DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, D. C. 20314-1000

EC 11-2-208

CECW-ID

Circular
No. 11-2-208

31 March 2015

Army Programs
CORPS OF ENGINEERS CIVIL WORKS DIRECT PROGRAM
DEVELOPMENT POLICY GUIDANCE
FISCAL YEAR 2017

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EXPIRES 31 MARCH 2016

# CIVIL WORKS PROGRAM DEVELOPMENT POLICY GUIDANCE FISCAL YEAR 2017

## SECTION 1

1. Purpose. This Engineer Circular (EC) provides policy guidance for the development and submission of the Corps of Engineers direct Civil Works (CW) Budget and Work Plan for Fiscal Year 2017 (FY17). This EC also supersedes and rescinds EC 11-2-206, ER 11-2-220, ER 11-2-240, ER 11-2-290, ER 11-2-292. In addition to this EC, the *Program Development Manual* will provide specific guidance for how project data is developed and managed for use in delivering the Budget and Work Plan.

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 (PA) and the Coastal Wetlands Restoration Trust Fund (CWRTF).

3. Distribution Statement. This information is approved for public release. Distribution is unlimited.

4. References. See Appendix A.

5. General Guidance. Work packages and the management of those work packages over time will be the basis for budget development and making annual work plan funding decisions. An overall goal of the Integrated Budget development and Work Plan process is to enable the Corps of Engineers to clearly identify budget capabilities, how funds are to be allocated, and document what work was accomplished [at the Program Code level] ((following the Budget Process – build, defend, execute).

Starting with the FY 2014 work plan, continuing with the FY2016 Budget Development and the FY2015 Work Plan development, the Civil Works Integration Division (CWID)

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This EC supersedes EC 11-2-206, dated 31 March 2014.
This EC rescinds ER 11-2-220, ER 11-2-240, ER 11-2-290, and ER 11-2-292.

developed and began implementation of the Civil Works Integrated Funding Database (CW-IFD, https://CW-IFD.usace.army.mil This database was the first product to come out of the Smart Use of Systems initiative. This database replaces the multiple data entry tools previously used for budget and work plan development. The objective of the smart use of systems is to reduce the number of independent data systems, reduce duplicate data entry, provide better management of data to make consistent and defendable decisions as part of the budget build process within HQUSACE and ASA(CW).

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

a. CW-IFD: The Civil Works Integrated Funding Database (CW-IFD), https://CW-IFD.usace.army.mil The CW-IFD tool will be used for data entry, data management and report development. This database is an integrated data set used for supporting program development and making Budget, Work Plan and Supplemental funding decisions. Data is organized at the Program Code and Work Package level. CW-IFD provides the data fields necessary to quickly display the Budget and Work Plan data in various ways to ensure funding decisions meet the goals and policy objectives of the Administration. Based on user feedback and incorporation of improvements, the database will continue to be developed to provide improvements and efficiencies where possible. User feedback is critical to making such improvements and all users at the District, MSC and HQ level are encouraged to use the Feedback screen within CW-IFD to submit recommendations for improvement.

b. Program Code: The term Program Code is used to identify the top level element that is indentified by a unique code. See the annual execution EC for use of Program Codes. For Budget development and Work Plan development, a Program Code is the summation level used to submit budget capabilities, it is the level identified within the President's Budget, and it is the level where allocations are issued through the Work Plan process.

c. Appropriations: There are nine appropriation accounts in the Civil Works program: Investigations (I), Construction (C), Operation & Maintenance (O&M) Mississippi River and Tributaries (MR&T), Regulatory, Expenses, FUSRAP, Flood Control and Coastal Emergencies (FCCE), and OASA(CW). 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 Annex I - VIII.

(1) Investigations (I): 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 Work Plan 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 Annex I.

(2) Construction (C): 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 projects specifically authorized by Congress, and specifically authorized post-construction modifications. Budget and Work Plan 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 Annex II.

(3) Operation and Maintenance (O&M): The Operation and Maintenance account 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. Budget and Work Plan 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 Annex III.

(4) Mississippi River and Tributaries (MR&T): The MR&T 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 Operations & Maintenance also applies to the applicable portion of the MR&T appropriation.

(5) Expenses (E): 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 Annex IV.

(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 Annex V.

(7) Formerly Used Sites Remedial Action Program (FUSRAP): The FUSRAP account funds continued 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 Annex VI.

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

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

(2) Automation program development can be found in Annex VIII.

e. Business Lines: The business lines categorize work according to its primary purpose. There are eight 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 with the Civil Works Integration Division, Program Development Branch, and work plan development with the Civil Works Integration Division, Project Programs 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 supplemental appropriations to the Flood Control and Coastal Emergencies (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 (ENR, ENS, ENF): The Corps has three distinct areas that are focused on the environment: (1) ENR - aquatic ecosystem restoration; (2) ENS – Environmental Stewardship of Corps-owned lands; and, (3) ENF - the Formerly Utilized Sites Remedial Action Program (FUSRAP) which has been moved to ANNEX VI. 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 and operate fish hatcheries 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 8,500 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 350 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 (Rec): 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 increment of work that can be considered for inclusion in the Budget or Work Plan or for funding with supplemental appropriations. All the work in a work package must share the same appropriation, business line, program code, and Engineer Reporting Organization Code (EROC). Each work package must be neither too granular nor too aggregated. On one hand, it must provide a useful increment of work that can be executed without any other work package being funded (other than predecessors, such as a P&S work package before a contract work package). On the other hand, it must be at a sufficient level of granularity that the owning EROC can live with a decision to fund the work package in its entirety or not fund it at all. Work packages will <u>not</u> be partially funded for budget development, work plan or supplemental allocations. Each work package will have a unique, automatically generated work package identifier. A work package may be One-Time, Periodic, or Annual, and may have work package capability in more than one FY. Details for work package development for each business line are in the *Program Development Manual*.

g. Capability:

(1) Capability is defined as the estimate for 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 continuing contract, the estimate for the amount that can be obligated or committed for the contract is limited to the amount that can be expended in the applicable fiscal year.

(2) Capability on a contract work package proposed for funding in the BY 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. 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 costs of 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.

(3) 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.

7. 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 Work Plan data. There are twelve information systems that are utilized for program development data. The districts are responsible for using and managing their data in these systems throughout the year based on each system's specific guidance. The systems are: CW-IFD, P2 (Primavera Project Manager, P6-web, CEFMs), the Information Technology Investment Portfolio System (ITIPS), the Recreation Budget Evaluation System (Rec-BEST), the Environmental-Stewardship Budget Evaluation System (E-S BEST), the Operation and Maintenance Business Information Link (OMBIL), the Life Safety Hazard Index (LSHI) web-tool, the CW Project Mitigation database, the Facility and Equipment Maintenance (FEM) system, the Inland Navigation Operational Condition Assessment (OCA) and the Operational Risk Assessment (ORA), the Coastal Navigation Structures (CNS) Level Tier 1 District Condition Assessment Tool, Coastal Systems Portfolio Initiative (CSPI), and the Corps of Engineers Bridge Information System (CEBIS). Specific instructions on how these systems relate to budget and work plan development are outlined in the *Program Development Manual*.

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

d. HQ BL Managers (BLM). The BLMs are responsible for coordinating specific business line guidance contained in the *Program Development Manual,* reviewing/verifying Budget and Work Plan data, developing the HQ ranking all work within their business line, negotiate and balance crosswalk tables, and identify work packages to fund in the work plan or with supplemental funding.

e. HQ CW Integration Division (CECW-I). The CWID has overall responsibility for developing, defending and execution the CW Program. The Program Development Branch (CECW-IP) is responsible for this EC as well as for finalizing the Budget submittal. The Program Integration Branch (CECW-II) is responsible for allocating

funds from the Budget and the Work Plan as well as for preparing annual execution guidance. The National Programs Branch (CWCW-IN) is responsible for the managing the CW-IFD and the *Program Development Manual*.

8. 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) = FY17
BY-1 = the fiscal year of the most recently released Budget = FY16
BY-2 = 2 yrs. before BY = the fiscal year of the current fiscal year= FY15
BY+1 to BY+4 = FY18 to FY21

9. Budget Policy.

a. Presidential (OMB) Policy.

(1) Economic Assumptions. Economic assumptions underlying Presidential policy are contained in OMB document Fiscal Year 2016, Analytical Perspectives, Budget of the United States Government. These assumptions, along with related factors from the CivilService 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 (OASDI) 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 are shown in OMB document *Fiscal Year 2016, Analytical Perspectives, Budget of the United States Government*, Table 2-1, Economic Assumptions. Future projections are developed using rates in guidance provided directly from OMB. 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 (ECI), apply nationally. For BY- 2 (2015) the President's alternative pay adjustment for both base and locality pay is 1.0 percent. For BY-1 (2016) the Fiscal Year 2016 Analytical Perspectives shows the pay raise to be 1.3 percent. 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 nonfederal workers, and for non-pay items. Public Law 105-33, entitled Balanced Budget Act of 1997, requires that the Gross Domestic Product (GDP) 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. These ceilings are presented, for all accounts, in TABLE 5.2 of the Historical Tables appendix of the Budget.

(3) Sustainability. E.O. 13514, signed on 5 Oct 2009, establishes sustainability requirements and re-emphasizes those established in E.O. 13423 (2007), the *Energy Policy Act, 2005 (EPAct)* and the *Energy Independence and Security Act, 2007 (EISA)*. These requirements are related to greenhouse gases (GHG), energy/fuel efficiency, renewable energy, green buildings, local and regional planning, water efficiency, pollution prevention, sustainable acquisition, electronic stewardship and data centers, and USACE sustainability innovations. With respect to federal renewable energy requirements, in FY 2013, the President increased the Federal renewable electricity goal from 7.5% of total agency electricity by FY 2013, to 20% of total agency electricity by FY2020.Additional information for EISA and EPAct, as well as other Sustainability requirements is available at: http://www1.eere.energy.gov/femp/.

(a) Actions required to meet the above Federal sustainability requirements are described in the USACE Sustainability Plan (SP) and associated implementing directives, OPORD 2014-12 (14 Mar 2014), FRAGOs 1 (17 Aug 2014), and 2 (17 Feb 2015). For further information see “Planning and Implementation” at: https://eko.usace.army.mil/usacecop/environmental/sustainability/.

(b) In accordance with ASA(CW) budget guidance for FY17, strong consideration will be given to funding the maximum amount of high quality work packages supporting Executive Order 13514 (sustainability) that can be efficiently executed in FY17. The use of Energy Savings Performance Contracts and Utility Energy Services Contracts is strongly encouraged. Sustainability funds will be taken “off the top” of the FY17 budget and distributed to the MSCs based on competitive selection of budget packages that conform to the guidance below, and which align with the MSC Sustainability Plan/Investment Strategy developed in response to the new FY14 Sustainability OPORD, available at https://eko.usace.army.mil/usacecop/environmental/sustainability/. The portion of sustainability funding competitively awarded to any MSC may be more or less than the MSC’s contribution to the sustainability allocation.

- Sustainability and Energy Priority Goals. As articulated in the USACE Campaign Plan and Army Campaign Plan, Greenhouse Gas Scope 1&2 emissions reduction (SP Goal 1), energy intensity (SP Goal 2), non-tactical vehicle petroleum consumption (SP Goal 3), and water intensity (SP Goal 4) and renewable energy (SP Goal 8) are USACE’s highest priorities. In other words, the focus for FY17 budget development will be on facility energy and water efficiency, renewable energy, and petroleum efficiency in facilities, vehicles and vessels.

- Renewable Energy at Civil Works Facilities. The USACE Sustainability Plan advocates for investments in life-cycle cost effective renewable energy (e.g., solar photovoltaic) systems to generate renewable electricity for use on-site. Civil Works projects should program life cycle cost-effective budget packages to increase BOTH on-

site generation AND consumption of renewable electricity

- Alternative Financing. HQ USACE is centrally funding the US Army Engineering and Support Center, Huntsville, AL (HNC) to provide ESPC contracting and technical support for ESPCs and UESCs for Civil Works O&M funded projects. Therefore, FY17 budget submissions for ESPCs and UESCs should include only those costs incurred locally by projects, Districts and Divisions to support ESPC and UESC development and execution. Only those ESPC and UESC requirements addressed in MSC-level alternative financing portion of the MSC Sustainability Plan/Investment Strategy will be eligible for funding in the FY17 CW O&M budget. (Contact your MSC-level Sustainability POC for information on the MSC-level Sustainability Plan/Investment Strategy.)

- Metering. Based on guidance issued in December 2014, HQ USACE is developing a 5-year metering plan. This plan will not be complete until after FY17 budget development is complete. Pending issuance of the USACE Metering Plan, MSCs should limit O&M funded investments in new utility meters to those new/replacement meters needed to meet current mission, energy and water management, and CRAFT reporting requirements.

- PRIP and Revolving Fund Facilities and Vessels. MSCs must ensure that budget submissions for facilities and vessels that are funded by the Plant Replacement and Improvement Program (PRIP), or other revolving funds, adhere with PRIP and revolving fund policy. In general, PRIP and revolving fund facilities and vessels are not eligible to budget for CW O&M funds.

- Pay-Back. Budget packages with a simple pay-back of ten years or less will be given priority.

- Covered Facilities. Budget packages involving USACE Covered Facilities as listed in OPORD 2014-12, Appendix 2 to Annex F will be given priority.

- Budget packages for the costs incurred internally by projects and Districts to support ESPC or UESC development, review, and award will be given priority, if and only if the ESPC/UESC is identified in the MSC Sustainability Plan/Investment Strategy submitted to HQ USACE prior to 30 June 2015.

- Audit-Identified ECMs. Priority will be given to budget packages implementing energy and water conservation measures (ECMs) identified through facility-level audits conducted by experienced professionals, e.g., energy services contractors, utility companies, and appropriately trained and experienced DoD, Army, or USACE personnel.

- EISA 432 Audits of USACE Covered Facilities. FY17 budget packages requesting funds to meet the EISA 432 requirement for energy/water audits on a 4-year recurring

cycle (i.e., to execute in FY17 an update of an EISA 432 Covered Facility audit conducted during FY13) will be given priority in the FY17 budget.

(c) A supplementary data submittal is required for each FY17 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 FY17 Sustainability Budget Data Spreadsheet, which is available at:
https://team.usace.army.mil/sites/HQ/PDT/craft/Sustainability_Budget_Data_Spreadsheets/Forms/AllItems.aspx

(d) 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. Sustainability work packages will be entered into CW-IFD in Increment “5” ONLY. After budget submission, the sustainability work packages will be evaluated by the HQ USACE 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 assigned a new Increment number of “1” in CW-IFD, and the work package 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 as an increase above the final negotiated business line ceiling amount. MSC O&M budget limits at the 75% and 100% levels will be increased accordingly. Submission date for Sustainability work packages is shown in TABLE 2 in the MAIN part of this EC.

b. Army Budget Policy. See ASA(CW) memo dated March ___2015. The primary goal for formulating the Army’s 2017 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 Annexes.

c. Corps Budget and Work Plan 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 CW 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 (from Initial to Recommended) is an incremental increase in funding in the budget. The number of funding levels varies in any BY based on Army budget guidance. For detailed information regarding increments, refer to O&M ANNEX III, III-2- 20e.

(b) Initial Level of Funding. For Investigations, Construction, and Operations & Maintenance initial level of funding, the criteria for each Increment can be found in Annexes I, II and III, respectively. For these accounts, the Initial Program is defined as the total funding of Increments 1 and 2 for ALL business lines. (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) Decrement Level of Funding. This level of funding is generally a percentage below the Ceiling level. The percentage is prescribed by Army or OMB and reflects some intermediate funding level between the Initial and the Ceiling programs. The Decrement Program level only applies when directed by Army and normally includes projects funded at the Initial Level plus some Increment 3.

(d) Ceiling Funding Level. This level of funding is established by Army as the "target" level of funding (budget authority) for the Corps (CW) budget in the BY. It is the funding level that all other funding levels are compared to in the BY and the funding level that is provided in the BY-2 publication entitled: Budget of the United States Government, Historical Tables (unless provided otherwise by OMB). The Ceiling Level will include funding identified at the Decrement Level plus more Increment 3 and maybe some Increment 4 work.

(2) Work Plan Guidance. During BY-1, a Work Plan will be developed to distribute available funding. The annual funds will either be provided from a Conference Report 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. Therefore, allocations shown in the BY materials (including justification sheets) for each study or project must include this added funding.

(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 the Corps website at: http://www.usace.army.mil/Missions/Environmental.aspx for the Corps EOPs.

10. Special Policy, Guidance and Initiatives for FY2017.

a. Impacts to the FY17 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 Work Plan 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 (CW) Budget Process. Civil Works transformation in the budget process includes improved management of the budget processes associated with watershed informed budgeting, asset management, and the expenses program.

c. 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 work plan development. The *Program Development Manual*, separate from this EC, is used to fully describe the CW-IFD, provide the current data dictionary, and provide more detailed guidance concerning account and business line specific requirements for the Budget and Work plan development process.

d. Watershed Informed Budgeting. Watershed informed budgeting 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. Watershed informed 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. Watershed Informed Budgeting (WIB) shows the value of projects based on three indices that will be implemented over the next 3 years: (1) Value to Nation (FY17 Budget); (2) Spatial Dependency (FY18 Budget); and (3) Stakeholder Dependency (FY19).

(1) During FY14, WIB completed its third year of pilots with all MSCs and Districts in participation. The FY16 Budget pilots were very useful in terms of informing the team of the value and efficiencies of the IBET tool and the process. The pilots also informed the development team of areas where work can be advanced in the future. Based on comments provided by MSCs during the After Action Review of the FY16 pilots and direct communications with the PID, the proposed way forward is to have no new FY17 pilots. WIB will proceed as a phased implementation in collaboration with the field over the next three fiscal years. FY17 will focus primarily on improving the Value to Nation (V2N) score at the project level. As part of the FY17 Budget process Value to Nation (V2N) will be calculated for each Corps project automatically within CW-IFD and the districts will be asked to review and assess possible reasons for the difference in rankings between PBB and V2N. FY18 will focus on implementing Corps project-to-project spatial dependencies. FY19 will focus on implementing stakeholder informed

prioritization. During FY17 budgeting process, the spatial dependencies and stakeholder engagement process will be refined concurrently with the V2N process implementation. By the FY19 budget development process, the budget development process will have a systematic approach to be informed by the Civil Works value to stakeholder interests and priorities, and geospatial interdependencies of the watershed or coastal system.

(2) Workshops and webinars will be held throughout the year where MSC participants will be asked to help IWR by reviewing work products as they refine the V2N score calculation, stakeholder process, and spatial logic. WIB implementation will be an inclusive, open process between HQ, IWR, and the field that complements the annual budget development process. Stakeholder engagement will be broadened to leverage existing forums, project delivery teams, and regional business processes that include studies, projects, and related district activities as much as possible.

(3) For programs development, the outcome of WIB will be an improved alignment of budgeting with national and watershed objectives by directing resources to reduce risk of loss services (O&M) and enhance service (CG & GI) 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, not only each project's performance-based. WIB will recognize priorities and challenges of water resource management issues in the watershed.

(4) The full implementation of WIB 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 the system. As a result, watershed informed budgeting provides a more complete account of the value associated with each item in the budget submission. Ultimately, it provides a more compelling rationale for the overall Corps budget

e. Digital Accountability Transparency Act (Data Act). The Digital Accountability and Transparency Act of 2014 is a bill that was enacted after being 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 Sepnding.gov, and applies approaches developed by the Recovery Accountability and Transparency board to spending across the Federal Government.

11. 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 work plan 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.

12. Contracts and Budget Development.

a. Following the guidance in the latest Execution EC, an acquisition plan will be developed for evaluating potential contract alternatives for each proposed contract.

b. Use of Continuing Contracts.

(1) No new contracts with a value of less than $10 million will be planned as continuing contracts in the BY.

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

(3) By 31 July 2015, any contract planned for the BY budget as a continuing contract will be submitted for approval in accordance with the latest Execution EC.

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

13. 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 identify 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 Appendices in the FY 2017 Program Manual 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 shall complete data input for five-year capability in accordance with the guidance presented in the Program Policy Annexes for Investigations, Construction and Operation and Maintenance. For example: the funding stream for Investigations for feasibility and GRR's 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 $300,000 for year 1, $700,000 for year 2, and $500,000 for year 3. 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 PED studies, the PED estimates in out-years need to include useful increments of work that results in the first 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 Annex 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.

- 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 and submission requirements are identified in TABLE 2 and 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

14. Cost Estimating for Civil Works Studies/Projects.

a. Economic Assumptions. The Administration's economic assumptions address inflation and adjustments through BY-1. 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 1 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. Micro-computer Assisted Cost Estimating System (M-CACES). A complete and reliable M-CACES 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.

15. Project Economics.

a. Economic Updates. Economic updates shall be in accordance with 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 http://planning.usace.army.mil/toolbox/library/MemosandLetters/CWPM12-001.pdf for CWPM #12-001.

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 FY 2017 budget (initial submission due to HQ by June of 2015), the approval date of the document containing the most recent economic analysis can be no older than 1 June 2012.

(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 FY2017 budget (initial submission due to HQ by June of 2015), the economic analysis can be no older than 1 June 2010.

(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 work plan.

(d) Discount Rates. A discount rate of 3.375% will be used to determine the "current" economics of any project. See http://planning.usace.army.mil/toolbox/library/EGMs/EGM14-01.pdf for CECW-P Memorandum, 14-01, dated 17 October 2013.

- 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 in accordance with 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 (RBRCs) for all continuing and new construction projects, each based on a 7% discount rate, will be input into the CW-IFD database. RBRC's are required when updating Justification Sheets. Specifics on computing RBRCs are included in Annex II, Sub-Annex II-4.

(3) Verification of BCR Updates. In accordance with implementing guidance contained in the EIG report cited above, District Commanders are required to provide CECW-ID a signed "Verification of Compliance with 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.

