in the budget that are identified as "critical", whether Common O&M or Specific Work Activities, should be capable of meeting this requirement.

Critical Infrastructure Protection & Resilience Program. The CIPR program leads risk assessment and prioritization efforts for USACE critical infrastructure portfolio in order to enhance its protection and resilience. The program includes both common actions (security and operations personnel training, security patrol and monitoring, security equipment maintenance, security risk assessments, blast damage assessment studies, dam security exercises, operating interim risk reduction measures, and physical security inspections) and Specific Work Activities (protection and operational interim risk reduction measures, physical security implementation, construction retrofits/hardening for vulnerability mitigation, surge in protective measures due to increased threat levels). For more information, see Annex III, paragraph III-2-7.

Civil Works Integrated Funding Database (CW-IFD). CW-IFD is defined as the integrated data set for supporting budget allocations and related funding decisions. CW-IFD includes data used to support the following processes:

- Budget development
- Work plan development/Allocation Strategy
- Documentation and decisions on funding emergency repairs
- Authoritative data on project authorization and cost, to facilitate life cycle cost management, deauthorization, and portfolio management

Data is organized into one of three general categories:

- Program or Project data
- Facility or Feature data
- Work package data

Cyclical Maintenance. The replacement or renewal of items that are required on a recurring basis, with a frequency of greater than one year and less than seven to ten years. Examples are channel dredging, painting, floor coverings, engine overhauls, etc. These generally fall below Capital thresholds. These are also the items that are frequently deferred. Cyclical Maintenance is also referred to as Recurring Maintenance.

Enterprise-Wide Capability for Allocation Strategy: Enterprise-wide capability, or execution capacity, is the maximum amount of project capabilities that the MSC or FOA can execute in the applicable fiscal year. It is recognized that each enterprise, while it can execute the project capabilities on some of its projects, cannot execute the project capabilities on all of its projects. Enterprise-wide capability is less than the sum of project capabilities. Appropriations Committee staffs are interested in USACE enterprise-wide capabilities,

particularly by business line or line item of additional funding, for the allocation Strategy (BY-1). This paragraph provides guidance on how each MSC or FOA states its enterprise-wide capability in the Allocation Strategy.

(i) The Explanatory Statements accompanying recent energy and water development appropriations acts have provided line items of additional funding that span all authorized business lines and functions, including those of lower budget priority such as bank protection and environmental infrastructure. Accordingly, enterprise-wide capability should represent a balanced mix of business lines and functions. In other words, within each business line or function a reasonable portion of work packages should be within enterprise-wide capability, and others should be beyond enterprise-wide capability. The mix is more or less governed by expectations (based on recent Explanatory Statements and House and Senate Reports) for funding of budgeted work and the line items of additional funding.

(ii) The MSC or FOA should use performance to determine, within each business line or function, which work packages are within enterprise capability, and which are not. All budgeted work packages should be first-added within enterprise capability, and unbudgeted work packages should be next-added.

(iii) The MSC or FOA should signify which work packages are within enterprise-wide capability, or not, by checking the "Funding Pot" box, or not, in the "Recommended for Funding" field under the “Funding” tab in the Civil Works Integrated Funding Database (CWIFD). To respond to Congressional inquiries for USACE-wide enterprise capability for a business line or function, HQUSACE will aggregate across USACE the capabilities of work packages in that business line or function that have the “Funding Pot” box checked.

Facility Operation. The day-to-day activities that allow for the continued use of facilities but are not considered part of the maintenance regimen that directly extends the life of the asset, facility or component. Examples include things such as security, custodial services, removing ice and snow, mowing, debris, trash, cleaning; or replacing lighting fixtures.