16. Program Development Integrated Schedule. The FY 2017 Civil Works Budget and Work Plan will be developed based on the following process and schedule. All submittals must occur on or before the date shown. This schedule is based on the key assumption that decision making on the FY 2016 Work Plan and the final FY 2017 Budget will be simultaneous, and will occur following "Passback" and enactment of FY 2016 Appropriations. See TABLE 2 for more detail on dates and submittals of the FY 2017 budget data. Integrated Schedule is listed in Section 16 a.

a. Integrated Schedule. Submission dates are set by HQ to control the budget development workload and to enable CECW-I to brief the ASA(CW) on a pre-determined schedule. Therefore it is ESSENTIAL that submission dates are met.

| | |
|---|---|
| Final Program Development Guidance issued | Feb BY-2 |
| Begin Budget development and Work Package data entry | Mar BY-2 |
| Draft J-Sheets, initial meetings with SACW on continuing work | Apr-Jun BY-2 |
| MSC complete data entry, QA, and ranking | Jun BY-2 |
| Work package capability allocation decision for Army submittal | Jul BY-2 |
| New starts and new funding decisions for I & C accounts | Jul BY-2 |
| SACW briefings | Jul-Aug BY-1 |
| Army Budget submittal | Sep BY-2 |
| Unlock data – Budget and Work Plan BY-1 | Nov BY-1 |
| Pbud & hearing allocation decison/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-Sep BY-1 |
| Unlock - Districts and MSCs update work package capabilities | Sep BY-1 |
| Conference allocation decision for Work Plan (do not lock) | TBD on CR |
| Conference | Nov BY |
| Answer RFIs using Conference snapshot | Oct-Dec BY |
| Work Plan cleared | Conf + 45 days |
| Work allowances issued | Conf + 60 days |

17. Ranking Work Packages. Increments and Ranks will be used in conjunction by HQ to make Budget and Work Plan funding decisions within each Account

a. Generally, Increments 1 and 2 represent continuing, budgeted, 3x3x3 compliant studies, continuing, critical construction work on budgeted projects, and critical O&M work for efficient, effective and safe operation of priority projects. 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.

b. The Increments and Ranks span fiscal years and apply to Budget, Work Plan, and supplemental applications. Accordingly, there will not be separate Increments or 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 assigned an Increment and 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 for Increments 3 through 9 are within Business Lines and across Increments, that is, work packages in higher increments are not necessarily ranked higher than other work packages. District and MSC/Lab Ranks are 1 to N; however, once the work packages have been ranked, work packages that are added due to newly arising requirement may be assigned duplicate rankings based on their relative priority, without necessitating re-ranking of all work packages.

d. HQ ranks are within Business Lines but also across Increments. HQ Ranks are in tranches or tiers. Army ranks cross business lines and Increments and are also in tranches or tiers.

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 Glossary section of this policy EC.

f. Details on Increments and Ranks are found in the *Program Development Manual.*

18. Justification Materials and Congressional Books.

a. 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.

b. Justification Sheets (J-sheets).

(1) Schedule. See TABLE 2 in the MAIN part of this EC for J-sheet submission requirements.

(2) J-sheet Guidelines. These guidelines are to be used in conjunction with the J-sheet templates included in this EC for development of J-sheets by Districts. J-sheets shall be developed using Microsoft Word and must be consistent with the J-sheet requirements provided in ER 11-2-240, paragraph 11. 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 and district personnel. RIT programmers should be contacted for questions regarding J-sheet issues – NOT CECW-ID.

(a) J-Sheets -- GENERAL NOTES

- 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.

- Submit final J-sheets via email, thru MSCs to associated RITs for review. See TABLE 2 in the MAIN part of this EC for submission dates. Use the Checklist during the development of your J-sheets and submit signed checklist along with your Final J-sheets. See TABLE 2a.

- For projects whose BCR has changed since lasted submitted to Congress, highlight the change in the J-sheet. (changed since FY 2016 Budget)

- Completion Dates. 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 GI 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 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.

- See TABLE 2 in the MAIN part of this EC for submission dates

- 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, and Surveillance of Northern Boundary Waters. Refer to Annex III.

- 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 in accordance with the examples in ILLUSTRATION II-4.2 of Annex II.

- 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 THOUSANDS as either whole numbers that have been rounded (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 2017”. Where templates show FY_(BY-1)_ J-sheets should show FY 2016, etc.

(c) Formatting Investigations (I) & Construction (C) 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 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 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 Operation and Maintenance (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 J-sheets above. (e) Formatting Maps and Illustrations:

Follow the guidance in ER 11-2-240, Appendix C for map content EXCEPT that for margins and font size use the guidance above for I, C and O&M J-sheets.

c. J- sheets upload to (OMB MAX). The Office of Management and Budget (OMB) MAX Enterprise System (OMB MAX) is being used to manage the J-sheets Congressional Submission process, so J-sheets need to be formatted correctly to be manageable in OMB MAX. See Program Manual for specific instructions.

(1) After J-sheets are created by the Districts and quality control is performed by the MSCs, the J-sheets are submitted to the MSC's RIT programmers. Each RIT programmer performs quality assurance on their MSC's J-sheets and then uploads them to the designated HQS Sharepoint site and to the designated folder on the OMB MAX system. The Office of the OASA (CW) reviews the J-Sheets. The RIT programmer downloads the OASA (CW)-edited J-sheets, make corrections and respond to OASA (CW) comments. The J-sheets are uploaded again to the designated folder on OMB MAX and then transmitted to OMB after final review and approval by OASA (CW). The file names of J-sheets uploaded to OMB MAX should not change throughout the budget development process.

d. Congressional Books. The ultimate use for justification sheets is the Congressional books prepared and submitted to appropriate Congressional subcommittees. Each book contains justification materials for each MSC.

(1) Each MSC is responsible for developing its own data using whatever software it chooses, such as computer-aided design (CAD), and Microsoft Word and Excel software. However, ultimately, each MSC must convert its Congressional book of justification materials to an Adobe Acrobat file for efficient electronic transmission and publication. In order to ensure that each book will "present" in the Adobe Acrobat file as it does in the development software file, print preview the individual Word files for each J-sheet using the Adobe Acrobat printer in the development software before finalizing the product. For example, to ensure that a Word document transfers exactly into an Adobe Acrobat file, select."Print," then select "Adobe PDF " as the printer in Word - then save the individual file as a PDF. Review on-screen or print the PDF file on a local printer for review. If changes are required return to the Word document and make corrections. Repeat the process to create and print the final PDF version of individual J-sheets. NOTE: The final PDF version of each MSC's Congressional book must be bookmarked. See ILLUSTRATION 9, page 44, in this section of the EC.

(2) The MSC prepares a Word file of the table of contents which lists the study and project sheets being submitted in the following order: by Account, then by State within accounts, then alphabetically by project within each state, in portrait format with 1"

margins on all sides in Arial 10 font. See ILLUSTRATION 8, page 44, in this section of the EC.

(3) The MSC also prepares a Word file that contains the following pages in landscape format with 1" top and bottom margins and 0.5" side margins and centered on the page in Arial 36 font. See ILLUSTRATION 8, page 44, in this section of the EC.

(a) MSC title page (followed by the Table of Contents).

(b) Account title pages (Investigations, Construction, Operation & Maintenance).

(c) State title page(s) in each account. NOTE: For studies/projects involving more than one state, the J-sheet must be placed under the FIRST state in the title. For instance, if the project title is: Ohio River Locks and Dams, KY, IL, IN & OH, the J-sheet must be inserted under the proper account, after the KY state title page, in alphabetical order.

(4) Follow the process described in paragraph 16.c.(1) above to create the individual PDF files described in subsequent paragraphs (2), (3), and (4). Combine these files into a single PDF file in the proper order and name it the MSC master file.

(a) Insert the individual final project J-sheets in the appropriate location within the master PDF file.

(b) Review the master file to ensure all J-sheets (especially footers as submitted by the districts) are visible in the master file.

(c) Once the master PDF is determined to be final, insert a PDF footer by choosing "Document", "Header & Footer", "Add", then choose "Add New" in the popup window.

(d) Customize the PDF footer ensuring to choose

- Arial 10 font.

- Margins -- Top and Bottom, 0.5 inches; Left and Right, 1.0 inch.

- Center Footer Text should be the date of Army's press conference (to be provided later).

- Right footer text should be customized with the division, ~~space,~~ dash and then follow by selecting the "Insert Page Number" button on the drop down menu (i.e., SAD – page #).

- Once the above steps are complete, choose "OK" and the footer will be inserted on the MSC master file. Review the document to confirm that all District J-sheet footers

are intact and the PDF footer is correct. If all footers look correct, save the MSC master PDF file and print for final review at the MSC prior to submitting to HQUSACE – RIT.

19. 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, beginning with the FY97 Civil Works budget cycle, each district commander will submit a certification, modeled after ILLUSTRATION 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 ILLUSTRATION 2A and 2B certifying, respectively, that this “FY 2017 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 ILLUSTRATION 3 of this section of the EC. A sample of a completed checklist is available for illustration purposes only in ILLUSTRATION 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 shall submit a signed Certification modeled after ILLUSTRATION 4, certifying that a program management checklist was used by the MSC districts, and as applicable, the MSC. The certification must be submitted in accordance with TABLE 2.

20. 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. The Chief, CECW-IN serves as the committee chair.

b. Users of this EC are strongly encouraged to bring all errors, omissions, and inconsistencies found in this document to the attention of CECW-ID 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 Work plan, whether intentional or not, must be brought to the attention of the Chief, CECW-ID and CECW-IN at the earliest possible date. All MSC budget submissions are expected to be in accordance with the guidance and the intent of the guidance provided herein.

8 Annexes
(See Table of Contents)

STEVEN L. STOCKTON, P. E.
Director of Civil Works

TABLE 1

Cost Estimate Update Rates

EC-11-2-206_FY16
Cost Estimate Updatin

TABLE 2

Summary of FY 17 Submission Requirements and Shared FY16 Work Plan

TABLE 2 MAIN 2
APRIL FINAL.xlsx

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

TABLE 2a FINAL I CG
OM checklist template

TABLE 3

Codes

TABLE 3 - Phase Codes

TABLE 3 - CCS Codes

ILLUSTRATION 1

DATE: _____

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

and Paragraph 8 of ER 1110-1-8156

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 in accordance with ER 1110-1-8156.

_____
Colonel, Corps of Engineers
Commanding

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

ILLUSTRATION 2A

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

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

ILLUSTRATION 2B

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

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

ILLUSTRATION 3

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 15 of the MAIN part 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 ILLUSTRATION 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:

ILLUSTRATION 3
(Continued)

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:

ILLUSTRATION 3
(Continued)

Management Control Evaluation Checklist

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 in accordance with 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:

ILLUSTRATION 3
(Continued)

Management Control Evaluation Checklist

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:

ILLUSTRATION 3
(Continued)

Management Control Evaluation Checklist

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.

Tested by:
Response: YES_____ NO_____ NA_____
Remarks:

18. Were Section 902 cost limit calculations performed by District economists in accordance with 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 in accordance with 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:

ILLUSTRATION 3
(Continued)

Management Control Evaluation Checklist

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 in accordance with 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:

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:

22. For each project with a Watershed Informed Budgeting Rank and an MSC Rank, the following has been verified:

a. For projects where WIB rank differs from MSC Ranks MSC, explanations were made in CW-IFD on those differences.

Tested by:
Response: YES_____ NO_____NA_____
Remarks:

b. Changes were made to MSC PBB Rankings informed by Watershed-Informed Budgeting rankings with justification based on project-level Value to Nation.

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.]

ILLUSTRATION 4

DATE: _____

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

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

ILLUSTRATION 5A

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 Benefit-to-Cost Ratios (BCR) for Budget Development dated March 8, 2012.

2. That the Civil Works Integrated Funding database (CW-IFD) Primavera 2v3 (P2) 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

FOR ILLUSTRATION PURPOSES ONLY

(TO BE TYPED AS NECESSARY)

ILLUSTRATION 5B

Construction Project-Level Data Sheet for BCR Updates
(To Be Attached to Illustration 5A as Needed)

ILLUSTRATION 5B

ILLUSTRATION 6
Sample Management Control Evaluation Checklist


Illustration 6

ILLUSTRATION 7
Glossary of Acronyms

ILLUSRATION 7
Glossary of Acronyms

ILLUSTRATION 8
Congressional Book – Format Examples

ILLUSTRATION 8

ILLUSTRATION 9
Bookmarking J-sheets

Bookmarked J-sheets
for FINAL.docx

SECTION 2

This section provides information and guidance regarding several continuing and new initiatives by Civil Works Integration within USACE to make the budget formulation more streamlined, our investments more cost effective and to bring our budget into line with Administration overall goals and objectives.

1. Watershed Informed Budgeting.

a. In FY 2017, Value to Nation scores and dropdown fields to provide feedback are provided in CW-IFD that allow users to assess the accuracy the Value to Nation scores and ranks, produced within the program. The Value to Nation index measures project contributions supporting three National Objectives “Support the Economy”, “Restore and Protect the Environment” and “Improve Quality of Life”.

b. The economic index measures a project’s financial and economic benefits to the Nation.

c. The environmental index measures a project’s environmental benefits to the Nation.

d. The social index measures a project’s social benefits to the Nation.

e. The basis of these measures is performance based budgeting (PBB) data fields found in the CW-IFD and OMBIL databases.

f. Submission Requirements. Further background on how each of the V2N indices are calculated can be found on the WIB SharePoint: https://cops.usace.army.mil/sites/PPM/TM/WB/default.aspx.

2. Unique Performance Identifier (UPI)

a. A unique performance identifier (UPI) is defined based on the project and/or program’s EROC code, program code, appropriation code, and P2 project number (only for GC and GI projects).

(1) Therefore, UPIs defining O&M projects will read as follows:

(2) EROC Code, Program Code, Approp Abbrev=OM

(3) Similarly GC project UPIs will be defined by the following code:

(4) EROC Code, Program Code, Approp Abbrev=C, P2 Program Code

(5) Finally, GI project UPIs will read as:

(6) EROC Code, Program Code, Approp Abbrev=I, P2 Program Code

b. Inferred MSC ranks.

(1) Defined UPI projects ranks will be inferred with respect to (1) PBB and (2) WIB Value to Nation scores. WIB project ranks will depend on the relative Value to Nation scores of all projects within a district. PBB ranks for each UPI project will be determined through workshops and webinars with representatives from each MSC and HQ business line manager. Two columns in CW-IFD will be populated: (1) MSC UPI rank and; (2) WIB UPI rank.

c. Inferred rank PBB and WIB differences

(1) If the PBB and WIB inferred ranks differ for a given UPI project, CW-IFD will require the District user to choose up to three suspected reasons (in three separate columns) for the difference from a drop down menu. A preliminary list of dropdown menu options is listed below:

- Legal Mandate or other requirements
- Performance data not captured in V2N logic
- Social score too high
- Environmental Score too high
- Economic score too high
- Social score too low
- Environmental Score too low
- Economic score too low
- Geo-Spatial value not captured
- Stakeholder importance not captured
- Missing data or metric
- No federal sponsor
- Prefer V2N rank
- Other (please comment)

(2) In addition to the three columns allotted to dropdown menus, a fourth comment column will be available for additional notes for those who (1) choose the option ‘Other (please comment)’ from one of the dropdown menus and/or (2) want to elaborate on a specific cause of the difference between the PBB and WIB inferred rank for a given UPI. Users will only be required to comment on differences if the PBB and WIB rank differ, but they will also have the option to provide comments on all projects.

d. MSC rank changes based on review of WIB rankings.

(1) MSCs will review MSC rankings after District users have completed their review of differences between PBB and WIB rankings and assessed the reasons for the differences in CW-IFD.

(2) This assessment may strengthen work package justifications based upon WIB. MSCs may change the MSC Ranking on any work package where they are supported by Value to Nation WIB-enhanced justifications.

(3) In an effort time minimize resources on this task, it is recommended that a subset of work packages be reviewed first: work packages in Increment 3 or above for CG and GI; work packages in Increment 4 or above for O&M.

(4) Other work packages may be reviewed upon completing a review of the recommended subset listed above.

(5) Where uncertainty about the source of significant differences between PBB and WIB rankings exists, project-level rankings will likely NOT change. Further review of these projects, where project-level rankings are NOT changed, will be done outside the budget development process.

3. Digital Accountability and Transparency Act.

a. Purpose. To expand the Federal Funding Accountability and Transparency Act of 2006 by requiring ALL federal agency to electronically publish expenditures in real time.

b. Business Process Outcomes.

(1) Direct the federal government to standardize and publish a wide variety of reports and data related to spending: financial management, payments, and budget actions (outlays, expenditures, obligations)

(2) Most of the DATA Act requirements will fall to resource Management for implementation

(3) Agencies must link those expenditure to their budget. Will require each roject to include fiscal data that will link to the budget to the final execution by resource code or object class (20+ in use)

4. FY 2017 CW Expenses Program Development Pilots.

a. Purpose. Implement a CW Expenses program development labor process that appropriately integrates the current RM/operating budget development cycle and the annual program development process that will improve the current ability to develop and defend Civil Works labor funding within the Administration intent.

b. Business Process Outcomes Desired.

(1) Improve defense of CW labor allocation in the annual Expenses program development and defense process.

(2) Establish CW Expenses program development guidance for the HQ, MSCs, and FOAs, in development and defense of the FY 2017 CW Expenses program pilots.

(3) Utilize an existing source of data for CW functions and activities to provide the baseline for the CW Expenses labor in the FY 2017 program development pilots, which will also support the next CW manpower survey development effort.

(4) Appropriately integrate development of the FY 2017 CW Expenses program development pilots w/RM personnel responsible for developing the FY 2017 Operating Budget.

(5) Incorporate Lessons Learned from FY 2015 Expense Budget development briefing w/ASA (CW) and OMB.

c. PID Chief and RM Director Guidance:

(1) Automate the labor Expenses portion of the program development process.

(2) Work with CWID Chiefs and MSC RM's to Identify Expense Program Managers at the MSC/FOA level.

(3) Increase the discipline/rigor in the labor portion of the Expenses program development and defense process.

(4) Develop guidance for the labor Pilots by the end of February for inclusion in the FY 2017 program EC.

(5) Use FY 2011 manpower survey results as a baseline to identify what Labor-based functions and work packages should be recommended for funding in the development of the FY 2017 Labor Expenses program pilots.

(6) Use the chain of command from branches to divisions to directorates (Managers and Commanders) to prioritize labor based project work packages.

(7) Hold Managers responsible and accountable for developing and executing the Labor based priorities and decisions made in the development of the Expenses program "blueprint".

(8) Execute the budget as if the Expenses budget were a single year appropriation.

(9) PAWG time value should be spent prioritizing individual discretionary Items, not labor.

(10) Identify the scope of effort, level of detail required, work package definition, and determine Capability, Ceiling and Decrement. Expenses Program development results (priorities and impacts) will be handed off to RM to include in the development of the Command Operating budget.

(11) Use work center total man-hours converted to $s as FTE and $ capability funding level.

d. Draft Labor Work Package Defined:

Labor work package will be based upon an workload activity which falls under an office function identified in the FY 2011 Manpower Survey that is (1) clearly distinguishable, (2) has an assigned operating budget, (3) Can be separated into 3 funding amounts, Above Ceiling, Ceiling, Below ceiling and (4) whose assigned operating budget is aligned with organizational priorities.

e. Analysis Summary of each of the Work packages is listed in TABLE 4.

TABLE 4

Summary of each of the Work packages

| | |
|---|---|
| Expenses “Function" | Function from Manpower Survey e.g. Integrate all CW Business Line requirements in a cohesive program for administration |
| “Function Capability" | "total" manhours for Function converted to dollars $150K=1740 hours (conversion factor) |
| Function Activity Increment 1 + 2 | "Must Fund" = Critical this year |
| Increment 3 | Difference between “Must Fund” and current budget allocation (not capability) |
| Un-resourced Requirements | Capability |
| Ceiling | FY14 Budget Allocation |
| Below Ceiling | Project Increment 1 & 2 |

f. Draft Expenses Budget Guidance and Increments Defined General. Each HQs element MSC/FOA must:

(1) Identify labor "functions" based on FY 2011 Manpower Survey.

(2) Identify Expenses labor work packages at the activity workload function level using funding increments (Below Ceiling, Ceiling, and Capability).

(3) Prioritize Expenses labor work packages within a work center and across an MSC.

(4) Describe in detail funding level impacts consistent with ranking (eligibility) criteria.

(5) Increments 1 and 2 will receive priority consideration for budget funding and represent the minimum critical 1 year function and recurring functions.

(6) Increment 1 functions in this initial increment will include critical routine functions that can be completed in the BY, such as, critical cyclical routine functions that are needed on a regular recurring basis but not every year or, Critical non-routine functions are those that: (a) must be accomplished to insure safety, and/or, (b) critical actions that are required to keep the program operating and delivering benefits.

(7) Increment 3. This Increment includes only: E functions necessary for minimum E not included in Increments 1 & 2 work packages that make up the rest of the ceiling program.

(8) Increment 4. This increment includes E functions that are both routine and non-routine and that are needed to sustain the expected future benefits of the E program. These functions provide funding for: (a) the level of service that customers, stakeholders, and others have come to expect and depend upon, (b) sustaining public safety and (c) economic, environmental and social benefits.

g. Scope of Effort - CECW-ID will provide a listing of functions by work centers by HQs, MSC, and FOA at the webinars, dates to be determined.

h. Work with National Programs Branch on CW Integrated Financial Database (CW-IFD). CW-IFD will be used in the Field for submitting work packages through Smart systems to RM/PID for review/analysis/input into the J Sheets. This database will be used to load, analyze and store all of the work packages for this pilot. The organizational elements (Work Center) will be broken down to the functional level (Work Packages) within a work center consistent with the FY 2011 USAMMA Study organizational level, ie., Civil Works Directorate, Division Level, Branch Level, to ultimately the functional level. Each workload activity which falls under a function will be

assigned as a work package and described and justified as part of the unresourced requirements, labor ceiling,, and below ceiling Expenses labor program.

i. See Table 5 for the USAMMA Forms 3 and 4a and Table 6 for instructions.

j. Way Forward.

(1) Webinars. To provide information to the pilot participants on how we intend to implement the CW Labor Expenses Program Pilot. The implementation plan will be in done in three Phases: Concept development/Information gathering; MSC/FOA/Dir Review/Analysis/Approval levels; and CW Senior Leadership Approval/Pilot Member feedback.

(2) Pilot organizations Identify FY 2014 Labor workload activities and packages and compare to USAMMA's 2011manpower study.

(3) Identify what workload activity (work package) to be included in the Un-resourced requirements, Labor Ceiling, Below Ceiling and Decrement Program. Decremented workload functions and packages will be prioritized, rank ordered and banded.

(4) Each CDR/Director develops Un-resourced Requirements and Ceiling. Below Ceiling, and Decrement program, to provide defense for adequate appropriation.

(5) Each CDR/Director will prioritize all pilot Labor Ceiling/Below Ceiling/Un-resourced Requirement list and submit a prioritized decrement list to CECW-ID for compilation into an integrated priority list. CECW-ID will forward to the Management Working Group.

(6) Leadership of Expenses Management Working Group, leads the development of Un-resourced Requirements, Ceiling, Below Ceiling, and Un-resourced program, to provide defense for adequate appropriation. Expenses Management Working Group submits recommended prioritized decrement list to the Expenses Steering Committee for concurrence.

(7) Leadership of Expenses Steering Committee, leads the development of Un-resourced requirements, labor ceiling, and below Ceiling, to provide defense for adequate appropriation. Expenses Steering Committee provides recommended prioritized decrement list to DCW for review and approval.

TABLE 5

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TABLE 6

FY 2017 Main Table
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5. USACE Asset Management Program.

a. Background. The USACE Asset Management Program has developed a Civil Works Strategic Investment Framework (CW-SIF) that provides the conceptual basis for an analytic approach that improves decision-making in the annual budget process. Integral pieces of this approach include Maintenance Management, business-line specific efforts such as Operational Condition Assessments (OCAs) and Operational Risk Assessments (ORAs), and Asset Management Portfolio Analytics (AMPA).

b. Maintenance Management. USACE Asset Management developed an overall USACE Maintenance Management Strategy and a Maintenance Management Improvement Plan (MMIP). The MMIP, with its associated implementation plan, provide a maintenance management strategy to 1) develop consistent maintenance management policies, processes, practices, and terminology; and 2) begin to align maintenance investments with desired levels of facility performance. Key to this effort are uniformly accepted definitions of what constitutes maintenance. Clear definitions of maintenance, as well as resolution of different forms of maintenance aid in accurate budget development, in establishing clear links between budget development and budget execution; and may tie investments to the performance of the facility when executed.

(1) Maintenance Budgeting.

(a) Budget decisions that support appropriate levels of maintenance investments and asset performance are key to improving maintenance management within USACE. The budget process must present decision-makers with a balance of packages that support direct execution of a project's mission (operations) and maintains the capability of the project facilities to deliver that mission (maintenance). To reach this end state, USACE seeks maintenance budget proposals directly tied to the project performance. Transformation to a budget paradigm focused on the level of performance associated with maintenance investments are being phased over three budget cycles:

- FY 2015 Budget EC. The FY 2015 budget guidance provided the maintenance terminology developed during the MMIP process. Budgetary terms, such as routine and non-routine maintenance were clarified, and maintenance types, such as preventive and corrective maintenance, and component renewal were introduced to the budget lexicon. Facility operations (in lieu of "operational maintenance") was introduced to improve the distinction between Operations and Maintenance consistent with standard practice in the industry.

- FY 2016 Budget EC. For FY 2016 budget development, the guidance continues to employ standard maintenance terminology for improved clarity of investment decisions. Achieving a common understanding within USACE of terms such as "little m", "big M", "routine "non-routine", and "major maintenance" is critically important to be able to establish the proper range of investments necessary for facility sustainment. Efforts to further separate Operations work packages from Maintenance work packages

have been incorporated in the GLOSSARY and for O&M Work Category Codes. This change will allow decision-makers to make strategic decisions on mission delivery and project performance; resourcing benefit delivery through Operations activities or facility sustainment through Maintenance activities. As this process matures, trade-offs between Operations and Maintenance activities will be more apparent and USACE leaders can adjust levels of service delivery in Operations activities without creating unintended consequences impacting facility sustainment for the future (as can occur with the current budget process).

- FY 2017 Budget EC. USACE will pilot the application of performance based funding levels. A "performance" work package bundles activities required to achieve a given level of facility performance. The concept of maintenance performance, tied to budget increments, was introduced in the FY 2016 guidance in the form of maintenance Levels of Performance (LoP). To further the development of this concept, performance based funding levels will be piloted during FY 2017 development. The FY 2017 pilot effort extends the performance increment concept to Operations activities as well. The pilot will involve specific business line budget analysis parallel to the standard FY 2017 submittal. The pilot budget will follow a budget framework modeled after military Common Level of Service (CLS)/Installation Status Rating (ISR) to meet CW O&M needs, a framework based on common metrics for project status and service levels. In simple terms, a budget process that clearly defines end-of-period project status and risks associated with specific funding levels. The outcome of the FY 2017 pilot will inform follow-on guidance for the O&M appropriation in tying levels of performance to budget increments.

b. Operational Condition Assessment/Operational Risk Assessment (OCA/ORA). OCAs establish a means to delineate mission-critical assets and components from non-critical ones and record and communicate their condition in a more objective and corporately consistent fashion. This information is used to develop probabilities of failure for those assets and components, which when factored with the appropriate consequences (value) can produce an operational risk assessment (ORA). For the FY 2017 Budget, OCA asset condition data is consumed by the Asset Management Portfolio Analytics tool as well as the ORA workbooks for ranking work packages. As such, the accuracy of OCA data and its availability to decision-makers within the budget process must be assured. Particular data quality needs are explained in subsequent sections.

c. Asset Management Portfolio Analytics (AMPA). AMPA is a portfolio analytic and budgetary decision support tool. AMPA analysis makes use of CW-IFD data in order to “operationalize” the 5x5 qualitative risk matrices used by USACE business lines. AMPA~~'s~~ seeks to optimize WPs that provide “biggest bang for buck,” as measured in terms of relative risk “buy down” value. AMPA provides the organization with two key capabilities: (i) provide individual business lines with the ability to prioritize and rank budget WPs in a consistent, and risk- informed manner using existing USACE data sources; and (ii) provide Corps leaders with an analytic framework for prioritizing *across* USACE business lines using a common optimization and valuation framework. During

FY 2016 Budget analysis, data gaps were identified in the CW-IFD submission which affected the ability of the AMPA to evaluate certain WP's. District and MSC BLMs are encouraged to provide complete data sets for the FY 2017 budget submission. The lack of data input for new data fields in the FRM, Navigation, and Hydropower business lines related to Consequences will preclude competition of certain budget packages and should be avoided. Consequences data fields should be reviewed and any blank data fields populated with appropriate input. For more information, the AMPA Case Study Report is available for download on the Asset Management Sharepoint site at: https://cops.usace.army.mil/sites/AM/default.aspx.

d. Short-term Goal. Implement Maintenance Management, starting with mission-critical assets and components, followed by non-critical ones. Link budget development to budget execution. Complete baseline OCA/ORA for all business lines and continue integration efforts across business lines. Execute AMPA at the HQ level for FY 2016 by continuing collaboration with the Business Line Managers for Navigation, Flood Risk Management and Hydropower to expand application beyond the limited dataset used in the AMPA Case Study in coordination with the Watershed Based Budgeting pilots. The intent is for these HQ BLMs to use AMPA results when considering prioritization of the FY 2016 WPs in addition to the guidance in the respective Annexes. Additionally, AMPA will take advantage of new data fields in the FRM, Navigation, and Hydropower business lines related to Consequences enabling the Corps to consider all consequence criteria in a conjunctive manner.

e. Long-term Goal. Continue implementation of Maintenance Management through improving work flow and developing increasing sophistication of planning, execution, analysis, and reporting. Improve linkage between budget development and budget through increased visibility of maintenance accomplished/deferred at the asset level, along with any corresponding impacts to condition and risk. Provide budget categories for maintenance packages (routine and non-routine) which are performance focused and provide meaningful investment decision points. Develop and implement version(s) of AMPA that will be applied at all levels of the organization, and all of the O&M appropriation with an eye to supporting other appropriations. The District AMPA will enable integrated intra- and inter-business line optimization for all of the Districts projects; the MSC AMPA will then do the same in an integrated manner for all of their Division; and lastly, the future HQ AMPA would provide a nationally integrated portfolio investment strategy based on District and MSC AMPA results.

6. Alternative Financing.

a. Background. As part of Alternative Financing, the USACE is developing Public-Private Partnership (P3) public-public-private (P4) Pilot Projects within existing authorities consistent with the President's Memorandum Expanding Public-Private Collaboration on Infrastructure Development and Financing. Alternative Financing Efforts are aimed at cost-effective investments in our Nation's infrastructure, innovative solutions, improving collaboration with our non-Federal sponsors and the private sector with respect to infrastructure development, resourcing, delivery, and financing.

Implementation of Alternative Financing and P3 is anticipated to provide significant gains in productivity, efficiency, and resilience because it is expected to provide funding/revenue streams to enable projects to be completed on an optimal delivery schedule, with benefits realized earlier.

b. FY 2017 Budget EC. Each USACE MSC shall develop two P3 or P4 pilot proposals to include any of the business lines with a priority towards Flood Risk Management and Navigation projects.

- Viable proposals will have the ability to be implemented within existing authorities, can award a construction or O&M contract in FY 2017, demonstrate a sizable Federal cost savings, and decrease the delivery schedule.

- Projects demonstrating the largest cost savings to the Federal government based on dollars saved will be prioritized.

- A minimum of two P3/P4 proposals will be included in the President's 2017 Budget.

- The UIS Alternative Financing team will provide expertise and support for project development

c. Civil Works Integrated Funding Database (CW-IFD) will include two data fields to meet the above requirements: 1) P3/P4 Pilot – Yes or No; 2) Anticipated Federal cost savings (1,000s).

d. Outcomes. Implementation of P3/4 will enable USACE to meet the Nation’s demands for water resources infrastructure, utilizing new resourcing and financing tools, and P3/4 delivery methods.

ANNEX I

Investigations and MR&T Investigations

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SUB-ANNEX I-1

Investigations and MR&T Investigations

General

I-1-1. Applicability. This annex provides Program guidance and procedures for all activities in the Investigations (I) appropriation title and comparable ones from the Flood Control, Mississippi River and Tributaries (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. The purpose is to determine the advisability of adopting new or modifying existing Federal projects for navigation, flood risk management, shoreline risk management, ecosystem restoration, and solutions for related water resources needs including those for which there is no Corps of Engineer implementation role. Planning assistance to and coordination with other Federal agencies, States, and other non-Federal public interests are also funded under this appropriation. Activities in the collection and study of basic data not chargeable directly to authorized surveys or projects, performed by other Federal agencies with funds budgeted for and transferred by the Corps of Engineers under the cooperative programs of observing and compiling basic data on streamflow, rainfall, and the Corps participation in the various boards to study and control international streams and watersheds which mutually affect the United States and bordering nations. Research and development activities which assist in the solution of continuing and recurring water resource development problems affecting the planning, construction and operation of projects, but not directly chargeable to authorized studies or projects, nor covered by cooperative programs for which funds are transferred to other agencies.

I-1-2. Types of Studies.

a. General. The following definitions are provided to assist in identifying studies to be included in the investigations program budget submission.

(1) Special Studies. 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. 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.

(3) Watershed Assessment (WA). 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 and results in a Watershed Plan Section 729 studies may recommend more detailed feasibility studies, but feasibility studies may not be conducted under the authority of Section 729. The cost of Section 729 studies may receive up to $100K at 100 percent Federal expense for the initial assessment then cost -shared 75% Federal and 25% non-Federal under modified Feasibility Cost Sharing Agreements. Reference ER-1105-2-411.

(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 (CS). Unlike watershed assessments, there is not a standing authority that authorizes comprehensive or basin-wide studies. 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 Feasibility Cost Sharing Agreement and the costs are shared as per the specific authority.

(5) 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. 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 Assessment Study and Comprehensive or Basin-wide Study that is identified in the final watershed assessment report or in the comprehensive or basin-wide study's final report, 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 (CAP) Conversion Study. CAP projects that are being converted to Investigations are considered New Start because they have never received Investigation funding. A conversion will follow the New Start process outlined in section I-1-10. Corps policy for CAP Conversion Studies is under development, any changes will be reflected in the revised Planning Guidance Notebook.

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

(a) 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. 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 (but not a new start), and will be categorized as New Phase (NP).

(b) 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. A LRR started before FY17 will continue to completion. Additional guidance regarding Limited Reevaluation Studies incorporating WRDA 2007 Section 2043 will be provided in the updated

Planning Guidance Notebook. Instead of a LRR a new reexamination of project justification that does not require reformulation will be referred to as a Validation Study.

(c) 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. Validation Reports, except those for Section 902 increases, are approved by the Division Commander, more guidance will follow in the revised Planning Guidance Notebook. 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.

(d). 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.

I-1-3. Types of Phases. The following descriptions of phases are provided to assist in identifying phases in the investigations program.

a. Specifically Authorized Study Phase. 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 Feasibility Cost Sharing Agreement (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 seamlessly to completion. It is anticipated that all active studies will be included in the budget submission.

(1) Reconnaissance Phase. A Specifically Authorized Study that has received an allocation for Reconnaissance phase prior to FY15 may receive funding to continue or complete the Reconnaissance phase in a Work Plan. There will be no reconnaissance requests in the FY17 budget request.

(2) Feasibility Phase.

- Specifically Authorized Study, including a GRR, with a signed FCSA before passing of WRRDA 2014 on 10 June 2014. These studies must follow SMART Planning principles and have a Compliance Memo or Exemption with a vertically aligned scope and funding stream before the MSC submits the FY17 budget to HQUSACE in June 2015.

- New Start, Specifically Authorized Study started after the passing of WRRDA 2014, 10 June 2014. These studies will follow a single phase feasibility process. Once funds are 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 at the Alternatives Milestone. 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 $300,000 for year 1, $700,000 for year 2, and $500,000 for year 3.

(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. The PED phase ends after completing the first set of plans and specifications.

I-1-4 Descriptions of Status. The following describe different status within the investigations program.

a. Active Studies: Authorized studies that have received a Federal allocation or contributed funds, have non-Federal sponsor, and have reasonable prospects for a Federal project.

b. Inactive Studies: Authorized studies that have not received a Federal allocation or contributed funds in BY-3 or BY-2 or were not included in the President's Budget for BY-1.

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 should be 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 includes a new General Re-evaluation Report (GRR). 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.

(3) Resumption (RE): Previously funded phase of a study that was not funded (via an appropriation) or budgeted in BY-1, BY-2 or BY-3. The MSC Planning Chief must concur that this study qualifies as Active prior to its inclusion in the budget submission.

(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.

I-1-5. Increments.

a. Investigation increments have been added to better align with the overall Corps program. Investigation increments are categories used to group studies of similar status. Increments are not the same as priorities. In grouping studies of similar status, requirements in Increments 1 and 2 typically comprise the Below Ceiling Program – must be funded. Requirements in Increments 1, 2, and 3 typically comprise the Ceiling Program – most likely to be funded. Requirements in Increment 4 typically comprise the Above Ceiling program – unlikely to be funded unless additional budget authority is provided. The Studies and pre-construction engineering and design of specifically authorized and MR&T Investigation increments are defined as follows:

(1) Increment 1. Increment 1 will be used to request full capability funding according to the vertically aligned schedule for:

- All Last Year and Continuing feasibility studies, including GRRs, that are compliant, reference I-1-8, or have an approved exemption prior to the MSC's FY17 budget submission to HQUSACE.

- All Last Year and Continuing Watershed Assessments, Comprehensive Studies, LRRs, Section 902 Post Authorization Studies, and PED phase. A watershed assessment and comprehensive study requires submission of the Watershed Memorandum prior to the MSC's FY17 budget submission to HQUSACE.

(2) Increment 2. Increment 2 will be used to request full capability funding for:

- New Phase (NP) funding request for specifically authorized phase requires a vertically aligned compliance memo prior to the MSC's FY17 budget submission to HQUSACE.

- New Phase (NP) GRRs follow the single phase process, I-1-8 d.

- New Phase (NP) funding requests for PED must be for a useful increment of work

- All Resumptions (RE) (Note: all feasibility phase resumption funding requests require a vertically aligned compliance memo prior to the MSC's FY17 budget submission to HQUSACE.)

(3) Increment 3 is for New Start (NS) studies, reference I-1-10

(4) Increment 4-8. Do not use.

(5) Increment 9. Unbudgetable Studies.

I-1-6. 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 a Compliance Memo, Exemption, or be a new Feasibility study after the passage of WRRDA 2014, June 10, 2014.

(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.

(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) Have successfully completed the Civil Works Review Board by 1 August 2015 and;

(2) The project has net economic benefits of 2.0 BCR at 7 percent , or ecosystem restoration studies whose Civil Works Review Board determined that the benefits to be achieved exceed the cost and;

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

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

(5) There is an identified and willing sponsor who understands and has the ability to finance PED in accordance with 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.

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

c. Prioritization will be based on the criteria for the appropriate business line as discussed in Appendices C-F and Appendix I.

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

I-1-7. Work Plan Requirements.

a. Eligibility and Ranking criteria for studies, see I-1-6 a.

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

I-1-8. Study 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 seamlessly fund studies to completion. Therefore, it is required that full Federal funding needed in the fiscal year be requested in one line item to ensure efficient completion of the study. Study prioritization by the field is required in the case funding is not sufficient to cover all the requirements in the Investigations account. The reason a continuing study would be left out of the budget submission is if it has carryover funds to proceed 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 in accordance with 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 cost shared feasibility cost sharing agreement (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 in feasibility phase will use 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 and Compliance. Specifically Authorized Feasibility Study, including GRRs, with a FCSA signed after the passing of WRRDA 2014, 10 June 2014, are subject to WRRDA Section 1001 cost and time rules . Section 1001 of WRRDA 2014 provides that, in general, the maximum Federal cost for a feasibility study is $3 million. However, the USACE will continue to 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) 3x3x3 Compliance. For feasibility studies, including GRRs, with a signed FCSA prior to 10 June 2014, require a vertically aligned compliance memo before submission of the budget in order to be considered, reference Planning Bulletin PB 2015-01. For studies signing the FCSA after 10 June 2014, that started before FY 2015, the Project Delivery Teams (PDTs) are required to scope efforts to develop a 3x3x3 compliant Project Management Plan (PMP), and achieve vertical Team alignment in reconnaissance phase prior to signing the FCSA. The PMP will set out the study scope, costs, and schedule, including milestones, in accordance with the 3x3x3 process. The 3x3x3 compliance memo is required prior to submission of the FY17 budget by the MSC to HQUSACE.

(d) 3x3x3 Compliance. Specifically Authorized Feasibility Studies, including GRRs, started after the passing of WRRDA 2014, 10 June 2014, will follow a single phase feasibility process. Once funds are 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. Documentation of the Alternatives Milestone will record the Scope and schedule of the study and will no longer use the Standard Funding Stream. For these studies, vertical team alignment will occur at the Alternatives Milestone. 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 $300,000 for year 1, $700,000 for year 2, and $500,000 for year 3.

(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 operations and maintenance (O&M) funds. 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.

(a) The above guidance is true for all Section 216 studies except for disposition studies. These studies will be identified through the divestiture process, being established at HQUSACE, using asset management principles. Divestitures are intended to include disposals (including de-authorizations), out-grants, transfers and placing in caretaker status. The HQUSACE Asset Management team will identify and prioritize divestitures that require feasibility level study. These studies will be studied using the Disposition Studies Remaining Item under the authority of Flood Control Act of 1970, Section 216 – Review of Completed Projects, reference Sub-Annex I-3. This Remaining Item is in line with the Energy and Water Development and Related Agencies Appropriations Act, 2015 Explanatory Statement where divestures are encouraged, but are not to be treated as individual New Starts rather a programmatic approach as recommended by Congress in the Appropriations 2015 Explanatory Statement. Therefore, no disposition studies should be included as a New Start study in the MSC budget submission.

(3) Watershed Assessment. A Watershed Assessment is conducted in accordance with Section 729 of the Water Resources Development Act of 1986, as amended, and leads to a Watershed

Management Plan. Given the unique nature of watershed assessments we expect a variety in cost, scope, schedule and complexity. All watershed assessment studies will use SMART Planning principles. Before proceeding with a watershed assessment, an initial watershed assessment is required to be submitted to the CECW-P and also include a Watershed Memorandum with the following:

(a) MSC Planning Chief endorsement of vertical alignment.

(b) Schedule including the scope and funding stream.

(4) Preconstruction Engineering and Design (PED). 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 in accordance with the 24 May 2013 CECW-PC Memorandum Modification of non-federal contribution in Design Agreement. See: http://planning.usace.army.mil/toolbox/library/MemosandLetters/2013May-DA.pdf. A design agreement is not required for the following: an inland waterway project; a dam safety assurance, seepage correction, or static instability correction project; a replacement project; deficiency correction at a Federally operated project; or a project or separable element for which the non-Federally financed portion of engineering and design during construction costs alone would exceed the total non-Federal cash share for the project or element, the non-Federal share is reduced under ability to pay rules, or PED was initiated prior to FY 97. A design agreement also is not required (may be skipped) if Construction or MR&T Construction funds have been received and total PED costs preceding planned execution of the PPA are estimated to be less than $100,000, assuming no delay in technical PED activities. If funds for construction have not been received or the MSC believes that the $100,000 limit will be exceeded, the District should execute a design agreement with PED funds. The budgeted increment to initiate PED phase must be for a useful piece of work and not just enough to sign the design agreement.

(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 required, 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 all study processes. See Definitions i-1-2. B. 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. 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. 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 required 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 in accordance with 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, Watershed Assessments and PEDs that are consistent with policy will show capability under the Investigations account or the study/design portion of the Flood Control, Mississippi River and Tributaries (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 or has received construction appropriations.

I-1-9. Program Considerations.

a. All studies; Specifically Authorized, GRRs, LRRs, Validation Studies, Comprehensive or Basin-wide studies, and Watershed Assessments will follow SMART Planning principles.

b. All vertically aligned studies 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.

d. New Studies identified in the BY-1 or BY-2 that have not reached the Alternatives Milestone, so a specific funding stream has not been aligned, will continue to be supported in the budget at the Standard Funding Stream of $300,000 for year 1 , $700,000 for year 2, and $500,000 for year 3.

e. PED cost estimates are to include an allowance for inflation in accordance with 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).