FEM Work Order Number (WON). A FEM WON is an alpha-numeric field from the FEM (Facilities and Equipment Maintenance) program that is a unique identifier connecting the budget work package to budget execution via the USACE Facilities and Equipment Management system (FEM). A FEM WON is required for all Specific Work Activity budget work packages in CWIF-D for all BLs and should be assigned at the appropriate asset level. Note that a data field has been established in CWIF-D for entering the FEM WON. Selection of the specific work order numbering schema is at the discretion of the activity submitting the budget work package. All project deficiencies and needs captured on FEM Work orders, according to Phase 3 of the Maintenance Management Improvement Plan (MMIP), should serve as input to developing work packages. Additionally, it is required that in FEM the Work Order:

(i) description should mirror the work package and associated Work Category Code descriptions and be preceded by "FY19 SWA". If a work package was created in FEM in previous years, was not funded, and will be resubmitted for FY19, the Work Order description may be updated as necessary.

(ii) the FEM work order long description field should contain exactly the same Information as the budget work package description and the associated Work Category Code.

(iii) type should be "SWA," Specific Work Activity.

(iv) the Command Work Type should be Deferred Maintenance (DM).

General Reevaluation Study (GRR). This is a study that involves reformulation of alternatives from a previously completed Feasibility Study. The addition of separable element(s) or separable implementable features may be included in a General Reevaluation Study so long as reformulation of the already-recommended or already-authorized alternative is included. The phase activity code is GR.

Inactive Facility. A facility that does not have a specific current or near-term program or mission requirement is considered "Inactive". Inactive facilities or parts of facilities are assets not currently needed to support the agency's mission or function but will have a planned need in the future. Inactive facilities may be classified by status: Standby or Mothball, corresponding to the Federal Real Property Council Indicator status "inactive". The following conditions characterize all inactive facilities or parts of facilities that are inactive:

1. No personnel occupy the facility.

2. Utilities are curtailed, other than as required for fire prevention, security, or safety.

3. The facility is secured to prevent unauthorized access and injury to personnel.

4. The facility does not receive funding for renewal or other significant improvement.

Level of Performance (LoP) LoP is a management decision in the context of the available maintenance resources, maintenance demands of an asset, and asset service demands or capacity. If formally established, the asset's formally determined Level of Service (LoS), may be used in considering asset demand/capacity. Managers should understand the minimum funding levels necessary to meet regulatory and safety requirements as caretaker of the facility/asset. Beyond this, a range of facility performance levels are available. In the budget context, LoP's may be broadly grouped No Mission (Red), Partial Mission (Yellow), Full Mission (Green). Managers must understand the range of performance available for the facility and the associated investments required to achieve various performance levels. Work packages are formulated to express the investment necessary to achieve a given performance level for the facility/asset. Further definition of the three LOPs: No Mission LOP is funding required to simply own a project; Partial Mission represents the additional funding required to deliver the majority of project benefits, but not meet all requirements; and Full Mission includes the additional funding required to deliver all project benefits and fully preserve the facility for the foreseeable future.

Limited Reevaluation Study (LRR). This is a reexamination of project justification, including the economics and/or environmental effects, which does not require reformulation of project alternatives for an ongoing study. No longer used, See Validation Studies and Annex I.
Lowest Sustainable Investment. The lowest overall investment level that a prudent manager would select, balancing between short and long term economics and considering overall availability of resources. Sustainability in this sense is crucial to ensure that project meets or exceeds project life-cycle expectations including meeting or exceeding changing environmental requirements for compliant operation.

Major Maintenance. Major maintenance is defined as a non-repetitive item of work or aggregate items of related work for which the total estimated cost exceeds $6,200,000, and which does not qualify as Major Rehabilitation. This designation is not applicable to dredging, but it is applicable to dredged material disposal facilities. The related items of work should include all items required to make the work effective for its desired purpose. Optional or casually-related work which is not essential to the major maintenance item should be programmed, prioritized, and justified as a separate work package, or part of another work package, as appropriate. Major Maintenance work packages are budgeted under the O&M account only.

Major Rehabilitation. Rehabilitation projects are projects to restore or ensure continuation of project functions or outputs. Section 205 of P.L.102-580 defines “rehabilitation” with respect to inland waterway projects, as either:

1. Economically justified structural work for restoration of a major project feature that extends the life of the feature significantly and will take at least 2 years to complete, and has a capital cost of at least $8,000,000, adjusted for changes in price levels (reliability improvements). The updated threshold for (a) is $ 21 million.