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

I-1-10. 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 and thinking actively 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. The investigations portfolio must support the infrastructure initiative, Civil Works Transformation and the Civil Works Strategic plan. To remain relevant stewards of our Nations' waterways, the Corps must continue to evaluate the water resource opportunities (vulnerabilities) that could be addressed by either a Corps action (project) or action by others.

(2) The District will conduct a rigorous screening process to ensure that the most viable studies are recommended as New Start studies. Each District has been provided an additional $25,000 in the Special Investigations program to assist in the screening process. District staff will use the funding to identify appropriate non-Federal sponsors, obtain a Letter of Intent, discuss how to partner with the Corps since passage of Section 1002 of WRRDA 2014, and ensure that study authority exists in order to develop a viable portfolio of new start studies. 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) Feasibility New Starts. The MSCs will submit a regional portfolio identifying its top 10 Feasibility studies for HQUSACE consideration in development of the National New Start Portfolio 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 I-2.1 are due concurrently in accordance with Table 2 of the main EC. To be considered the proposal must have a J Sheet 1-2.1 and a minimum of the following key data points:

(a) MSC Rank of 1-10

(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 3x3x3 requirements using the Standard funding stream of: $300,000 for year 1, $700,000 for year 2, $500,000 for year.

(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

(l) Not a disposition study

(m) Not a watershed assessment

(n) Not a comprehensive or basin-wide study
(o) Not a GRR

(p) Not a resumption

(4) Watershed and Comprehensive or Basin-wide New Starts. The MSCs will submit a regional portfolio identifying its top 5 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 JSheet 1-2.1 and a minimum of the following key data points:

(a) MSC Rank of 11-15

(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: $300,000 for year 1, $700,000 for year 2, $500,000 for year or a best estimate.

(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) Not a disposition study

(l) Not a feasibility study

(m) Not a GRR

(n) Not a resumption

(5) HQUSACE System Assessment of New Start Study Recommendations. The HQUSACE will further hone 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 the Value to the Nation:

(a) Support the economy

(b) Develop, restore and protect the environment

(c) Improve quality of life

I-1-11. Submission Requirements.

a. CW-IFD – See Summary of Submission Requirements which is listed in the MAIN EC.

b. Justification Sheets - See Summary of Submission Requirements which is listed in the MAIN EC.

c. All studies and projects, including new starts, will be entered in CW-IFD as discussed in the MAIN part of this EC and further described in the *Program Development Manual*.

**ILLUSTRATION I-1.1**

New Start Feasibility Study

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

SURVEYS – New Start Feasibility

| 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 2/ | 300,000 1/ | 1,200,000 |

Study Name: - Type (Types are: 'Aquatic Ecosystem Restoration'; 'Flood Risk Management'; 'Navigation'; Comprehensive, or 'Watershed'…. 'Watershed' should only be applied to the studies using the 729 Authority). All one line with a return space below the dollars..

EFG (three letter abbreviation) District

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 Environmental Appendix (do not enter the scores) and information about the physical area involved. For all purposes, provide any pertinent information concerning coord-ination with Federal and state resource agencies. Identify relationship to other project purposes if appropriate. 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 and identify the sponsor and include the date that the Letter of Intent was signed. (There may be multiple sponsors for watershed and multi-purpose studies) Describe briefly the general scope 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.

Cite study authority.

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

**ILLUSTRATION I-1.2**

Cost-shared Feasibility Study

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

SURVEYS – New Phase, 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'; Water Supply, Comprehensive or 'Watershed'…. 'Watershed' should only be applied to the studies using the 729 Authority). All one line with a return space below the dollars.

EFG District

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 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 Appendices C-F and Appendix I.. 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. Describe the work to be performed in the Program year. ( This paragraph should present specific arguments and evidence that it is important to fund 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. Provide the sponsor, date of signed Letter of Intent or actual FCSA signing.)

Fiscal Year _(BY-1)_ funds are being used to (specifify 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) into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is $XXX,XXX which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. 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. A summary of study cost sharing is as follows:

| | |
|---|---|
| Total Estimated Study Cost | $X,XXX,XXX |
| Reconnaissance Phase (Federal) | XXX,XXX |
| Feasibility Phase (Federal) | X,XXX,XXX |
| Feasibility Phase (Non-Federal) | X,XXX,XXX |

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

**ILLUSTRATION I-1.2** (continued)

Cite study authority.

The Feasibiltiy Cost Sharing agreement was signed (or scheduled to be signed, Month and Year). The feasibility study is scheduled for completion in (Month and Year of Division Engineer's Transmittal Letter).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year _(BY)_ from prior appropriations for use on this effort is $_____($XXX). This amount will be used to perform work on the study 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).

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 $1,000, put $0 in the blank space and delete "in (FY)").
(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:]

**ILLUSTRATION I-1.3**

Full Federal Expense Feasibility Study

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

SURVEYS – New Phase, 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';Water Supply, Comprehensive or 'Watershed'…. 'Watershed' should only be applied to the studies using 729 Authority). All one line with a return space below the dollars.

EFG District

This paragraph should describe the study area, the navigation problems and potential solutions. Results of the study to date should be covered as well as information that conveys to the reviewer (Corps, Army, OMB, or Congress) that the study and its anticipated outputs are in accord with Administration priorities.

This paragraph is to be used to describe the activities to be undertaken during the BY-1. The activities pertaining to each interim are to be clearly described.

This third paragraph is to be used to describe the activities to be undertaken in the BY.

This final paragraph will set forth the schedule for the study including completion dates (month and year) (date of Division Engineer's Transmittal Letter for each interim and the overall study.

Cite study authority.

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

**ILLUSTRATION I-1.3** (continued)

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year _(BY)_ from prior appropriations for use on this effort is $_____($XXX). This amount will be used to perform work on the study 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).

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/.

REQUIRED FOOTNOTES:

(NOTE: if the $ below is less than $1,000, put $0 in the blank space and delete "in (FY) ").
(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:]

**ILLUSTRATION I-1.4**

Preconstruction Engineering and Design

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'; Water Supply, Comprehensive or 'Watershed'…. 'Watershed' should only be applied to the studies using the 729 Authority). All one line with a return space below the dollars.

EFG District

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. 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 based upon the latest economic analysis dated (Month Year). Identify project sponsor and set forth latest evidence of support. Give date of the signed PCA.(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 as described in the CECW-PC memorandum of 24 May 2013, Modification of non-federal contribution in Design Agreement above in para I-2.2.b.(2)(a).. Any additional adjustments that may be necessary to bring the non-Federal contribution in line with 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 |
| Federal Share | X,XXX,XXX |
| Non-Federal Share | XXX,XXX |

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

**ILLUSTRATION I-1.4** (continued)

The project is authorized for construction by: (Cite the construction authorization and cost sharing requirements). Fiscal Year (BY-1) funds are being utilized to continue work on the Feature Design Memorandum, including economic studies. Fiscal Year (BY) funds and any carry-in funds will be used for completion of PED in (Month and Year).

1/ Estimated Unobligated Carry-in Funding: As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year _(BY)_ from prior appropriations for use on this effort is $_____($XXX). This amount will be used to perform work on the study 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).

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/.

REQUIRED FOOTNOTES:

(NOTE: if the $ below is less than $1,000, put $0 in the blank space and delete "in (FY)").
(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:]

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SUB-ANNEX I-2

Investigations

CECW Programmed Items

I-2-1. Program Procedure.

a. The activities covered by this sub-annex are programmed by CECW. You should assume your allowances will remain at or about the same level as BY-2 through BY+4 in preparing programming documents for the activities requiring Division response.

b. If a division is experiencing conditions that would materially affect its requirements for the activities covered, the Division Commander should submit a brief letter to HQUSACE, CECW-I outlining the changed conditions.

c. Some requests for assistance will not fit clearly into one of these three accounts, but you should be sure that, to the extent possible, that the capabilities are identified in the appropriate account and that activities in the three accounts are not duplicative.

I-2-2. Submission Requirements. Provide accomplishments (including completed products) for each applicable activity in Illustration I-2.1 for budget years: BY-3, BY-2, BY-1, and BY in the format of Illustration I-3.1, i.e., (Each applicable program should have an independent MSC submission that reflects four years {by year} of accomplishments or schedule accomplishments). This information will provide a basis to developing work allowances for varying program levels.

I-2-3. Program Purposes

a. Special Investigations. The Program Objective. This category is for investigations of limited scope, in replying to requests from sources outside the Corps of Engineers, for information relating to unauthorized projects and other activities which have no funds, and which are not accomplished with a view toward determining whether a project can be developed. Also included is work specifically authorized by the Chief of Engineers; the review of reports and Environmental Impact Statements requested by other agencies, unless otherwise provided for; and attendance at meetings of local interests and other agencies during the preliminary stages of project investigations. Accomplishments could include: number of meetings attended, number of request responses, or number of EIS reports reviewed.

(1) The program objective specifically includes 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.

(2) The program objective specifically includes 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.

(3) The program objective specifically includes 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.

(4) The program specifically includes funding for New Start 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.

1-2-4. FERC Licensing Activities.

a. Program Objective. The objective of the Federal Energy Regulatory Commission licensing activities is to provide timely review of FERC license and permit applications consistent with regional and national priorities. Review is accomplished on a first come-first served basis.

b. Eligibility. License or permit applications are eligible for consideration if they are for new or existing non-Corps operated facilities. Review of license and permit applications which could have an effect on ongoing projects under construction or being operated by the Corps should be accomplished with available project funds.

1-2-5. Interagency Water Resources Development. The interagency water resources development program is for Corps of Engineers districts 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. The funds would also be used to cover costs of meeting with potential study sponsors prior to programming for study to insure they fully understand study cost sharing and to obtain an indication of their interest in participating in a future study. Funding for American Heritage River Navigators is included in this category and requirements for this effort should be separately noted and justified.

1-2-6. Interagency and International Support. Authorized by Section 234 of the Water Resources Development Act of 1996, this program is for activities in support of other Federal agencies and international organizations to address problems of national significance to the United States.

a. Program Objective. This program was authorized by Section 234 of the Water Resources Development Act 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 is for Corps of Engineers coordination activities with other agencies and governments, not otherwise funded. These activities include such things as meeting with officials, exchanges of strategies and regional planning in water resources areas included, but not limited to, navigation, flood risk management, coastal development, dredging and river basin management. These funds will be used to cover activities that build the capability of addressing water resource issues between the Corps and other organizations or governments."

1-2-7. Coordination with Other Water Resources Agencies. Includes Department of Agriculture, Natural Resources Conservation Service; Department of Interior, Bureau of Reclamation; and Regional Planning Commissions and Committees Programs.

a. Program Objective. The objective of this program is to provide coordination with these agencies on water resources issues and problem areas of mutual concern that are general in nature and not part of a programmed project or study.

b. CalFed. The program objective specifically includes 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.

c. Lake Tahoe Federal Interagency Partnership. The program objective includes Corps participation in the partnership with other Federal Agencies, in accordance with Executive Order 13057 “Federal Actions in the Lake Tahoe Region”, to insure cooperation, support and synergy.

1-2-8. Planning Assistance to States.

a. Program Objective. The Planning Assistance to States program is carried out in accordance with the provisions of Sec.22, PL 93-251. This public law authorizes the Chief of Engineers to cooperate

with States (Commonwealths, Territories, etc.) and Indian tribes in the preparation of plans for the development, utilization, and conservation of water and related land resources of drainage basins located within the boundaries of the state. This program has been amended by Section 2013 of the Water Resources Development Act of 2007 with implementation guidance reflected by the 11 Aug 2008 CECW-P/CECW-I Memorandum 'Implementation Guidance for Section 2013 of the Water Resources Development Act of 2007 (WRDA 2007) Relating to In-Kind Contributions and State Funding Limits for Planning Assistance to States Activities'. Until Implementation guidance is issued for the "Technical Assistance" provision that provides authority to enter into cooperative agreements with non-profits, budgeting for this provision is NOT allowed. Assistance is provided on the basis of State or tribe requests. When a state or tribe is served by more than one division, the Lead Division assigned in Exhibit G-12, ER 1105-2-100, has the responsibility for providing data on work requested by that state or tribe. The Lead Division may further delegate that responsibility to a Coordinating District, but that Coordinating District is responsible for coordinating not only with the State or tribe, but also with the other Districts doing work for that State or tribe.

b. Planning assistance should be coordinated and scheduled to ensure the continuation and completion of ongoing work and the timely initiation of new work requested by the States and tribes. Funds issued for this program will follow the performance based process described for Special Investigations in para. I-2-3.c.

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 014800.

1-2-9. 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 or committee are eligible for funding.

1-2-10. 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, technical assistance, and guidance, in identifying the magnitude of the flood hazard and for planning wise use of the flood plain including the consideration of non-structural measures. Direct response and assistance are provided through the FPMS program to states, Indian tribes and local governments without charge and to Federal agencies and private persons on a cost reimbursable basis.

b. 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, and (4) Special studies to include HES studies. In addition to the comprehensive Special Study numbers, a list of Study accomplishments completed in the BY is required. An estimated cumulative number of responses to requests will be shown for Quick Responses and Technical Services. Hurricane Evacuation Study (HES) funding will be allotted in the same manner as other MSC study allotments for this program. Full reimbursement should be required for assistance to Federal agencies and private persons. Information provided for Illustration I-3.1 should not exclude requirements for HES studies, but exclude all requirements for assistance to Federal agencies and private persons.

c. Fiscal Year funds issued for this program will follow the performance based process described for Special Investigations in para I-3-3.c with the exception that the FPMS program funds will be reduced prior to the pro-rations to fund the FPMS funded special programs.

d. 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) District FPMS Units - 082030

(2) Quick Responses - 082045 and

(3) Technical Services - 082040

1-2-11. Hydrologic Studies.

a. Program Objectives. To collect and analyze basic data on hydrologic, climatologic, and river morphology for general use in connection with the Corps planning design, construction, and operation of water resource projects.

(1) 261, Storm Studies. Includes Part I and II storm studies accomplished in coordination with National Weather Service.

(2) 262, General Hydrologic Studies. Includes generalized hydrologic analyses of rainfall - runoff relationship, flood frequency, snowmelt studies, hydrograph development and routing at selected watersheds, model calibrations in urban areas, and analyses of past floods and other studies of hydrologic nature.

(3) 263, Sedimentation Studies. Includes all non-project sedimentation investigation activities at the Waterways Experiment Station.

(4) 264, Streamflow and Rainfall Data Collection. This continuing program provides for installation and operation of streamflow and rainfall gages for general studies. It also provides for flood investigation activities such as investigation of hurricane surges; high water mark setting, measurement, and recordings; and rainfall bucket surveys.

**ILLUSTRATION I-2. 1**

Program Accomplishments
(Code 901-171,172,173,178,181,186,240,250,260)

Division: _____

| | | |
|---|---|---|
| BY-3 Accomplishments<br>Study/product Name | State<br>(If Applicable) | Accomplishments (actual obligations) |
| BY-2 Accomplishments<br>Study/product Name | State<br>(If Applicable) | Accomplishments (actual obligations) |
| BY-1 Accomplishments<br>Study/product Name | State<br>(If Applicable) | Scheduled Accomplishments |
| BY Accomplishments<br>Study/product Name | State<br>(If Applicable) | Anticipated Accomplishments |

SPECIAL INVESTIGATIONS (AND)
GULF OF MEXICO PROGRAM (AND)
PACIFIC NORTHWEST FOREST CASE STUDY (AND)
CHESAPEAKE BAY PROGRAM (AND)
FERC LICENSING (AND)
INTERAGENCY WATER RESOURCES DEVELOPMENT (AND)
AMERICAN HERITAGE RIVER NAVIGATORS (AND)
INTERAGENCY AND INTERNATIONAL SUPPORT (AND)
COORDINATION WITH OTHER WATER RESOURCES AGENCIES (AND)
CALFED (AND)
LAKE TAHOE FEDERAL INTERAGENCY PARTNERSHIP (AND)
PLANNING ASSISTANCE TO STATES (AND)
INTERNATIONAL WATER STUDIES (AND)
FLOOD PLAIN MANAGEMENT SERVICES (AND)
HYDROLOGIC STUDIES
DISPOSITION STUDIES
NACCS FOCUS AREAS

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ANNEX II

Construction and MR&T Construction

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TABLES/FILES

SUB-ANNEX II-1

Construction and MR&T Construction

General

II-1-1. Applicability. This annex provides guidance for preparation of the FY2017 Budget and FY2017 Workplan for all new and continuing projects and programs funded by line item under the Construction (C) appropriation, including the Inland Waterways Trust Fund (IWTF) and Harbor Maintenance Trust Fund (HMTF), as applicable, and the Construction portion of the Mississippi River and Tributaries appropriation. Unless stated otherwise, any reference to the C (or I) appropriation applies to IWTF, HMTF and MR&T as well as C (or I). This annex does not address the Continuing Authorities Program or other CECW-developed Remaining Items.

II-1-2. Objective. The overall goal is to develop a construction program (BY through BY+4) 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-ANNEX II-2

Construction and MR&T Construction

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

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

II-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, or Dam Safety modification report; and, where applicable, successfully completed review from OMB under Executive Order 12322. Army policy identifies what types of work that are considered a priority for inclusion in the budget development process.

a. Project Purpose – Ongoing construction projects, including those funded in the Mississippi River and Tributaries 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 hydropower, for consistency w/the FY 2016 Construction Performance Guidelines used to develop the FY 2016 Budget.

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, for consistency w/the FY 2016 Construction Performance Guidelines used to develop the FY 2016 Budget.

c. Projects Funded on the Basis of Their Economic Return – Ongoing construction projects that are funded based on their economic return and have a benefit-to-cost ratio (BCR) of 2.5 to 1 or higher, calculated at a seven percent 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, for consistency w/the FY 2016 Construction Performance Guidelines used to develop the FY 2016 Budget.

d. New Starts and resumption – The start of a priority new construction project, and the resumption of work on a priority construction project, will be eligible for funding, for consistency w/the FY 2016 Construction Performance Guidelines used to develop the FY 2016 Budget.

e. Environmental Projects – Ongoing construction projects that restore degraded ecosystem structure, function, and process to a more natural condition are eligible for inclusion.

f. Significant Risk to Human Safety – Flood risk management projects that are funded to address a significant risk to human safety will receive funding to support an uninterrupted effort, for consistency w/the FY 2016 Construction Performance Guidelines used to develop the FY 2016 Budget.

g. Resumptions – Projects that have not performed any physical work under a construction contract in the past three consecutive fiscal years. "Physical work under a construction contract" is further defined as not including activities related to project planning, engineering and design, relocation, or the acquisition of lands, easements, or rights-of-way. Only high priority (high performing) resumptions will be eligible for inclusion.

h. Mitigation, Treaties and Bi-Op Work – Mitigation work at ongoing construction projects, and work needed to comply with treaties or biological opinions, will be funded to meet those requirements in the BY.

i. Non-structural Flood Risk Management Projects – Ongoing non-structural flood risk management projects will be eligible if the project has a BCR or 1.0 to 1 or above at a seven percent discount rate.

j. Dredged Material Disposal Facility (DMDFs) for high and moderate use segments of commercial deep draft, shallow draft, and inland projects which are no longer included in O&M and should be submitted under Construction.

k. Qualifying continuing projects with Continuing Contracts under the original Continuing Contract clause. For all planned contract awards with a face value of more than $10 million, identify the acquisition plan. If the plan is to award a new continuing contract in the BY, submit a request for approval through CECW-IF to OASA (CW) not later than July BY-2.

l. Major Rehabilitation Projects - these are construction projects where the work involves the rehabilitation of major project components such as hydropower plant generator rewind(s). To qualify as a major rehab project, the work must have an approved Major Rehab report and a work package budget requirement of at least $16M or more. Major rehab projects must be entered into CW-IFD under the Construction account and must meet the New Start criteria in the first year of budgeting.

m. 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 II-2-10 in this ANNEX.

n. 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;

(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.

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

o. Budgeting Decision Documents. Work for advancement of LRRs, GRRs, and other authorized project reformulation study efforts undertaken on authorized projects in the construction and investigations account must be budgeted and prioritized as <u>separate BL/account work packages in CW-IFD.</u>

II-2-3. <u>Construction and MR&T Construction Increment Definitions</u>.

1. Increment Definitions <u>except</u> for Endangered Species Protection.

a. Increment 1: will be used to identify work packages for active 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.

a. 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.

b. Increment 3 will be used to identify additional work packages for active 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.

c. Increment 4 will be used to identify work packages for Construction new starts and resumptions that meet the requirements defined above.

d. Increments 5-7 are not used in the Construction account.

e. 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.

f. Increment 9 will be used for work packages that are inconsistent with Administration policy, such as environmental infrastructure.

2. 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:

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

b. 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.

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

d. Increment 4. Activities that accelerate the completion of the efforts required to comply with the biological opinion 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 ESA protection as described in an ESA recovery plan.

II-2-4. Specifically Authorized Projects and Elements.

a. Project Development Cycle. Each specifically authorized project is developed through the normal project development process, including cost-shared feasibility, and preconstruction engineering and design (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. 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.

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

a. Modifications under 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 in the CW Program Development.

b. Rehabilitation, Deficiency Correction, Biological Opinion, and Maintenance Dredged Material Disposal Facility (DMDF) Projects.

(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 II-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 II-2-7.

(3) (Major) Rehabilitation Projects.

(a) The definition of rehabilitation project in section 205 of P.L. 102-2580 (WRDA 92) is applied by policy to all business programs. For FY 2016 the cost threshold is $16,000,000 for reliability improvement projects and $2,000,000 for efficiency improvement projects. Work below the cost thresholds is funded in the O&M or MR&T (M) account.

(b) 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.

(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.

(5) Biological Opinion Projects. These are efforts to avoid jeopardy of 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 pursuant to 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 47.

II-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 II-2-4. Guidance on reconstruction of Corps structural Flood Damage Reduction projects for which non-Federal interests are responsible for OMRR&R is contained a memorandum from the Director of Civil Works dated August 16, 2005. 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. A project modification for beneficial use that is of a large scale and that is not implemented as part of a navigation construction project pursuant to the navigation project authorization or Section 207 of WRDA 1996 must be specifically authorized and will be treated as a separate project. See paragraph II-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 pursuant to the navigation project authorization must be specifically authorized and will be treated as a separate project. See paragraph II-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 pursuant to the construction project authorization must be specifically authorized and will be treated as a separate project. See paragraph

II-2-7. Budgeting for New Construction. New construction includes new starts and resumptions.

a. New Start. A new start is one of the following that has not been funded previously in the Construction or MR&T Construction account. Note: A maintenance DMDF that has never been funded is not a new start; see paragraph II-2-8).

(1) Physical construction of a specifically authorized project.

(2) Physical construction of a specifically authorized project modification (reconstruction, beneficial use, navigation mitigation, or environmental modification).

(3) Physical construction of a separable element of a previously funded, specifically authorized project.

(4) Physical construction of a rehabilitation project, deficiency correction project, or biological opinion project.

b. Resumption of physical construction. Projects that have not performed any physical work under a construction contract in the past three consecutive fiscal years. “Physical work under a construction contract" is further defined as not including activities related to project planning, engineering and design, relocation, or the acquisition of lands, easements, or rights-of-way. Construction projects with phases, levee lifts, renourishment cycles and monitoring of completed work are not resumptions. A resumption of physical construction is considered new construction and as such requires a construction new start decision. Note that based on the definition of “resumption”, continuing planning, engineering and design, relocation, or the acquisition of lands, easements, or rights-of-way for a project to be resumed may be programmed as continuing work in the BY.

c. Eligibility Criteria.

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

(2) Decision Document. Each recommended new start or resumption requires a decision document to serve as the basis for selection for a PPA, with the exception of inland waterway construction or rehabilitation projects, and certain other projects. 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.

(3) 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 in accordance with paragraph 15 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, PAC, 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 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.

II-2-8. Budgeting for Continuing Construction.

a. Continuing construction includes the following:

(1) A project described in sections II-2-2 through II-2-4 that has previously been funded for construction, except in the case of a resumption.

(2) A maintenance DMDF, whether or not previously funded. A maintenance DMDF should be budgeted as needed for placement of material from maintenance dredging.

b. Economic Analysis. A current economic analysis for each continuing construction project that produces economic outputs must be approved in accordance with paragraph 14 in the MAIN part of this EC.

II-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 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 in accordance with 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 in accordance with 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 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 in accordance with 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, 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.

j. Resumptions.

(1) Projects initiated after-WRDA 1986 will be cost shared and financed in accordance with WRDA 1986, as amended.

(2) Cost sharing for projects initiated under pre-WRDA 1986 cost sharing will depend on the circumstances under which construction on the project was stopped. Generally, if it was at the request of, or due to action by local interests, cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, as amended, will apply. However, if the project was stopped by other parties, such as in the case of a court injunction, then the originally authorized cost sharing and financing requirements will apply.

II-2-10. Budgeting for Completion of Construction. The milestone for completion of construction and the point at which no more construction funds are required, is the District Commander's notice of completion of the project. 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 close-out of the construction project should be done after monitoring is complete. However, if the cost to complete monitoring is less than $100k AND 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.

TABLE II-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. For a project, separable element, specifically authorized modification, or reconstruction project with no previous, applicable Executive Branch position, OMB provides the necessary position. For a rehabilitation, deficiency correction, or biological opinion project, ASA(CW) provides the necessary concurrence during development of the Army's recommendations. If a project modification or cost sharing change was enacted after a favorable position was developed, a favorable position also must be developed on the enacted change.

3. PED is fully funded by the end of the BY-1 and the PPA is on schedule to be executed and the Financing Plan approved 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 has been completed and Finding of No Significant Impact signed, or final 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. An M-CACES Baseline cost estimate has been prepared, in accordance with ER 5-1-11, with approval at the appropriate level 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 the 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, 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 in accordance with 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 is current (meets the criteria in paragraphs II-2-5. or II-2-6. as applicable).

*11. In all cases, project cost estimates exceeding the authorized cost plus inflation must be approved by the DCG-CEO.*

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SUB-ANNEX II-3

Construction and MR&T Construction

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

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

II-3-2. Definitions.

a. In accordance with 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).

II-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 II-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 Report (IES), which is completed by the District and review and approved by the Senior Oversight Group (SOG). 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 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 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.

II-3-4. Eligibility Criteria.

a. For FY 2017, only DSAC Class 1 and 2 projects are eligible for funding in the wedge or as 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 for 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.

b. A DSMR has been approved by USACE DSO and transmitted for ASA-CW concurrence prior to 1 June of BY-2.

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

II-3-5. Cost Sharing.

a. In accordance with Section 1203 of the WRDA 1986, 15 percent of Dam Safety Assurance project costs are assigned to project purposes in accordance with 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 in accordance with 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. 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 II-3-1**

Dam Safety Action Classification (DSAC)

| DSAC Class Code | Characteristics of Classification |
|---|---|
| Very High Urgency (1) | 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 Urgency (2) | 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 Urgency (3) | 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 Urgency (4) | LOW INCREMENTAL RISK**: For confirmed and unconfirmed dam safety issues, the combination of life, economic, or environmental consequences with likelihood of failure is 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) | VERY LOW INCREMENTAL RISK**: The combination of life, economic, or environmental consequences with likelihood of failure is 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 the risk that exists due to the presence of the dam and this is the risk used to inform the decision on the DSAC assignment. The information presented in this table does not reflect the NON-BREACH RISK associated with the presence of the dam or from operation of the dam.

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SUB-ANNEX II-4

Construction and MR&T Construction

Supporting Documentation and Submission Requirements

II-4-1. Schedules and Capabilities.

a. Capabilities. BY thru BY+4 capabilities should be loaded into the 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+4 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 reflect the funding decisions 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 in line with 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.

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, and overly optimistic schedules, or capabilities that ignore carry-in or fund out-year obligations, lead to a misallocation of funding.

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

a. Cost estimates will be developed as noted below, assuming a Capability schedule and in accordance with 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. 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 in accordance with the guidance in paragraph 8 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 also in accordance with the guidance in ER 11-2-240.

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 a 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 may include an appropriate, reasonable amount for contingencies. For projects that are not programmed to complete in the BY, the project cost estimate may include appropriate contingency allowances to which the contingencies apply; Unused contingencies from prior years shall 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 in accordance with normal reprogramming procedures. BY and out-year requests must not include amounts for anticipated claim settlements or anticipated deficiency judgments.

II-4-3. Benefit Cost Ratio~~n~~ (BCR) and Remaining Benefit – Remaining Cost Ration (RBRCR).

a. BCR. Data on benefit-cost ratios (BCRs) should be input into CW-IFD and provided in TABLE II-4-5, entitled: BCR Worksheet, for projects and separable elements.

b. RBRCR. Use the following guidelines and the RBRCR worksheets and instructions, 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 shall 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 2012 dollars. Where the project includes completed separable elements, independent units and/or useful increments, OMRR&R costs for completed units/increments shall also be considered sunk, and only OMRR&R for remaining units/increments shall be considered in remaining project costs. The remaining costs should include any reimbursements 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 shall 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 later 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 the RBRCR is not applicable and the reasons why.

(5) For BY, the RBRCR's will be computed using both the applicable rates from TABLE II-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. 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 in accordance with 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 (ie. 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 periodic 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 shall 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 II-4-1**

Remaining Benefit/Remaining Cost Ratio (RBRCR) Summary Sheet

RBRCR Summary Sheet

**TABLE II-4-2**

Sample Non-Beach RBRCR Spreadsheet with Instructions

RBRCR Instructions - Non-Beaches

fy17ec_annex_II TABLE II-4-2-B RBRC a

**TABLE II-4-3**

Sample Beaches RBRCR Spreadsheets with Instructions

RBRCR Instructions - Beaches

RBRCR Spreadsheet - Beaches

**TABLE II-4-4**

Final Division Summary RBRCR List

RBRCR - MSC Summary List

**TABLE II-4-5**

BCR Worksheet

BCR Worksheet

II-4-4. Submission Requirements.

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

(1) See paragraph 18 in the MAIN part of this EC for specific instructions on J-sheets and Congressional submission to HQ.

(2) Illustration II-4., 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, Illustration II-4-2, BY Justification Sheet, will be prepared for each separable element that is recommended as new construction in the BY.

(3) BCR and RBRCR analyses in accordance with paragraph II-4-3 for projects and separable elements other than design or construction deficiency correction projects, Safety of Dams projects, and aquatic ecosystem restoration projects by the dates shown in TABLE 2 in the MAIN part of this EC.

(4) See Table II-4-5a for specific instructions on development of Dam Safety Justification Sheets.

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

(1) Illustration II-4.3, New Construction Checklist, will be prepared to identify each new start or resumption recommended for construction funding in the BY.

(2) Note actual or scheduled approval date in Illustration II-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 Illustration II-4.3, and notify HQ if final Executive Branch action is pending.

(4) Approved M-CACES Baseline cost estimate - summary sheets to the sub-feature element level for each feature and the appropriate narrative.

**TABLE II-4-5a**

**Dam Safety J- Sheet Instructions**

Annex II Table
II-4-5a Dam Safety J-S

**TABLE II-4-6**

Applicable Discount Rates in Effect
When Initial Construction Funds Were Appropriated

| Fiscal Year | Discount Rate 1/ Show on Justification Sheet | Show on Illustration II-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 |

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.

**TABLE II-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 Illustration II-2.1 |
|---|---|---|
| 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 |
| 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 |

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.

**ILLUSTRATION II-4.2**

BY Justification Sheet
(NOTE: DO NOT TYPE ILLUSTRATION HEADING ON JUSTIFICATION SHEET)

APPROPRIATION TITLE: Construction - Enter the project classification and type.

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 plan of improvement clearly identifying major project features and differentiating between programmed and un-programmed work. 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.

AUTHORIZATION: Enter the act authorizing the project, such as: 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 Sub-Annex II-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.

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 II-4-6.

Division: District:

Project name:

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 | | | | | |
| 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) | | | | | | |

Division: District: Project name:

**ILLUSTRATION II-4.2** (Continued)

| 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/ Unobligated Carry-in Funding: The actual unobligated balance from BY-2 into BY-1 (3011A report) for this project is $_(x1000)_. As of the date this justification sheet was prepared, the total unobligated dollars estimated to be carried into Fiscal Year__(BY)__ from prior appropriations for use on this effort is $_____(x1000). 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.)
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.)

Division: District: Project Name:

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

**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 in accordance with 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.

**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.

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 |

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: In accordance with 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.

Division: District: Project name:

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

| 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). | | |
| 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 |

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

| 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 |
| 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. | x,xxx,xxx | x,xxx |
| 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. | x,xxx,xxx | x,xxx |

**ILLUSTRATION II-4. 2** (Continued)

BY Justification Sheet

| Requirements of Local Cooperation (Continued) | Payments During Construction and Reimbursements | Annual 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. | | |
| 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. | x,xxx,xxx | x,xxx |

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

| 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 |
| 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 | x,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 | |
| Total Non-Federal Costs | x,xxx,xxx | x,xxx |

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 0f 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 pursuant to 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.

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.

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 |

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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.

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.

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 | |

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 | |

**ILLUSTRATION II-4.2** (Continued)

BY Justification Sheet

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 | |

**ILLUSTRATION II-4.3**

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 II-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 II-2-8, paragraph 2.

FOR ILLUSTRATION PURPOSES ONLY

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ANNEX III

Operation and Maintenance

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# SUB-ANNEX III-1

## Operation and Maintenance

## Operation and Maintenance Appropriation

III-1-1. Appropriation Title.

a. This annex provides guidance for the "FY 2017 Program Development" for all Operation and Maintenance activities under the appropriation titles: Operation and Maintenance (O&M) and Flood Control, Mississippi River and Tributaries, Maintenance (MR&T) for the Budget Fiscal Year.

b. 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.

III-1-2. Transparency in the Budget Submission. The Corps' operating projects have many stakeholders who have an interest in how the budgets for Civil Works projects are developed, in addition to tax payers who have an interest in how their tax dollars are spent. The Corps has a responsibility to assure that their Civil Works' budget process is disciplined, documented, discoverable and understandable to those who have an interest in the budgetary outcome. Terminology needs to be free of jargon and acronyms need to be spelled out. The performance criteria on which budget decisions are based need to be relevant and fully defined in advance, and their application to different business lines need to be laid out and understandable. On the other hand, during the budget development process prior to the release of the President's Budget submission, all pre-decisional budgetary information is considered classified, for official use only, and is not to be released outside the Department of the Army.

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SUB-ANNEX III-2

Operation and Maintenance

Project Operation and Maintenance (O&M)

III-2-1. Purpose and Scope. This sub-annex provides policy and general procedural guidance for program development for the Project Operation and Maintenance (O&M), and National Emergency Preparedness (NEPP) programs and will provide a general framework and uniform approach for budget development and justification. Guidance concerning automated data requirements for submittal of budget recommendations is contained in the *Program Development Manual*.

III-2-2. Army Budget Guidelines for Operation and Maintenance Projects. Reference ASA Memo dated xx March 2015, and include specific requirements.

a. Budget priority is given to key O&M infrastructure and 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:

b. Each proposed O&M work package, including those in the Mississippi River and Tributaries (MR&T) account, will be assigned to one of eight business lines: commercial navigation, flood risk management, environmental stewardship, environmental restoration, emergency management, recreation, hydropower or water supply. . For multi-purpose projects with Hydropower, Cat Class 300 is used and the Joint work packages are allocated among all business lines served by the project based upon a project-specific allocation formula. See paragraph III-2-10 for joint work packages. For multi-purpose projects (non-Cat Class 300), the separable work packages will be assigned to the business line that they serve

c. The economic benefits that will accrue for the dollars spent to improve the level of service 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. Those with a higher return on investment 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 Guar 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 or property; for recreation include the National Economic Benefit provided, visitor attendance and job created; and for hydropower, the risk of a generating unit shutdown and resultant loss of generating capacity

d. Reliability of projects is evaluated to determine a project's ability to adequately perform its intended function in a consistent and reliable manner when field conditions allow. Condition classification guidelines are used to determine overall project condition, with component condition assessments performed to evaluate the condition of individual 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 availability. 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 of not funding the proposed work is evaluated in the budget year 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 improve the overall reliability of the project.

e. Public safety and national security are also factors used in evaluating O&M activities. A proposed work package is given greater consideration if its purpose is to reduce the risk of a failure that could result in loss of life. Other factors 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.

f. O&M work to address a significant environmental concern is evaluated based on the increment definition. Those O&M activities that reduce the risk of a significant adverse environmental impact are given a higher consideration in the budget in accordance with the increment level. 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 budget under increment 1. All environmental packages shall be discrete work packages

g. Projects with O&M-related legal requirements are also given a higher consideration in the budget, for example, projects with requirements to address Native America 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 shall be prioritized to reduce legal risk or consequences associated with requirements.

h. Monitoring Activities for Channel Improvement projects - caution should be used when budgeting for monitoring activities for channel improvement projects. Monitoring for channel improvements must be budgeted in the O&M account. Monitoring for beach nourishment projects must be budgeted in the CG account.

i. Because each work package will be either funded or not funded, each work package should be for a useful increment of work.

(1) Each contract, task order, or contract option in a project-based account should be a separate work package.

(2) Each set of plans and specifications supporting a contract solicitation in a project-based account should be a separate work package.

(3) Each Limited Reevaluation Report (LRR), General Reevaluation Report (GRR), or Project Authorization Change Report (PACR), and each evaluation for deficiency correction or major rehabilitation should have its own work package.

(4) Each work package in a project-based account should be independent (that is, the work package should be sufficient to produce a useful increment of work), and should be indivisible (that is, a portion of the work package would not be sufficient to produce a useful increment of work).

III-2-3. O&M Budget Development Principles.

a. General Philosophy. The Operation and Maintenance program path forward incorporates approaches to better reflect the performance outputs of the projects and a management philosophy that

looks at the inter-relationships of the projects across business lines, within systems and for a long-term horizon. The key components of this approach include:

Mission performance

Risk and Reliability, condition and consequences

Five Year Development Plan

Infrastructure Management Plans

Budget Execution Tracking

(1) These areas of interest have been addressed in prior budget ECs but more and better use of such tools is needed to realize efficiencies of employing these management tools in our budgeting and program execution. Our program plans must be able to be rolled up and examined holistically from a system and/or regional perspective to ensure consistent reliability, goals, mission execution, lowest sustainable investment levels and acceptable or shared risk levels are considered. The goal is to place all the projects on the same basis for the establishment of priorities based on benefits and risks.

(2) The O&M budget should be developed from an asset management perspective which incorporates an emphasis on long range planning and return of value to the nation through the 5 year funding stream and Infrastructure Management Plans. The 5 year funding stream represents a comprehensive assessment of total investment requirements from all appropriation accounts (Investigations, Construction and Operation and Maintenance) while the Infrastructure Management Plans are currently focused on O&M program requirements. It is in the national interest for the Corps of Engineers to ensure reliable mission achievement at our operating projects in order to return value back to the nation. The projects were built to meet a national need through prioritized investment of Federal funds. In recognition of this, the Corps of Engineers maximizes the value returned to the nation by ensuring reliable performance, and maximum sustainable operating life at the lowest sustainable level of investment.

(3) The 5 year funding stream and Infrastructure Management Plans represent the collective technical judgment of the Operation and Maintenance Community of Practice, Business Line Managers, and the Engineering & Construction Community of Practice with regard to optimal asset replacement cycles, and best operation and maintenance practice. Investment requirements are informed by asset condition assessments and failure risk assessments which affect estimates of remaining equipment life, future maintenance and repair requirements and re-capitalization plans. Equipment condition, failure risk and replacement cycles affect the O&M requirements and should be accounted for within Infrastructure Management Plans. Asset life extension through prudent O&M practice can provide return to the nation beyond the originally expected life of the project and serves the public interest. In addition, ensuring that our stewardship of these assets is accomplished at the lowest sustainable investment level maximizes the net value returned from our missions.

(a) The term Established Criteria is defined as the standard with specific guidelines which are formulated by the Administration which clarify and describe "justified levels of service.

(b) Justified Level of Service is defined as the delivery of a supportable and defendable amount or degree of project benefits consistent with authorization, use, and administration policies.

(c) lowest Sustainable Investment is defined as the lowest investment level that a prudent manager would select, balancing between short and long term economics and considering overall availability of resources. Sustainability is crucial to ensure that project meets or exceeds project life-cycle expectations and meets or exceeds changing environmental requirements for compliant operation.

b. Budgeting by Systems. The budget is to be formulated based on performance goals and objectives and risk-based indices (details can be found in the business line Appendices). The O&M plan in the past grouped individual projects by "basin codes" for geographically defining projects into regions. The Systems data will still be used to further refine the collection into systems that are functionally based. The hierarchy of order is the Systems with the Hydrological Unit Code (HUC) sub-regions assigned to the Systems. The set of Systems has been developed to consider the multiple purpose aspects of the O&M program. The 21 USGS Regions presented in FY07-08 are too broad for this purpose. See TABLE III-5 -1 for the O&M Systems that will be used in the BY. We will continue to assign projects to a HUC Sub-Region using the 4-digit code although the budget is presented project by project.

(1) The Systems have been developed using a standard, rational, logical approach, considering all business purposes.

(2) Each System has the HUC sub-regions assigned. Some HUC sub-regions are included in more than one System. All projects in a HUC sub-region do not have to be assigned to one System, but should be assigned to the System that it belongs.

(3) The end result is a set of Systems for O&M, with the HUC sub-regions and Corps of Engineers O&M projects assigned.

(4) "Regions" have also been associated with the Systems to allow greater aggregation.

c. Out-Year Plans. Basic design criteria for water resources improvements generally include estimates of repair and replacement frequency and effective project life. Major costs such as spillway gate replacements, navigation lock gate replacements, hydroelectric power generator rewinding and turbine replacement certainly need to be anticipated. Construction completion schedules for additional projects coming on line also need to be incorporated within O&M budgets (in some cases re-capitalization replaces equipment with better technology that requires lower O&M needs, but may not be as robust and therefore shortens re-capitalization cycles). However many projects in the Corps inventory are long past their design life. A strategy to formulate long range maintenance funding plans must take into account unforeseen risk from fluctuations in weather conditions such as hurricanes and other major storms which often impose sudden, unanticipated requirements for maintenance and service restoration. Prediction of operational requirements requires consideration of equipment condition assessments, shifting public needs or areas of emphasis, geographic shifts driven by regional trends in commercial activity and other economic factors. And, finally, national priorities for federal investments are subject to frequent and radical fluctuations. Accordingly, the 5 year funding stream and Infrastructure Management Plans must not only be developed as a project-specific long-range plan, but also be based on sub-plans recommended by business lines. In addition, these project plans must be rolled up and examined holistically from a regional and/or system perspective to ensure consistent reliability goals, mission execution, lowest sustainable investment levels and acceptable or shared risk levels are taken into consideration.

d. Mission and Systems Performance. O&M budget and system performance plans must account for performance output dependencies. For example, closure of one lock in a system would affect other lock

passages or reservoir operations on one project could affect other downstream reservoirs. Consideration of systems in the operation and functioning of our projects will achieve better service to the public.

e. Performance-Based Programming.

(1) Performance measures are described in the Appendices for individual Business Lines. Performance data will be entered in CW-IFD for each budget item for which funds are requested. In addition, in accordance with paragraph III-2-13, each budget item will be assigned to a Business Line increment. The districts may cite different performance levels in the funding arguments for different budget activities. For example, funding of the highest priority budget item in the Business Line initial increment may be required to attain 80 percent availability; funding of the next highest priority budget item in a subsequent Business Line increment may enable the project to attain 95 percent availability.

(2) Relative Risk Matrix (RRM). Project performance is not a consistent assured output. Project conditions have inherent risk and reliability that affect the performance outputs. Our budget packages require an assignment of a risk evaluation. The risk and consequence evaluation methodology are described in the business line appendixes and should be based, similar to that done for Dam Safety analyses, in the evaluation of facility conditions (risk) against the consequence of failure (consequence or performance). A Relative Risk Matrix allows for a consistent approach to risk/consequence. Work packages to preclude failure of high consequences would be readily apparent. This matrix would assist in the prioritization of work/budgeting. The analysis is to propose common, risk-based economic and life safety metrics for projects that protect life and property. These should be consistent with the principles of the Dam Safety Program. The goal is to place all the projects on the same basis for the establishment of priorities based on benefits and risk.