2. Structural modifications that enhance operational efficiency and that have a capital cost of at least $1,000,000, adjusted for changes in price levels (efficiency improvements). Section 205 of P.L. 102-580 (WRDA 1992) was amended by Section 2006 of P.L. 113-121, WRRDA 2014, which increased the major rehabilitation threshold from $8,000,000 to $20,000,000. The updated threshold for 1. is 21.5 million and for 2. is 2.1 million.

By policy these thresholds also apply to all Business Lines / Missions.

Maintenance. Work to restore equipment, assets, facilities or components to design conditions or to conditions that have been determined to be sufficient to meet a prescribed level of performance (vice "activities directed toward keeping assets in an acceptable condition"); replacement of parts, systems, or components; preventive maintenance and inspection/monitoring of facilities or equipment (excluding formal inspection/monitoring of facilities or equipment required by USACE guidance such as ER 1110-2-1156, ER 1110-2-111, and others); and other activities needed to preserve or maintain the asset. Maintenance and repairs, as distinguished from capital improvements, exclude activities directed towards expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, its current use. ”(SFFAS 40 & 6 maintenance on plant, property, and equipment (PP&E)) This activity involves "maintenance" as well as "operation" staff. However, Common O&M and Specific Work Activity maintenance or rehabilitations are maintenance so long as the action does not expand the capacity, or alter use.

MAX (OMB) Collection and Collaboration Process. Max Collect is a data collection and collaboration tool that allows HQUSACE to compile and publish the Congressional Budget Materials information into an easy to use web application. See paragraph 19 of the Main EC for the process.

Mothball status (long term inactive). An asset status applied to facilities when a decision has been made to suspend operations for an extended period of time and for which maintenance measures have been taken to prevent deterioration of essential systems. Mothballing generally results in higher first-year costs, but future annual costs are lower due to reduced maintenance and repair requirements. Mothball status is distinct from “caretaker” or “standby” status; corresponds to the Federal Real Property Indicator status “inactive”. Mothball status is defined at the project or project site level, not the feature level. The total time to deactivate and then to reactivate a facility, including the mothballed period, generally exceeds 36 months. In addition to the conditions indicated above, the following conditions characterize mothballed facilities:

1. Utility systems and collateral equipment have been properly prepared for long-term inactivation without significant deterioration. Selected systems, such as cathodic and fire detection systems are kept in operation and routinely inspected.

2. The facility interior is equipped with appropriate environmental control to prevent significant deterioration.

3. Hazardous materials have been removed.

4. The facility exterior envelope is inspected routinely and the integrity and appearance of the exterior shell are maintained.

5. Personal property is reported to the USACE Logistic Agency for reutilization.

New Investment. A new investment decision is required for a study or project that is not a new start, but meets one of the following criteria: It is a new study phase of a study funded previously in the account; it is a resumption; study resumption or construction resumption.

Non-critical Work Activities/Packages. Activities where failure to perform the work may cause considerable inconvenience but would not affect the accomplishment of the assigned mission; would not seriously affect the health and safety of the public or project personnel; or would cause moderate or insignificant losses.

Operation. Work that is integral to the actual performance of an operating project that provides authorized benefits to the public. Operation includes facility operation necessary to keep equipment, assets and facilities functioning at a particular service level; examples include custodial services, removing snow and ice, debris removal (not required for dam safety), trash, cleaning, replacing lighting elements. This work is typically performed on an annual basis, typically by hired labor or small contract (service contract, purchase order, etc.)

Post-Feasibility Studies. These types of studies involve reformulation of alternatives and project justification via economics and/or environmental effects.

President's Budget Rank. President's Budget rank identifies the level of funding assigned to individual work packages after OMB review (passback) and HQ finalization of the BY budget. The President's Budget rank is entered into the CWIF-D database by BLMs prior to submitting the budget to Congress. President's Budget Rankings are defined as follows:

- President's Budget Rank 1 = IN the budget
- President's Budget Rank 7 = NOT in the budget

See also ARMY Rank and HQ Rank definitions in this Glossary.