(3) Risk-Based Condition Assessments. Risk-based and reliability condition assessments are described in the Business Line appendixes.

f. Infrastructure Management Plans. The Infrastructure Management Plan (IMP) brings the management tools above together in laying out prioritized risk and performance based work over a short and long term to achieve desired end-state performance metrics. The synergy of system development could require budgeting certain tasks in the same timeframe. For instance dredging contracts for projects A and B could be advertised together if conducive to a joint solicitation to obtain better bids or electrical panels in two nearby reservoirs could be more optimally scheduled. The management plans should also lay out periodic dredging requirements that can be projected for out-year budgets to assure annual system outputs and stakeholder buy-ins (recognizing budgetary rules and inability to commit to future budgets). This could identify a higher budgetary priority and more system outputs for lower use projects that require infrequent investments. For example, a project with 400,000 tons moved annually but dredged every five years could be a better investment than a project with higher annual tons but dredged each year. For example, for Navigation the plans would include all harbor maintenance work that is justified by the resulting commercial transportation savings or by benefits to subsistence use, public safety, or public transportation as described in the Navigation appendix. The IMP is to cover the period BY through BY+4 and be modified annually for subsequent budget submittals. The Infrastructure Management Plan will be consistent with the five year funding stream including the BY "FY 2016 Work Package Capability". The Infrastructure Management Plan will be based on sub-plans developed by Business Line Managers for six primary missions (Flood & Storm Damage Reduction, Navigation, Environmental Stewardship, Water Supply, Hydropower, and Recreation). The Infrastructure Management Plan should be jointly developed and improved within the Operations Community of Practice. The Infrastructure Management Plan must reflect sound engineering, construction, operation and maintenance state of practice (reliability centered

maintenance, condition assessments, equipment mortality studies, predictive maintenance, etc.) and continually honed to achieve the lowest sustainable O&M investment level. Accelerated replacement cycles within the five year funding stream may affect O&M needs within the Infrastructure Management Plan (i.e. replacement versus continuing high outage and repairs on failing equipment). The O&M budget submission should be consistent with the 5 year funding stream and the five year Infrastructure Management Plan. The ten year funding stream and five year Infrastructure Management Plan both reflect planned investments for one range of periods.

(1) Infrastructure Management Plans for all Systems should have been prepared during the FY09-12 budget cycles. All existing IMPs will be updated each BY using the template included in this EC. Any IMPs not previously prepared in accordance with the budget development guidance should be prepared in the BY.

(2) IMPs will be developed for the O&M Systems included in this EC. Each IMP will identify the current performance level or target and the five year end-state performance target. Ultimately, the overall end-state performance could be beyond the five-year planning horizon. For example, it may take more than five years to reach the target of reducing unscheduled closures at a navigation lock. The IMP should consider the various business activities performed within the System. Each Business Line will have a section to itself, and the IMP will have a summary section addressing comprehensive O&M activities. The relationships of the different business lines to each other should be addressed. For example, the dam at a project not only serves to create a navigation pool, but it is also used for municipal water supply and for water-based recreational opportunities. The IMP will include the major assets or features of the System and the relationship of the assets to the business lines. It will include the performance metrics and targets for the different business lines. The IMP will identify the risk and reliability factors for the major assets based on the different business lines condition assessments, with the condition and consequences addressed. The IMP will address different funding scenarios, such as a likely level to maintain the current condition, an optimal level to begin addressing the most critical items to begin increasing performance, and a “recommended” or elevated level to address critical condition needs, to buy down risk at a faster rate. The funding will be tied to achieving the targeted end-state for performance for the five years. The IMP will include stakeholder coordination and expectations. The MSCs will coordinate with other MSCs if required. For example, the IMP for the Mississippi River should address the relationship and impacts of the Missouri River as it is a provider of water flow to that waterway.

(3) Individual Infrastructure Management Plans for each System will be retained and updated annually at the respective district and MSC level, and will be readily available for forwarding when requested by HQUSACE.

g. USACE has begun an Asset Management Program that is described in SECTION 1, paragraph 6.i. and 6.j. and in SECTION 2, paragraph 3. of this EC. As part of this program, a Facilities and Equipment Maintenance Work Order Number (FEM WON) has been established. 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 the budget execution system. A FEM WON is required for all non-routine maintenance budget work packages in CWIFD in increments 2 thru 9 (for all BLs and above) and should be assigned at the appropriate asset level. Note that a new column (#13) has been established in CWIFD 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.

(1) Additionally, it is required that in FEM the Work Order:

(a) description should mirror the work package description and be preceded by "FY16 NRWP". If a

work package was created in FEM for FY15, was not funded, and will be resubmitted for FY16, the Work Order description should be updated to indicate it as an FY16 package.

(b) the FEM work order long description field should contain exactly the same Information as the budget work package description.

(c) type should be "NRWP," Non-routine Work Package.

(d) the Command Work Type should be Deferred Maintenance (DM).

(2) For budget work packages that cover more than one project site (i.e., are "bundled") a parent FEM WO shall be created that conforms to the above requirements and specifies as Work Order Site the parent location of the bundled work package. Parent locations of bundled work packages do not need to be associated with specific assets, and are typically at the District level.

(3) Each project site shall create a specific FEM WO assigned at the appropriate asset level that reflects their portion of the bundled work package and conforms to the requirements above. These specific work orders shall be linked to the parent FEM WO using the 'Related Records' tab on the parent WO.

h. Maintenance work packages that implement a recommended Dam Safety Interim Risk Reduction Measure (IRRM) should be coded as “SI” Phase Activity Code in the remarks of the specific work package to provide additional visibility of these cross-functional packages.

ILLUSTRATION III-2.1

Infrastructure Management Plan
(Format Template)

Infrastructure
Management Plan

III-2-4. Budget Development- Work Category Codes.

a. The Civil Works O&M budget development process reflects the Corps compliance with the requirements of the Government Performance and Results Act of 1993 (GPRA). Therefore, the budget will be submitted in a form that reflects the primary business functions established for the O&M mission. These Business Lines are Navigation, Flood Risk Management, Hydropower, Environmental Stewardship, Recreation and Water Supply. In addition, each budget activity will be tied to a business performance measure and goal for the budget year. The Work Category Codes (WCCs) are aligned within the primary Business Lines within the operations or maintenance areas.

III-2-5. O&M Dam Safety Program. Most dam safety related work items are below. Site specific conditions must be considered when determining costs for each project, following collaboration between the District Dam Safety and Operations experts. The table is a guide to cover many recurring dam safety program activities. However, it is not a comprehensive list and additional dam safety work items may be programmed.

a. O&M funded dam safety actions shall 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.

b. Routine dam safety monitoring, inspections, instrumentation data collection, instrumentation maintenance, surveys, training, Emergency Action Plan Updates, spillway and outlet works gate lubrication and testing, and dam safety exercises shall be budgeted to ensure safe operations. A higher standard of care is warranted for projects that have known dam safety deficiencies, or because of their inherent characteristics (reservoir size, construction methods, geographic setting, etc.) pose unacceptable life safety risks to the public. Implementation shall be reported to HQ quarterly via the Dam Safety Program Management Tools. Care must be taken to properly budget using existing Work Category Codes (WCCs) 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) Plans and Approved Interim Risk Reduction Measures. Effective 31 May 2007 USACE issued new guidance to develop IRRM Plans for Dam Safety Action Classification (DSAC) 1, 2 and 3 projects, and implement actions to reduce the probability and consequences of catastrophic failure to the maximum extent that is reasonably practicable while long term remedial measures are pursued. Funding for IRRM Plan preparation and implementation will be from the O&M account for the project. Critical Dam Safety Interim Risk Reduction Measures, including updating Emergency Action Plans and Conducting Emergency Exercises will be included and prioritized based on the DSAC classifications and program implementation guidance. The IRRM work will be recorded in the proper Operation WCCs or Maintenance WCCs, depending on the nature of the activity.

(2) Plans and Approved Dam Safety Interim Risk Reduction Measures will be identified in budget submittal as a separate work package. IRRM work packages will be identified with the Phase Activity Code of SI. The IRRMs could be routine and/or non-routine activities and should be budgeted in Increments 1, 2, 3 or 4 as appropriate to address deficiencies that pose unacceptable risks to public safety. Water Control Plan and Emergency Action Plan Updates may be considered as critical Interim Risk Reduction Measures. Examples of routine and non-routine are: Increased monitoring for critical failure mode is a routine activity (Increment 1) while stockpile emergency materials for critical failure mode is a non-routine activity (Increment 2 or 3).

d. Critical Routine and Cyclical Dam Safety Activities.

(1) Specifically for the Dam Safety Program, only critical routine and cyclical dam safety activities to ensure USACE meets minimum fundamental safety standards as determined by the District Dam Safety Officer may be included in Increment 1. Non-critical dam safety activities shall be included in Increments 3 or lower. 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 for developing budget costs based upon their unique projects.

(2) Critical minimum routine activities may include the following as applicable:

(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) Inspections; Annual Inspections, Periodic Inspections and Assessments, Special Inspections for Project Features (e.g. Hydraulic Steel Structures, Scour surveys, and stilling basin inspections. Periodic Assessments (PA), which expands the scope of currently scheduled Periodic Inspections (PI), were initiated in FY10. Periodic Assessments should be scheduled on all dams every 10 years. Approximately one half of the PIs scheduled for FY16 will be budgeted as PAs and will include labor and development costs to conduct a Potential Failure Mode Analysis (PFMA) and a qualitative risk assessment. 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, qualitative risk assessment, and PI activities for their district PA/PI Team. The Risk Management Center will provide labor and travel funding for the Risk Facilitator who is independent of the district and shall be utilized to lead the PFMA/qualitative risk assessment activities.

(c) Routine Dam Safety Maintenance; Relief Well Maintenance, Drain Cleaning, Vegetation Control, Lubrication of Mechanical Equipment.

(d) 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, Emergency Exercises.

e. Operating projects which have been evaluated under the Screening for Portfolio Risk Assessment (SPRA) process shall identify the Dam Safety Action Classification assigned by HQUSACE. See Annex II, Construction and Flood Control, Mississippi river and Tributaries, Sub-Annex II-3, Safety of Dams Projects for DSAC definitions.

List of Dam Safety Work Items/Activities:

Minimum Instrumentation Data Collection & Evaluation

Supplemental Instrumentation Data Collection & Evaluation

Emergency Action Plan Notification List Updates

Emergency Action Plan Revisions

Dam Safety Emergency Exercises

Interim Remedial Measures Planning (e.g. Coordination for Operating Restrictions

Inundation Map Updates

Seismic safety Re-evaluations

Hydrologic Reevaluations

Hydraulic Steel Structure Inspection & Testing

Periodic Inspections (PI)

Periodic Assessments (PA)

Physical Surveys in Support of PIs and PAs

Stilling Basin Inspections in support of PIs and PAs

Sedimentation Studies

Tainter Gate Testing

Dam Safety Training

Water Control Management Studies

O&M Manual & As Build Drawing Updates

Project Security Plans

Instrumentation Repairs & Replacement

Foundation Drain Cleaning

Critical Relief Well Maintenance

Other Relief Well Maintenance

Dam Safety Program Tool data Updates

Screening for Portfolio Risk Assessment

III-2-6. O&M Bridge 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 within each business line. CEBIS will be implemented in

developing the FY16 budget by each business line with non-routine 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 CEBIS and QMS (see below). The relative risk values are determined by cross referencing five levels of consequence category values on the vertical axis of the table with five levels of condition classification across the horizontal axis at the top of the table, as seen in TABLE III-2-1. 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 TABLE III-2-2. 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 TABLE III-2-2, 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: http://caroli.usace.army.mil:7780/CEBIS/cebis_2pub.pub_utl main and requires ACE-IT permission in UPASS.

(2) For non-CEBIS user, the Bridge OCA/ORA process will be added as an official USACE Process on the Quality Management System (QMS).

Table III-2-1

Relative Risk Ranking Matrix For Bridges

| 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 |

Table III-2-2

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) |

III-2-7. Critical Infrastructure Protection and Resilience Program Requirements. USACE has established the Critical Infrastructure Protection and Resilience (CIPR) Program (former Critical Infrastructure Security Program, CISP) 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 routine actions (security and operations personnel training, cyber security awareness and implementation training, cyber security certification and accreditation process, security patrol and monitoring, routine 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 non-routine 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). NOTE: CIPR Program work packages will be submitted in the Flood Risk Management budget business line to support critical infrastructure protection activities at flood control projects, and in the Navigation budget business line to support critical infrastructure activities at navigation projects, respectively. For multi-purpose projects with hydropower (CCS 300) work packages designated as CIPR Program Joint Costs work packages should

be submitted under the HYD business line as described in Appendix E, and Program Development EC, Sub-Annex III-2. Most critical infrastructure protection related work items are listed below. 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 table is a guide to cover many recurring CIPR program activities. However, it is not a comprehensive list and additional critical infrastructure protection work items may be programmed. The CIPR program activities are described in further detailed in Appendix D (Flood Risk Management), Appendix E (Hydropower), and Appendix F (Navigation).

a. O&M funded critical infrastructure protection actions shall 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. Routine 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 shall be budgeted to ensure safe and secure operations. A higher standard of care is warranted for projects that are deemed of highest relative criticality, have known dam safety deficiencies, or because of their inherent characteristics (reservoir size, construction methods, geographic setting, etc.) pose unacceptable life safety risks to the public. Implementation shall be reported to HQUSACE quarterly to the Office of Homeland Security, Critical Infrastructure Protection and Resilience (CIPR) Program Manager. Cyber security related metrics will be reported to the Civil Works National Information Assurance Program Manager. Care must be taken to properly budget using existing Work Category Codes (WCCs) to allow accurate tracking of routine critical infrastructure protection budgeting and expenditures, severable from the overall project operating costs.

c. Critical Infrastructure Protection and Resilience (CIPR) Program Activities (former Critical Infrastructure Security Program (CISP)):

(1) Only critical routine and cyclical critical infrastructure protection activities to ensure USACE meets minimum fundamental security and protection standards as determined by the District Commander may be included in Increment 1. 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 shall be included in Increment 1. Non-critical critical infrastructure protection activities shall be included in Increments 3 or lower. 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 minimum routine 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) 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 shall be utilized to lead CRM-D SRA implementation activities. The tools to support all these activities are hosted within the Dams Security Analysis Tool (DSAT), 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.

(c) Routine 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.

(d) Memoranda of Understanding (MOUs) with State and local jurisdictions security and law enforcement supporting first response efforts.

(e) Emergency Preparedness; Annual update of Site-Specific Security Plan (SSP) and Rapid Recovery Plans (RRP) as appendices to the Dam Safety Emergency Action Plan (EAP). 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.

(f) 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.

(2) Critical non-routine activities may include the following as applicable:

(a) Critical non-routine critical infrastructure protection activities to ensure USACE meets minimum fundamental security and protection standards.

(b) 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.

(c) Support implementation of additional security presence and protective measures requirements at critical infrastructure projects due to increased National or regional threat levels.

d. 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.

Some of the Critical Infrastructure Protection and Resilience (CIPR) Work Items/Activities:

Consequence-Based Screening Efforts

Security Risk Assessments

Blast Damage Assessment Studies

Consequence Analysis Studies

Comprehensive Facility Studies

Dam Security Exercises

Security Personnel Training

Security Patrol and Monitoring

Security Equipment Maintenance

Operating Interim Risk Reduction Measures

Physical Security Inspections

Physical Security Measures

Protection/Operational Vulnerability Mitigation Measures

Construction Retrofits and Hardening

Protection (Security Surge) Measures

III-2-8. Cultural Resources. (NAGPRA/Curation). Funding requirements for activities to ensure compliance with Section 5 – 7 of the Native American Graves Protection and Repatriation Act (NAGPRA) (PL 101-601) and with 36 CFR Part 79, Curation of Federally-Owned and Administered Archeological Collections, will be budgeted as a Remaining Items activity by HQUSACE thus should not be included in the general MSC budget submittal. 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 CRF Part 79. All of the requirements will be aggregated by the MCX into the budget as a separate line item funded across business lines. All annual maintenance curation costs and cultural resource management costs, other than NAGPRA, should be included in the appropriate Work Category Code, within project work packages under the primary business line for which the archeological materials were removed or in cases Joint projects under hydro-joint. Work packages supporting the storage of curation materials at the projects must meet federal regulations and standards in accordance with 36 CFR Part 79 and be budgeted in increment 1 of the appropriate business

line. These work packages must be separated from other business line activities and coded with a phase activity code of CR.

III-2-9. Special Recreation Use Fees (SRUF). Funds generated from collecting recreation use fees are returned in O&M appropriations for operation, maintenance and improvement of recreation sites and facilities. The construction of new recreation facilities or renovation and/or improvement of existing facilities may be accomplished with these funds if the goal of providing quality public recreation experiences with the most cost efficient management of water resource development projects can be met. Overall budgetary limitations should be carefully considered in determining what activities will be financed with these funds. Routine operation and maintenance of existing sites and facilities should not be compromised to finance new construction or facility improvements. SRUF funded work previously programmed in WCC 60512 and 61512 should now be programmed in WCC 60511 and 61511.

III-2-10. Joint Activities – Joint Costs. Joint Activities are activities that cannot be assigned to one specific Business Line at O&M multipurpose projects with power/HYD (Cat/Class 300). Joint Costs are the costs assigned to Joint work packages and then distributed to the appropriate business line based on the joint cost allocation table contained in the projects authorization documents. All Cat/Class 300 joint projects the joint cost allocation table will be used to determine those project features that should be funded as joint activities. All non-Cat/Class 300 (non-power) projects, activities will be included in the work packages for the appropriate business line.

a. The description of individual Joint cost work packages must be specific in nature and written in clear and concise terms. The use of generic language is unacceptable and may result in a lower ranking for the work package. Work that is critical to the project must be clearly identified and ranked higher in the budget. Joint work packages must be well justified to allow proper consideration in the evaluation process.

b. Joint work packages will compete with the work packages of all the business lines in the ranking of the overall O&M budget for the MSC.

c. Work packages for Joint activities must be developed and submitted through the Hydropower Business Line for budget consideration and allocation using the joint cost allocation for the project. See the *Program Development Manual* for guidance on entering and managing work package data in CW-IFD. Districts should not split HYD joint activities and submit request in the other business lines on these projects. The requests should be submitted in the HYD business line as a whole package to complete the work. HQ will split the HYD joint packages and insert them into the appropriate business line. The following work activities on Joint Cat/Class 300 projects are considered joint cost activities because the purpose of the work activity supports and benefit all of the projects authorized purposes.

(1) Dam Safety Activities including routine and period inspections and assessments; implementation of interim risk reduction measures; dam safety Instrumentation, Data Collection and Analysis; and dam safety assurance study activities and implementation of dam safety remediation of deficiencies.

(2) Project spillway structures including tainter gates, sluice gates, associated machinery, hoists, electrical equipment, cat walks, and supporting equipment unless the projects authorizing documents joint cost allocation table specifically identifies this feature as non-joint features attributed to a specific authorized purpose.

(3) Project facility and physical security activities to included assessments, reviews, studies,

analyses, security contracts, and other project security monitoring activities.

(4) Project administrative facilities and contracts that provide services in support of the project.

(3) Project environmental compliance activities including work related to Endangered Species Act such as biological assessments and biological opinions; authorized mitigation identified in project authorization documents, Environmental Impact Statements or other congressional authorization; storage of curated archeological material and records removed for project construction in accordance with Federal regulations. Increment definitions for these activities are found in sections III-2-12 e (2) for endangered species, III-2-12 e(3) for mitigation and III-2-8 for curation.

d. The Hydropower Business Line will contain hydropower specific activities and all business line joint activities for Cat/Class 300 projects. In this regard, all joint cost work packages ( to include CIPR joint cost packages) will - for convenience *only* - be assigned to the Hydropower Business Line when developing the BY district/MSC total O&M budget. *However, it is imperative that only the HYD portion of the joint cost packages submitted under the HYD business line be considered in the MSC HYD business line budget – NOT the total for all joint cost packages. Each business line MUST accept its portion of joint costs into its own business line budget even though all joint cost packages are assigned to the HYD business line.*

(1) The Hydropower Business Line Managers at each level will manage all Cat/Class 300 joint work packages to ensure accountability of joint activities across business lines. A joint cost funding level will be established by HQUSACE business line managers that represents the budget's sum total of the O&M joint activities across all business lines.

(2) Each MSC is responsible for ensuring that the most critical O&M joint activities are included in the Initial Increment at Joint projects. These joint activities will be ranked separately by the Hydropower Business Line Manager with input from other Business Line Managers as appropriate. Before submittal of the O&M budget to OMB, joint costs will be distributed to individual business lines based on the current statutory cost allocation table to enable HQ Business Line Managers to finalize individual business line BY budgets.

(3) Allocation of costs for Joint Cost activities - The joint cost allocation process used in HQ to distribute budgetary (work package) funding among the various project purposes (business lines) involves the use of the established (statutory) Cost Allocation table for Joint projects as contained in CW-IFD. The business line percentages used in the table for each project correspond to the cost allocations contained in the corresponding Chief's Cost Allocation Report for that project. The percentages in the Cost Allocation Table are applied to the total joint cost work package budget amount and the individual business line budget amounts are thus determined. For example – if the Cost Allocation Table shows a project with a cost allocation of: NAV = 25%; FDR = 25%; HYD = 25% and WS = 25% and the budgeted amount for the joint cost work package was $1000 (total), then each business line above would receive $250 as its budgeted amount of the joint costs.

III-2-11. O&M Power Costs in the Pacific Northwest.

a. Pursuant to the 5 December 1997 Memorandum of Agreement between the Department of Energy, acting by and through the Bonneville Power Administration (BPA), and the Department of the Army, entitled "Direct Funding of Power Operations and Maintenance Costs at Corps Projects", BPA will direct fund O&M Power Costs for Corps projects with hydroelectric power generation facilities for which BPA is the

designated Federal power marketing agency. O&M Power Costs include hydropower-specific O&M costs, the power portion of joint O&M activities, and power capital items.

b. The Northwestern Division will prepare an Annual Power Budget in conjunction with the Bonneville Power Administration that specifies O&M Power Costs for each applicable project. A five year Power Budget which includes annual power budgets for five consecutive fiscal years will be developed in conjunction with the Bonneville Power Administration by the Northwestern Division for purposes of inclusion in the BPA rate base and to fund the Corps O&M power costs.

c. O&M Power Costs in the Pacific Northwest will be entered into P2-Primavera Project Manager under a separate type of funds classification (Bonneville Power Appropriation), and submitted concurrently with the O&M budget submittal to HQUSACE, in the appropriate funding increment. In addition, budget activities for joint activities will be split into two budget activities to reflect the appropriate allocation of joint activity costs between the O&M and O&M Power Cost appropriations. See TABLE 2 in the MAIN part of this EC for budget submission dates.

d. Work packages for the power portion of large capital Joint activity costs require specific dispensation from ASA(CW) to be funded within the O&M appropriation.

III-2-12. O&M Budget Development.

a. O&M work packages. In developing a work package, all costs required to accomplish the work must be included. This includes the cost of the primary activity as well as all supporting activities that are required to accomplish the work. For example, a dredging work package should contain the cost of the actual dredging process plus the costs for before and after surveys, engineering and design, real estate requirements, contract supervision, water quality monitoring, etc. In this way, a complete and stand-alone decision package is developed. This process applies to all work packages.

b. Operation vs Maintenance. A continuing effort is required to standardize designations of budget activities as either operation or maintenance-related. It is the nature of the work itself which dictates where it should be placed. To provide uniform guidance for the appropriate placement of such budget activities within operation or maintenance Work Category Codes are used. In addition, the following general principles should be applied:

(1) Operation work packages may include work that is of a recurring nature, and is integral to continued project operation. Operations activities include facility operations 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.). Operation work should be placed under operation Work Category Codes.

(2) Maintenance work, specifically, preventive maintenance and inspections, cyclical maintenance, corrective maintenance, and component renewal should be placed under maintenance Work Category Codes. 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 Work Category Codes.

c. O&M Work Package Justifications.

(1) In a performance-based budget, every work package must relate to an improvement in performance or results, that is, in the outputs or outcomes created by 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.

(2) Care should be taken to write all descriptions and funding justifications clearly and concisely so that the reader can understand and appreciate the work for which funds are being requested. Well-written justifications are essential to convince reviewers who are not familiar with the work to fund your needs.

(3) CRITICAL Work Packages is where 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, MCSs must be able to fully justify work activities/packages that are identified as "critical" to their needs.

d. Rank Assignments.

(1) Work Groupings. The smallest increment of work for O&M budgeting purposes is a work item or task. Examples of tasks are trash pickup at a recreation area, mowing a levee, or painting a lock gate. tasks at the same project and within the same Work Category Code may be grouped into budget work packages if they are of comparable criticality or priority, for example, maintenance of 15 of 30 recreation sites during May through September or painting lock gates at locks 1-4.

(2) Rankings. As described in paragraph III-2-12.e., work packages in each Business Line will be assigned an increment. For each project all Increment 1 and 2 work packages do not need to be ranked. All other work packages need to be ranked. Ranking of individual work packages will be assigned by the district and MSC across each Business Line.

(3) Final Rankings. Development of final rankings should be an iterative process that employs all the knowledge and support tools available to the decision maker. In developing the national budget, HQ USACE will generally rely on the final rankings assigned by the MSC in CW-IFD provided they meet the business line increment definitions and overall policy. It is therefore important that rank assignments be made in accordance with the relative importance of the work so as to ensure that the highest priority activities can be accomplished within available resource limits. Ranking of work packages within the business line increments will follow the priorities for operation and maintenance work items. Each work package should be assigned to the appropriate Business Line increment based on consistent and objective application of the Business Line increment definitions and performance measures established for the applicable Business Line. See the *Program Development Manual* for guidance on ranking work packages for each program.

(4) Special care should be taken to ensure that all resource requests are economically justified. If sufficient study detail is not yet available to develop appropriate funding recommendations, then Work Package Capability should be held to levels below historic amounts. Major repairs not essential to structural integrity in the BY should be postponed. Operation activities should be constrained to the lowest level possible.

(5) Unfunded Requirements.

(a) Definition. Unfunded Requirements are defined as those unfunded operation and maintenance work items which are required in the BY in order to provide reasonable assurance that project performance goals can continue to be met and that undue risk of failure is avoided. It may occur in any Business Line and is not limited to infrastructure-related budget activities. Deferred maintenance of a project feature or deferred update of a project exhibit for instance, may both be valid examples of unfunded requirements.

(b) Rational. All requirements within district capability should be included (i.e. they must be executable within the Budget Year). District and MSC offices are encouraged to develop complete operation and maintenance budgets so that they might better anticipate future program management requirements. It is important that all justified requirements funded or unfunded, be identified, so that in the event that additional resources are made available for infrastructure preservation, appropriate funding prioritization decisions can be made about budget activities which may originally have appeared to be below the funding level. Identification of unfunded requirements is critical in order to understand and quantify the condition of the water resources infrastructure, and the quality of associated services. It is equally important that the identified unfunded requirements be a realistic assessment of requirements, and not a "wish list" of nice-to-have enhancements.

e. Budget Increments. The Corps Civil Works O&M budget will be developed in increments by Business Line from a zero base. The proposed work included in each increment will be evaluated against the performance criteria specified for each Business Line. The initial increment should provide the greatest benefit for the investment consistent with performance measures. Each subsequent increment should be ordered by the performance benefits to be gained versus the cost of the work contained in the increment. *Additional increments that applicable to a specific Business Line will be reference in the Program Development Manual for that particular Business Line.*

(1) Definitions of Increments for O&M except for Endangered Species Protection and mitigation.

(a) Increment 1: Only critical routine activities can be included in this increment. Critical cyclical routine activities may be included in Increment 1. Routine activities are those that have been conducted every year for at least the last five years, for example the operation of a powerhouse or are required to meet legal mandates, environmental (ESA/Biological Opinion) requirements, authorized mitigation requirements, and historic preservation. Cyclic activities are those that are required on a regular basis, but not each year. An example of a cyclic routine activity would be projects where dredging is needed on a regular recurring basis, but not every year, for example dredging is needed only every two years. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(b) Increment 2: Only for critical non-routine activities that must be accomplished to ensure project safety and keep the project operating and delivering benefits, or are required to meet minimum legal compliance with biological opinion in the applicable FY or mitigation activities with a specific plan/agreement for execution in the applicable FY. For each MSC or Lab, the sum of BY work package capabilities in Increments 1 and 2 may not add to more than 75 percent of the average allocated to that organization in the O&M account in the past three years. The 75 percent limit does not apply to individual projects.

(c) Increment 3: This increment includes critical operation and maintenance activities, both routine and non-routine, for the 25% above the minimal budget level, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project. Preparation of reports for Major maintenance (MM) and rehabilitation (MR) can be included in this increment. MM and MR activities must have approved reports before they can be included for implementation. Increment must be performance

based and integral with a study/project with high outputs and consistent with ranking.

(d) Increment 4: This increment includes operation and maintenance activities, both routine and non-routine, above the 100% level of TABLE III-2-3 by MSC, that are defined by the state of the practice and are needed to sustain the expected future benefits of the project. In most cases, activities in this increment will support continuing the level of service that customers, stakeholders, and others have come to expect and depend-on for sustaining public safety and economic, environmental and social benefits. Multiple Increment 4 activities should be submitted that reflect the logical pieces of routine or non-routine activities beyond the 5 year average limit. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(e) Increment 5: Activities that have a high expected return on investment that enable greater levels of performance in future years should be included in this enhanced or capability Increment. Increment must be performance based and integral with a study/project with high outputs and consistent with ranking.

(f) Performance metrics will be used to set funding priorities. An integrated O&M budget will be developed by each MSC as described below. *This integrated budget applies to all business lines and no business line is reserved an individual 75%*. It will be the MSC's decision to allocate to business lines within the integrated 75% budget limit. TABLE III-2-2 displays 75% values of the 5-year average of the O&M President's Budget amount by MSC. The philosophy is to use Increment 1 as the minimum level to account for critical routine activities (both operations and maintenance) and to use Increment 2 to account for critical non-routine activities on our high performing projects.

(2) 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 current work to develop a biological assessment leading to an opinion. Additional supporting information will be provided through data entry into the national Endangered Species section of the Civil Works Project Mitigation Database must be entered by June 15, 2015. Regardless of which business line funds the work package, subject matter experts including environmental stewardship business line managers at the District, MSC and HQ shall be consulted to insure work packages meet the definitions of the following increments and the Corps legal requirements are being met. Note that all packages that fund work required by a biological opinion should use Phase Activity Code "BO" (see paragraph 6.f. 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.

(a) Increment 1. Activities in a reasonable and prudent measure or alternative to operate and maintain projects to maintain minimum legal compliance with the biological opinion (s) in the current budget year. This includes operation and maintenance of existing fish passage infrastructure that support activities within a reasonable and prudent measure objective

(b) Increment 2. Activities that meet Increment 1 definitions and also O&M increment 2 definition of "non-routine" to address a reasonable and prudent measure or alternative that if not accomplished have the highest risk of exceeding take limits. Non-routine measures are short duration with a definitive beginning and end. Non-routine maintenance to repair, correct or upgrade existing fish passage infrastructure that would create a species take or non-compliance with a reasonable and prudent measure must be budgeted under increment 2.

(c) Increment 3. Activities above the initial program necessary to comply with the Endangered Species Act that if not done in the budget year have moderate risk of exceeding the take limit for the listed species. This increment might include funding for monitoring required by a biological opinion, development of biological assessments and consultation with the Services to develop draft biological opinions.

(d) Increment 4. Activities that if not done within the current budget year are least likely to increase the risk of exceeding the take limit for the species. This increment might also include funding for development of biological assessments and consultation with the Services to develop draft biological opinions.

(e) Increment 5. "Capability" activities beyond the minimum to support the maintenance O&M requirements necessary for the project to comply with a biological opinion (including conservation measures contained in biological opinions); and/or budget packages that enhance ESA protection as described in an ESA recovery plan.

(3) Increment Definitions for Mitigation Operations and Maintenance. The budget justification column must include language specific to authorizing document of the mitigation and brief description of the progress the item makes towards full implementation of mitigation. Regardless of which business line funds the work package, subject matter experts including environmental stewardship business line managers at the District, MSC and HQ shall be consulted to insure work packages meet the definitions of the following increments and the Corps legal requirements are being met. Additional supporting information will be provided into the national mitigation database. Note that all packages that fund mitigation work should use Phase Activity Code "MT" (see paragraph 6.f. in the MAIN part of this EC). If mitigation is as part of a Biological Opinion requirements such as fish hatchery mitigation reasonable and prudent measure, the package will be funded in accordance with the Endangered Species and Biological Opinion (BO) increments immediately above this section.

(a) Increment 1. Minimum Mitigation activities for on-going and completed projects that were specifically included in the recommended project, as supported by the authorizing documents, should be included in increment 1. Mitigation activities for ongoing and completed projects that are not specifically included in a decision document should not be included in increment 1. Mitigation activities with a specific plan for execution and agreements such as MOA or Real Estate instrument with state agencies to meet the specific tasks are priority in increment 1. In addition to specific mitigation requirements related to habitat modifications, all supporting work to adequately manage the mitigation lands such as boundary maintenance, inspections, real estate documentation, and environmental compliance including ERGO inspections of these properties must be funded in increment 1.

(b) Increment 2. Minimum "Non-Routine" Mitigation activities for on-going and completed projects that were specifically included in the recommended project, as supported by the authorizing documents, should be included in increment 2. Non routine would be for activities that do not occur each year and have a specific beginning and end.

(c) Increment 3. Activities above the initial program necessary to meet authorized mitigation targets at an efficient and competitive level based on outputs. Mitigation activities with assigned general goals (example: intensive wildlife management) for execution. Priority should be placed on those with specific plans or agreements to execute the work.

(d) Increment 4. Activities above increment 3 to fully meet mitigation targets or meet general targets not specifically provided in implementation plans or agreements with others.

(e) Increment 5. “Capability” activities beyond the minimum to support the maintenance O&M mitigation requirements necessary for full capability and benefit of the mitigation effort.

(4) Use of Increments. Increments can facilitate ranking, but they are not used to rank or prioritize activities. Performance metrics will be used to set funding priorities. An integrated O&M budget will be developed by each MSC as described below. *This integrated budget applies to all business lines and no business line is reserved an individual 75%*. It will be the MSC’s decision to allocate to business lines within the integrated 75% budget limit. TABLE III-2-3 displays 75% values of the 5-year average of the O&M President’s Budget amount by MSC. The philosophy is to use Increment 1 as the minimum level to account for critical routine activities (both operations and maintenance) and to use Increment 2 to account for critical non-routine activities on our high performing projects.

III-2-13. Operation and Maintenance Increments and Program Integration.

a**.** O&M Increments – The total of O&M Increments 1 and 2 for ALL business lines within an MSC must not exceed 75 percent of the average of the prior 5 year President’s budgets for O&M for the MSC. (See TABLE III-2-3. For LRD, this amount was calculated as follows : ($344,636/$1,752,000)*$10,000,000 = $1,956,000. NOTE 3: The 100% O&M calculation for each MSC MUST be reduced by the dollar reductions for the Sustainability Program as well.

b. O&M Business Line Integration. Districts shall rank O&M Increment 3 work packages within each business lines from “1 to N” before submitting their O&M budget to the MSC. Following district submissions, the MSC’s shall *integrate* O&M work packages from ALL districts and within each business line into a *single* MSC O&M plan. A single, integrated MSC O&M budget means that input from ALL districts shall be integrated, with each O&M Increment 3 work package given a MSC priority ranking from “1 to N” within each business line. This integration methodology by each MSC will facilitate consistency within HQUSACE in the formulation of the Civil Works O&M budget across all MSCs as well as all business lines, appropriations and Districts.

TABLE III-2-3

Total For Increments 1+2 (+2.5 for HYD) By Major Subordinate Command (MSC)

| 75% of prior five fiscal year average budgets for Increments 1 & 2 by MSC (see NOTES 1, 2 & 3 in para. III-2-14 (a) above) | | | |
|---|---|---|---|
| **MSC** | **75% of 5-Year Average Amounts** | **Sustainability Amounts** | **75% Amounts Less Sustainability** |
| | | | |
| **LRD** | **344,636,000** | **$1,956,000** | **$342,000,000** |
| **MVD** | **$328,970,000** | **$1,884,000** | **$327,000,000** |
| **NAD** | **$157,391,000** | **$895,000** | **$156,000,000** |
| **NWD** | **$242,334,,000** | **$1,378,000** | **$240,000,000** |
| **POD** | **$21,312,,000** | **$124,000** | **$21,100,000** |
| **SAD** | **$264,000,000** | **$1,503,000** | **$262,400,000** |
| **SPD** | **$110,127,000** | **$629,000** | **$109,500,000** |
| **SWD** | **$285,504,000** | **$1,631,000** | **$283,800,000** |
| **TOTAL** | **$1,754,274,000** | **$10,000,000** | **1,742,274,,000** |

III-2-14. Recreation Budget Evaluation System (Rec-BEST). This web–based tool has been developed for field use in calculating Recreation performance measure outputs for O&M activities. Rec-BEST must be used to support ranking BY Recreation O&M and MR&T work packages. Using Rec-BEST, Recreation budget activities (as defined by Work Category Codes) may be combined to create work packages. Recreation budget activities will be evaluated individually based upon their performance values. All the work packages will be matched into the corresponding increments in P2 and separated by “Budget Item” (BEST_ID) in P2 to assure the proper performance measures can be linked to each budget item in CW-IFD. See Appendix G, for additional information about budget development for the Recreation Business Line.

III-2-15. Environment-Stewardship Budget Evaluation System (E-S BEST). This web–based tool has been developed for field use in calculating Environment-Stewardship performance measure outputs for O&M activities. E-S BEST must be used to support ranking BY Environment-Stewardship O&M and MR&T work packages. Using E-S BEST, Environment-Stewardship budget activities (as defined by Work Category Codes) may be combined to create work packages. A work package is to contain all the activities that are necessary to produce a specified and quantified performance output. Performance outputs values will be calculated for all work packages created in E-S BEST, using information provided by the Operations Manager or appropriate project budget developer. E-S BEST will support the ranking of all the Environment-Stewardship work packages at the District, MSC, and HQ levels. Environment-Stewardship work packages will be grouped into increments in accord with the definitions provided in the main portion of the EC And this Annex. All the work packages will be matched into the corresponding increments in P2 and separated by “Budget Item” (BEST_ID) in P2 to assure the proper performance measures can be linked to each budget item in CW-IFD. See the *Program Development Manual* for additional information about budget development for the Environment-Stewardship Business Line and specific requirements for performance measures, ranking criteria and increment definitions.

III-2-16. Projects Previously Funded in O&M. The following five activities should be identified in separate work packages and managed in the Construction account: Biological Opinions for initial work related to the Columbia, Willamette and Missouri River Rehabilitations, Dredged Material Disposal Facilities (DMDFs), Beneficial Uses of Dredged Material, and Renourishment to Restore Sand Lost to Shorelines from Federal Navigation O&M.

III-2-17. Deficiency Corrections. All deficiencies at Corps of Engineers operated and maintained projects will be funded in accordance with Sub-ANNEX II-2-5.

III-2-18. Budget Submission Requirements.

a. Database System. CW-IFD will be used to submit data for the O&M program. For guidance and instructions on use of CW-IFD, see the *Civil Works Program Development Manual.*

b. Submission requirements for automated data and hard copies are listed in TABLE 2 of the MAIN part of this EC.

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SUB-ANNEX III-3

Operation and Maintenance

Operation and Maintenance Work Category Code (O&M)

III-3-1. O&M Work Category Codes- Matrixes (Definitions have been moved to the Program Development Manual)

a. Operation Work Category Code Matrix by Business Line. See Table III-3-3.a. (moved to Program Development Manual).

b. Maintenance Work Category Code Matrix by Business Line. See Table III-3-3.b. (moved to Program Development Manual).

NOTE: TABLE III-3.1a and TABLE III-3.1.b. Maintenance Work Category Code Matrix (by Business Line). See embedded excel file below.

TABLES III-3-1.a. and III-3-1.b

Operation/Maintenance Work Category Code Matrix (by Business Line)

fy17ec_annex_III
TABLE III.3.1a Operati

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SUB-ANNEX III-4

Operation and Maintenance

Systems and Justification Sheets

III-4-1. Operations and Maintenance Systems and Regions. The BY O&M budget will be formulated based on performance goals and objectives and risk-based indices (details can be found in the business line Appendices). Also basin codes will continue to be attached to projects on a system basis although the budget will be presented on a project by project basis. The systems were developed, using HUC sub-regions as established by the US Geological Survey.

III-4-2. Justification Sheets for O&M for Congressional Submission.

a. J-Sheets will be in accordance with the MAIN part of this EC, paragraph 16. Each MSC shall prepare and submit Justification Sheets (J-sheets) for each O&M project, using the format and template in ILLUSTRATION III-4.3.

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 (Pittsburgh Dist)
OHIO RIVER LOCKS AND DAMS, WV (Huntington Dist)
OHIO RIVER LOCKS AND DAMS, KY, IL, IN, OH, & WV (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 ILLUSTRATION III-4-4. for a list of all of the National program J-sheets and a list of the HQ and MSC proponents.

III-4-3. State Designations. 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 funding increment. 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 in the same funding increment. For example, Little Rock District (SWL) has projects in Missouri and Arkansas therefore SWL should have at least two ICW work packages, one for Missouri and one for Arkansas. Some SWL projects cross state lines such as Table Rock Lake. All of the ICW work packages for this project should be included for its primary state, which is Missouri. In addition, MR&T O&M-funded ICW projects and O&M-funded ICW projects may also exist in the same state. The MR&T O&M-funded ICW work packages and the O&M-funded ICW work packages in a state (example, Michigan) will be included in two separate ICW projects, one MR&T O&M-funded and the second O&M-funded.

b. Districts, even Districts in different MSCs, may have each 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), Huntington District (LRH) and Pittsburgh District (LRP) have ICW budget activities in Pennsylvania; they should all be included in one Pennsylvania ICW project. The same situation exists for PCS and SNBW. For example, Chicago District (LRC) and Detroit District (LRE) have SNBW and PCS work packages in Michigan. All the SNBW work packages for this SNBW project should be included for its primary state, which is Michigan. All the PCS work packages for this PCS project should be included for its primary state, which is Michigan.

c. The Justification/Remarks will indicate how many surveys, inspections, actions, etc. of that districts total will be performed for the respective Business Program funding increment. For example the Business Line initial increment 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 in next-added Business Line increments as justified by increased performance or benefits.