Preventive Maintenance. The systematic care, servicing, and inspection of assets, facilities, equipment and components for the purpose of detecting and correcting incipient failures and accomplishing minor maintenance (based on AR 420-1) Formal inspections and assessments explicitly required by current USACE guidance (i.e., ER 1110-2-1156, ER 1110-2-111, and others) are not considered preventive maintenance. The frequency of preventive maintenance is generally less than one year. Examples include things such as routine testing of lubricating and hydraulic oils; replacing packing in valves and glands; lubrication of equipment/components; replacing electrical brushes and touch-up painting, etc.

Program, Project, or Activity (PPA).

(1) For any appropriation, a project, study, program, or other work that has received a Statutory Earmark and for which any Funding from the Program Year of the Statutory Earmark remains available for obligation.

(2) For the FUSRAP appropriation, any funded project.

(3) For the I, C, O&M, or MR&T appropriation, a project, program, project element, or study that has been funded through a First-Tier Line Item in a table of allocations in the Statement of Managers accompanying any Act, and for which any Funding from the Program Year of that Act remains available for obligation.

(4) For the I, C, O&M, or MR&T appropriation, a Specifically Authorized Project or Program (see definition). However, if the Specifically Authorized Project or Program is a component of a broader PPA funded as a First-Tier Line Item, then the component is not a PPA unless the component itself had been funded through a First-Tier Line Item and Funding from the applicable Program Year remains available for obligation.

(5) For the I, C, O&M, or MR&T appropriation, a study intended to lead to a new, Specifically Authorized Project or Program (see definition), including a "spinoff" sub-basin study from a basin-wide or comprehensive study, or a study for an unauthorized project that would incorporate or subsume an already-authorized project, such as a study for widening or deepening beyond authorized channel dimensions.

Program Code. A mandatory field in P2 used to store the unique Congressional line-item identifier.

Project Partnership Agreement/Partnership Agreement. Reference P.L. 110-114 (WRDA 2007) Conference Report, Section 2003(f)(2) entitled: References to Cooperation Agreements – "any reference in a law, regulation, document, or other paper of the United States to a "cooperation agreement" or "project cooperation agreement" will be deemed to be a reference to a "partnership agreement" or a project partnership agreement," (PPA), respectively."

Recurring Maintenance. The replacement or renewal of items that are required on a recurring basis, with a frequency of greater than one year and less than seven to ten years. Examples are channel dredging, painting, floor coverings, engine overhauls, etc. These generally fall below Capital thresholds. These are also the items that are frequently deferred. Recurring Maintenance is also referred to as Cyclical Maintenance.

Rehabilitation. A budget category for Specific Work Activities which exceed cost thresholds of Section 205 of P.L. 102-580 (WRDA 1992) as amended by Section 2006 of P.L. 113-121, WRRDA 2014.

Remaining Benefits Remaining Cost Ratio (RBRCR). Compute the RBRCR at the applicable interest rate, the current interest rate, and the OMB prescribed 7% interest rate for projects and separable elements other than design or construction deficiency correction projects, safety of dams projects, and aquatic ecosystem restoration projects.

(1) Remaining Costs. Consider anticipated Federal and non-Federal allocations and other non-Federal costs through the BY-1 as sunk, and exclude them from the RBRCR computation. The remaining costs will be the Federal and non-Federal allocations as of the end of BY-1 based on the current project cost estimate and allocations from prior years and on the President's Budget for BY-2 in October 2017 dollars. Where the project includes completed separable elements, independent units and/or useful increments, OMRR&R costs for completed units/increments will also be considered sunk, and only OMRR&R for remaining units/increments will be considered in remaining project costs. The remaining costs should include any reimbursements still needing to be paid for work already completed.

(2) Remaining Benefits. Where the project includes completed separable elements, independent units and/or useful increments, the amount of annual benefits that would be expected to accrue over the period of analysis for completed or functioning components of the total project will be considered sunk and excluded from the RBRCR computation. Sunk benefits for projects that have reimbursable features should be estimated based on the reimbursable costs expended and an estimate on the amount of sunk benefits that would be associated with that level of expenditure. Remaining benefits are those that will be attainable in the BY or thereafter only if project features not completed with allocations through BY-1 are completed and operated and maintained.

Resumption (Investigation). A study resumption is the renewal of study activities on a study that has not been funded in any of the three most recent fiscal years before the fiscal year in question.

Resumption (Construction). A construction resumption is renewal of physical construction activities on a project or separable element on which physical construction under a construction contract has not been performed in any of the three most recent fiscal years before the fiscal year in question. However, in the case of a construction project with intermittent construction activities, such as phases, levee lifts, or renourishment cycles, initiation of the next intermittent construction activity is not a resumption.

Rounding. All cost estimates will be rounded to the nearest one thousand dollar ($1000) unless otherwise specified.

Section 902 Post Authorization Study. This is a type of Validation Study. Section 902 Post Authorization Reports are reviewed and approved at HQUSACE and may require additional Authorization.

Smart Use of Systems. The objective of the Smart Use of Systems is to make efficient and consistent use of the various tools currently being used within the Corps of Engineers Civil Works program for project and program data. CWIF-D is the tool that will be used to collect project/program data from the various other data sources within the Corps and then provide an intuitive and user friendly platform for users to enter and manage the project and program data needed for budget and work plan development.

Specific Work Activities. Typically includes scoping, cost estimates, Project Management Plans and/or contract actions, and larger scale planned operations or planned component renewals related efforts such as unique operation and maintenance actions with a specific beginning and end that require a greater level of rigor and documentation. Each Specific Work Activity must be shown separately to allow for individual funding decisions based on performance metrics and risk-based indices. The entire cost for all project-specific marine construction work or fleet work, including dredging and revetment work, whether by contract or hired labor, must be visible in this category, along with full Recurring (cyclical) and Component Renewal maintenance requirements to support anticipated mission delivery or to meet anticipated levels of service in subsequent budget years, including “major maintenance” level packages. Recapitalization (including betterments) actions including rehabilitation, Major Maintenance and Major Rehabilitations studies or evaluations should be requested as Specific Work Activities. Also, estimated corrective maintenance (proactive) resourcing for commonly occurring breakdown maintenance should be requested as Specific Work Activities. It is a budget category for unique operation and maintenance actions with a specific beginning and end, which require a greater level of rigor and documentation in the form of planning, scoping, contracting, etc. Each Specific Work Activity must be shown separately to allow for individual funding decisions based on performance metrics and risk-based indices.

Spin-off Studies (SS). A Feasibility Study that is specifically identified in a final report from a Comprehensive or Basin-wide Study and that would be carried out under the same study authority as the Comprehensive or Basin-wide, if provided for by that authority, is termed a Spin-off Study.

Systems. Is an area with a common function, such as a coastal system, navigation system or ecosystem. A system boundary is not a true drainage boundary, but does have hydrological function considerations. The term “watershed” will be used throughout this budget EC, and will refer to both watersheds and coastal systems.

Systems-Based Budgeting. (SBB) explicitly acknowledges that the projects and work packages included in each year’s budget submission are interconnected, within the context of systems and watersheds in which they operate. As such, the decision to fund (or not to fund) any given project or work package influences both the stand-alone project and system as a whole. Systems-based budgeting accounts for the interconnected performance of projects within watersheds and systems, in order to provide decision makers with a more clearly articulated description of work packages and project Value to Nation.

Validation Study (VS). This is a reexamination of project justification, including the economics and/or environmental effects that does not require reformulation of alternatives. A Validation Study may be carried out using any funds appropriated for the project and the cost of the Validation Study is shared under the applicable Design Agreement or Project Partnership Agreement.

Value to the Nation (VTN). Is defined broadly as improving economic growth, protecting the environment, and providing for the social well-being of the Nation.

Watershed. Is a geographic area which drains to a common river or body of water. Looking at water resource infrastructure and activities is called watershed management. Watershed management takes a comprehensive look at natural and man-made functions of the hydrologic system and impacts to that system.

Work Increment. A work increment is a discrete amount of work identified by an activity or a set of activities with specific resource requirements and a schedule.

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