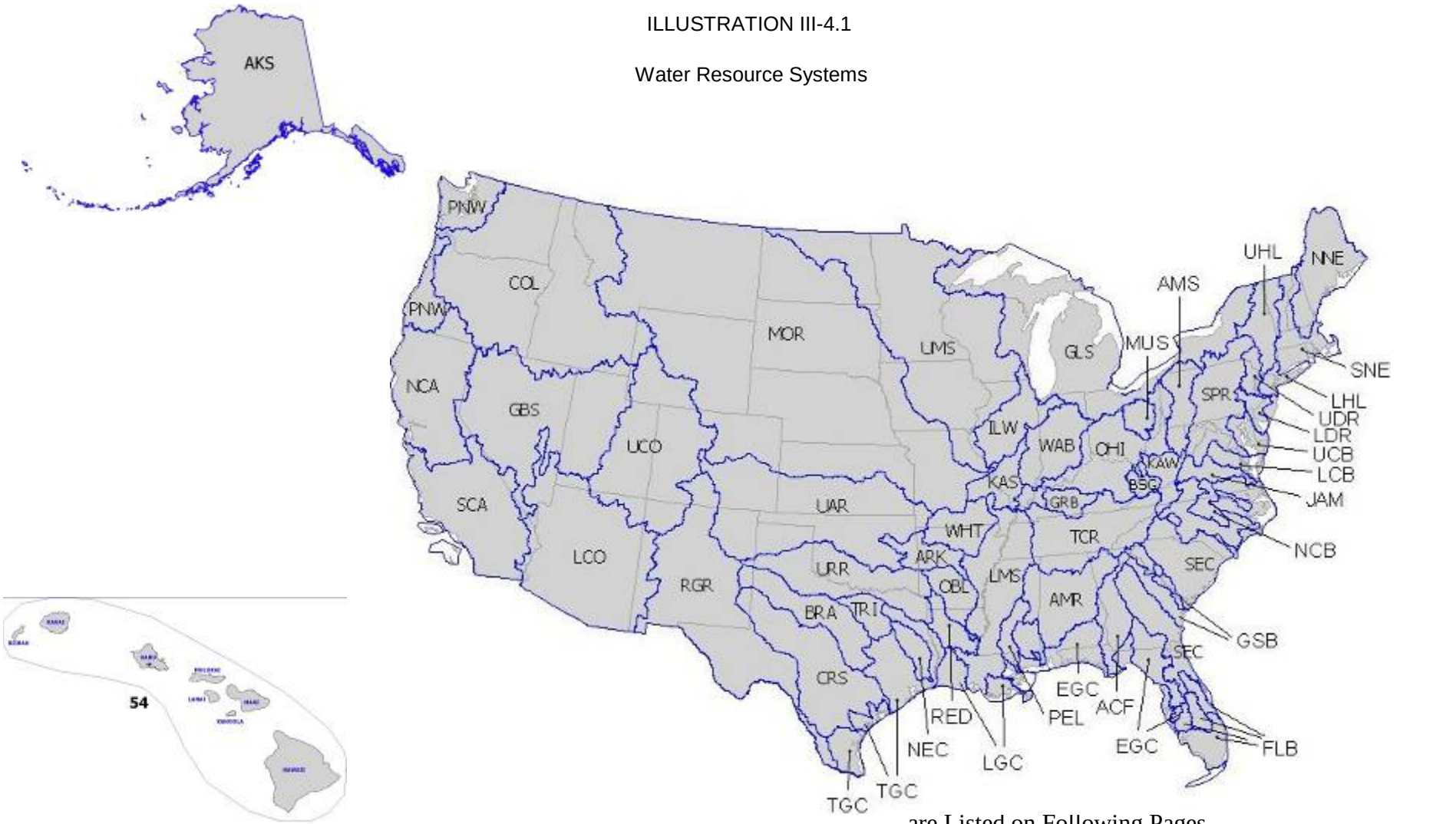
TABLE III-4-1

O&M Systems

fy17ec_annex_III
Draft Final Table III 4.

ILLUSTRATION III-4.1

Water Resource Systems




are Listed on Following Pages

ILLUSTRATION III-4.2

Major Subordinate Command (MSC)

Supplemental Justification Sheet

Major Maintenance

1. DESCRIPTION OF WORK: (Describe specific items of work to be included in the overall package).

2. JUSTIFICATION: (Provide justification for the total work to be accomplished, including economic evaluation. Quantify benefits when possible. In last paragraph of justification, provide arguments on why the work should be started in the budget year, either design or construction; and the impact of not starting the work in the budget year. For ongoing work, include the impacts of not continuing the work in the budget year. These paragraphs must be in sufficient detail to permit a decision to be made on the investment).

3. ESTIMATED COST AND SCHEDULE: (Provide the basis of the estimated cost, i.e., based on cost of XYZ PROJECT IN FY90 indexed to current price levels, reconnaissance level estimate, e.g. *Design Memorandum D-28 approved 22 January 1993, etc;* and include the amount of contingencies included in the estimate. The cost estimate should be broken down to reflect individual DDRs, procurements, contracts, installations, etc. Schedule dates should be shown only to the month and year, e.g .,11/01, and all dollar amounts in even thousands, i.e., $10,000 to be shown as 10. The estimate and schedule should include required fund requirements for engineering and design during construction and other related costs for completion of a total package. If contributed funds are required for Corps construction activities, include in cost estimate and add a line to the schedule with minus entries; so that the total line will reflect Total Federal fund requirements by year).

NOTE: This illustration is included to show the additional information required for major maintenance activities. This information will be provided in the format shown in the expanded funding argument field.

ILLUSTRATION III-4.3

MSC O&M Justification Sheet Template

OM J-sheet example
for FY2017-4Mar15.dc

ILLUSTRATION III-4-4
Matrix of the National Program J-sheets Proponents

ILLUSTRATION III-4.4
MATRIX O&M JUSTIFI

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ANNEX IV

Expenses

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# ANNEX IV

## Expenses

IV-1. Appropriation Title. Expenses 96 17/18/19-3124.

IV-2. Purpose. This ANNEX provides guidance for the formulation of the FY 17, FY 18 and FY 19. Expense (E) Program for Headquarters, U.S. Army Corps of Engineers (HQUSACE), Major Subordinate Commands (MSCs), and other command and control support activities. Although the data submitted for the FY 16 program will undergo the same Program Advisory Working Group (PAWG) validation process used in previous years, the results of the FY16 PAWG 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. There will be two parts to the FY 18/19 Expenses program development.

a. The first part is the normal identification and validation of requirements in the PAWG setting. The template (Illustration IV.1) used in previous years will be used for this process.

b. The second part addresses the Assistant Secretary of the Army for Civil Works ((ASA( CW)) request for development and implementation of a CW Expenses program budget development process that appropriately integrates the current RM/operating budget development cycle that will improve the current ability to develop and defend Civil Works labor funding within the Administration.

IV-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 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. The five functions are explained in detail below.

a. The five (5) functions of ED&M:

(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 in accordance with law, policy and guidance.

b. The Expenses appropriation is aligned with all of the National priorities/goals that guide, inform, and shape the Civil Works Program (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.

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, 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. When determining travel requirements, in compliance with the 30% reduction—FY 18 and FY 19 travel requirements should be 30% less than the FY10 travel obligations.

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, Major Subordinate Commands (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 15/16 will be developed based on guidance issued by HQ Resource Management. The focus of FY17 and FY18 will be formulation and program development. Requirements for FY(s) 17 and 18 will be submitted to Resource Management in the specified format with supporting data as reflected on the spreadsheet in **Illustration IV.2**. Resource Management will publish an official data call with suspense and definitive guidance for the outyear requirements. The instructions

from the data call will be used to complete the spreadsheet at Illustration IV.1. Additionally, between now and the time of the PAWG, RM will work with CW to gain an understanding of the CW priorities so that our validated requirements accurately reflect leadership's priorities.

f. Audit costs formally budgeted through the Expense Account will be funded through the Revolving Fund Account.

g. Labor Requirements and Funding.

(1) Labor Requirements. The Budget Year (BY) 17 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 BY17 will be at the allocated level of 917 and BY+1(BY18) 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 Chapter 2 of the Program Development EC.

(2) Labor Funding. Funding requests for BY will include base labor cost as of 1 Oct PY (2015), 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 due 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 IV-2.1. 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. When determining travel requirements comply with the 30% reduction mandated by OMB—your FY18 Expenses travel requirements should be 30% less than the FY10 Expenses travel obligations.

IV-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 FY13 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.

IV-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. CWI-FD will eventually be apart of this requirement. It will be under construction sometime next year.

IV-6. Prior Years Funds. This section is discussed in the FY15 Execution EC.

ILLUSTRATION IV.1

Requirements Summary

ANNEX VI-IV-1
Requirements Summa

ILLUSTRATION IV.2

**Program Development Worksheet**

Ill. IV-2-2 Program Development Wksht

ANNEX V

Regulatory

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# ANNEX V

## Regulatory

V-1. Background. The Regulatory program protects the aquatic environment by regulating the discharge of dredged and fill materials and other construction-related activities in jurisdictional waters of the United States. This responsibility is mandated by the Clean Water Act and the Rivers and Harbors Act of 1899 and other laws. During the past decade, the Corps Regulatory program has evaluated and made permit decisions for over 80,000 applications a year for projects that impact waters of the United States, including wetlands.

V-2. Objectives. The goal of this appendix is to provide guidance to all districts to request funds to perform its Regulatory mission as determined by FTE execution and non-labor costs associated with specific levels in the performance measures. The Regulatory Objectives and Performance Measures are provided below in TABLE V-1, “Regulatory Goals and Performance Measures.” The performance measures were developed to link the Regulatory Budget to performance and supporting data that would provide information on the effectiveness of the program. For example, the Objective “No Net Loss of Aquatic Resources (Wetlands)” will be informed by data captured through Performance Measures 1 through 6. Based on the national budget priorities, the Corps will provide funds to administer the Program. Because the Corps Regulatory program is predominantly a labor-based program, dollars allocated to district Programs are directly correlated to the target percentages for each of the performance measures. The percentage targets for each of the performance measures are designed to evaluate performance of these objectives based on available budget and to provide information on the veracity of data for the overall Program Goals. For example, data collected during compliance visits (i.e., percent of sites meeting performance criteria that are in compliance with the issued permit) provide information on the success of the Program Goal of "Avoidance and Minimization of Impacts" by confirming the special conditions placed on permits are completed as required. Higher target percentages for the Performance Measure will result in more first time compliance site visits, which will provide a better measure of success for the Objectives.

V-3. Civil Works Ten-Year Development Plan. The purpose of the Civil Works Ten-Year Development Plan is to present an overview of the funding required for the Civil Works Program over a 10-year period. The Five-Year Development Plan (FYDP), a stand alone document, is based on a subset of the 10-year plan which will produce results that contribute to achievement of the strategic goals and objectives contained in the Civil Works Strategic 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 within the proposed ten-year plan.

V-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 | 300 | 088890 |
| Other Regulations | 400 | 008207 |
| Environmental Impact Statements | 500 | 088870 |
| Administrative Appeals | 600 | 013579 |
| Compliance: Authorized activities and mitigation | 800 | 010688 |

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.

TABLE V-1
Regulatory Goals and Performance Measures

| Program Goals | Performance Measures |
|---|---|
| No Net Loss of Aquatic Resources (Wetlands)<br><br>Avoidance and Minimization of Impacts to Aquatic Resources | 1. Individual Permit Compliance. The Corps shall complete an initial compliance inspection on XX% of the total number of all individual permits (including LOPs) issued during the preceding FY where authorized work is underway. |
| | 2. General Permit Compliance. The Corps shall complete an initial compliance inspection on XX% of the total number of all General Permits (including NWP) issued during the preceding FY where authorized work is underway. |
| | 3. Mitigation Site Compliance. The Corps shall complete field compliance inspections of XX% of active mitigation sites each fiscal year. Active mitigation sites are those sites authorized through the permit process and are being monitored as part of the permit process but have not met final approval under the permit special conditions (success criteria). |
| | 4. Mitigation Bank/In-Lieu Fee Compliance. The Corps shall complete compliance inspections/audits on XX% of active mitigation banks and in-lieu fee programs annually. |
| | 5. Resolution of Non-compliance Issues. The Corps will reach resolution on XX% of all pending non-compliance actions for permits with special conditions and/or mitigation requirements that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year. |
| | 6. Resolution of Enforcement Actions. The Corps shall reach resolution on XX% of all pending enforcement actions (i.e., unauthorized activities) that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year. |
| Increase Efficiency and Expedite Permit Processing | 7. General Permit Decisions. The Corps shall reach permit decisions on XX% of all General Permit applications within 60 days. |
| | 8. Individual Permits. The Corps shall reach permit decisions on XX% of all Standard Permits and Letters of Permission (LOPs) within 120 days. This standard shall not include Individual Permits with Formal Endangered Species Act (ESA) Consultations. |

V-5. Performance Measures.

a. Performance Measure 1. Individual Permit Compliance. The Corps shall complete an initial compliance inspection on XX% of the total number of all individual permits (including LOPs) issued during the preceding FY where authorized work is underway.

b. Performance Measure 2. General Permit Compliance. The Corps shall complete an initial compliance inspection on XX% of the total number of all General Permits (including NWPs) issued during the preceding FY where authorized work is underway.

c. Performance Measure 3. Mitigation Site Compliance. The Corps shall complete field compliance inspections of XX% of active mitigation sites each fiscal year. Active mitigation sites are those sites authorized through the permit process and are being monitored as part of the permit process but have not met final approval under the permit special conditions (success criteria).

d. Performance Measure 4. Mitigation Bank/In-Lieu Fee Compliance. The Corps shall complete compliance inspections/audits on XX% of active mitigation banks and in-lieu fee programs annually.

e. Performance Measure 5. Resolution of Non-Compliance Resolution with Permit Conditions. The Corps will reach resolution on XX% of all pending non-compliance actions for permits with special conditions and/or mitigation requirements that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year.

f. Performance Measure 6. Resolution of Unauthorized Activities. The Corps shall reach resolution on XX% of all pending enforcement actions (i.e., unauthorized activities) that are unresolved at the end of the previous fiscal year and have been received during the current fiscal year.

g. Performance Measure 7. Processing of General Permits. The Corps shall reach permit decisions on XX% of all General Permit applications within 60 days.

h. Performance Measure 8. Processing of Individual Permits. The Corps shall reach permit decisions on XX% of all Standard Permits and Letters of Permission (LOPs) within 120 days. This standard will not include Individual Permits with Formal Endangered Species Act (ESA) Consultations.

V-6. General Submission Guidance. Data will be entered into the P2 Program under “REG” as the Primary Business Line. A separate (inactive) FY 16 Budget WBS should be added and funds scheduled must reflect the requested resource needed for the funding FTEs and non-labor items that will be requested to achieve performance levels outlined in paragraph H-10. 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 $180,000.00.

V-7. Types of Activities (Projects) and Work Functions. Resource needs under the Regulatory appropriation can be submitted for up to seven activities. The seven Regulatory activities are Permit Evaluation- 100, Enforcement- 210, Studies-300, Other Regulations-400, Environmental Impact Statements (EISs)-500, Administrative Appeals-600, and Compliance- 800. Resources can be further identified according to P2 Resource codes and are at the discretion of the individual districts.

V-8. Definition of Activity (Project) Categories. Regulatory is divided into seven activity 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, jurisdiction 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).

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.

c. Studies (300). Includes all costs related to studies such as jurisdiction studies (actual jurisdictional determinations are included under permit evaluation), mapping, wetland studies, shoreline inventories, and collection of data for environmental databases. Resource requests must be grouped by an identified and defined specific study. Studies may be only submitted at level 2 funding or above.

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 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 document for the Corps. If an EIS is to be prepared without the use of a Third Party Contractor (i.e., done in-house), Headquarters 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 FY 16 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 HQ approval.

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 $180,000.00. 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 conferences, and other duties in support of the division appeals process. 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 authorized work for a percentage of the authorized activities and the associated mitigation sites (including mitigation banks, in-lieu fee programs, and site specific mitigation). This category includes costs associated with resolution of non-compliance found as part of inspections, as well as administrative civil penalties for non-compliance.

V-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 above the Regulatory Office that charge labor for supervision, management, or oversight.

b. Vehicle Costs (GSAVEH). All projected vehicle costs to perform work at the identified activity level.

c. Printing (PRINTING). All printing costs associated with the identified activity level.

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.

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 shall be entered at the appropriate activity and funding level. Districts should not schedule funds for resources the program would typically not incur (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 ORM 2. 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 V-2.

V-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 FTEs utilization in Regulatory, FTE utilization in support to 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. As part of each funding level, districts will also be required to report the expected Effective rate, Indirect rate, and General Overhead rate (G&A) 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.

a. Funding level 1. The Level 1 funding package is designed to provide a balanced, operational, program based on the funding level no greater than the previous FY district baseline allocation. 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. Districts should resource the appropriate activity categories to meet the following target level of performance:

Compliance requests(s) to meet the following levels of performance:

| | | |
|---|---|---|
| Performance Measure 1 | Individual Permit Compl Insp | Level 1 Target: 10% |
| Performance Measure 2 | General Permit Compl Insp | Level 1 Target: 10% |
| Performance Measure 3 | Mitigation Site Compl Insp | Level 1 Target: 10% |
| Performance Measure 4 | Mitigation Bank/ILF Compl Insp | Level 1 Target: 20% |
| Performance Measure 5 | Resolution of Non-compliance | Level 1 Target: 20% |

Enforcement requests(s) to meet the following level of performance:

| | | |
|---|---|---|
| Performance Measure 6 | Resolution of Unauthorized Activities | Level 1 Target: 20% |

Permit Evaluation requests(s) to meet the following levels of performance:

| | | |
|---|---|---|
| Performance Measure 7 | Processing of General Permits | Level 1 Target: 80% |
| Performance Measure 8 | Processing of Individual Permits | Level 1 Target: 50% |

b. Funding Level 2. The level 2 funding package was designed to provide a balanced, operational program that will meet the performance goals for permit processing along with an increase in compliance and enforcement efforts from level 1. The incremental increase of all resource requests at level 2 should allow the district to provide the following increased levels of service and performance. Level 2 requests may include activities or initiatives, not directly contributing to meeting the measures but in support of the Regulatory Program (e.g. studies, PEIS, Outreach) and Goal 2c of the USACE Campaign Plan.

Compliance request(s) to meet the following levels of performance:

| | | |
|---|---|---|
| Performance Measure 1 | Individual Permit Compl Insp | Level 2 Target: 10% |
| Performance Measure 2 | General Permit Compl Insp | Level 2 Target: 15% |
| Performance Measure 3 | Mitigation Site Compl Insp | Level 2 Target: 15% |
| Performance Measure 4 | Mitigation Bank/ILF Compl Insp | Level 2 Target: 25% |
| Performance Measure 5 | Resolution of Non-compliance | Level 2 Target: 25% |

Enforcement request(s) to meet the following level of performance:

| | | |
|---|---|---|
| Performance Measure 6 | Resolution of Unauthorized Activities | Level 2 Target: 25% |

Permit Evaluation request(s) to meet the following levels of performance:

| | | |
|---|---|---|
| Performance Measure 7 | Processing of General permits | Level 2 Target: 80% |
| Performance Measure 8 | Processing of Individual Permits | Level 2 Target: 50% |

c. Funding Level 3. The level 3 funding package was designed to meet all the requirements at the level 2 funding requests represent the fully funded program, meeting all stated Program Objectives. After

requests have been submitted to meet the performance targets, additional, non-mandatory requests to enhance the program may be submitted.

Compliance package(s) to meet the following levels of performance:

| | | |
|---|---|---|
| Performance Measure 1 | Individual Permit Compl Insp | Level 3 Target: 20% |
| Performance Measure 2 | General Permit Compl Insp | Level 3 Target: 20% |
| Performance Measure 3 | Mitigation Site Compl Insp | Level 3 Target: 20% |
| Performance Measure 4 | Mitigation Bank/ILF Compl Insp | Level 3 Target: 40% |
| Performance Measure 5 | Resolution of Non-compliance | Level 3 Target: 25% |

Enforcement package(s) to meet the following level of performance:

| | | |
|---|---|---|
| Performance Measure 6 | Resolution of Unauthorized Activities | Level 3 Target: 30% |

Permit Evaluation request(s) to meet the following levels of performance:

| | | |
|---|---|---|
| Performance Measure 7 | Processing of General permits | Level 3 Target: 90% |
| Performance Measure 8 | Processing of Individual Permits | Level 3 Target: 75% |

V-11. Scheduling . All scheduling for Regulatory labor shall ultimately result in the estimation of FTEs at each funding level and should be broken out by business line providing support to the program. *IMPORTANT*: In order to insure that labor requests are considered, districts should be certain that the appropriate number of FTEs are reflected in the appropriate Primary Business Line (REG) in P2. Note – previous year carryover should also be included in scheduled amounts.

V-12. Points of Contact. Questions pertaining to policies, procedures, or format of the Regulatory Program activity should be referred to HQ USACE, CECW-CO-R.

V-13. Submission Requirements. See TABLE 2 in the MAIN part of this EC for applicable suspense dates for submission of budget data.

V-14. Division Funding & Staffing Summary. Districts are to include any specific study, EIS, program or administration initiative request in TABLE V-2. These items should be listed by name and include specific dollar amounts as well as projected FTEs needed to accomplish the task at the given level. This submission will be a subset of what is included in TABLE V-3 to gain visibility on the level of effort needed for studies and EISs.

In addition, each district will prepare and submit electronically to its division office the funding and staffing information summary in TABLEV-3. Level 2 and 3 calculations should be cumulative and include the subsequent level request. (e.g. Level 1 $5,000,000.00, Level 2 $6,500,000.00, Level 3 $8,000,000.00). 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 V-3. Note – these only include GRF funded positions and do NOT include those from any Section 214 or other funding agreements. 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 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 would include the division RO FTE and cost information (column 2 and 3 of TABLE V-3).

TABLE V-2

District: Example
Study/EIS/Initiative ($000)

| 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 V-3

Division/District: Example
Funding Summary($000)

| Funding Level | FTEs in Regulatory | Fully Burden Reg Labor costs | FTE Support to Regulatory | Support Labor cost | 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 | | | | | | | | | | | | |

ANNEX VI

Formerly Utilized Sites Action Program

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# ANNEX VI

## Formerly Utilized Sites Remedial Action Program

VI-1. Introduction.

a. In 1998 Congress directed the Corps to conduct response actions on 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 Formerly Utilized Sites Remedial Action Program (FUSRAP) was begun in 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 and including them 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 (Shallow Land Disposal Area (SLDA) (PA) being added since the Corps started executing the program. The Corps is completing the PA/SI on two sites (Wolf-Alport Site (NY), and Gillman Hall (CA)). The Corps is completing the closeout and transfer of two sites back to DOE (Painesville (OH) and Linde (NY) sites). Funds were budgeted for a total of twenty-three sites in FY15.

VI-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.

VI-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 for by the Manhattan Engineer District and 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 cost consistent with cleanup criteria. Criteria utilized are those that are protective of human health and the environment, responsive to regulatory and community interests, and in accordance with the current and reasonably foreseeable future land use.

TABLE VI-1

FUSRAP Environmental Performance Measures

| |
|---|
| Strategic Goal #2 - Repair past degradation and prevent future environmental losses.<br>From the December 2014 Civil Works Strategic Plan |
| Strategic Objective 2.3 --- Assist in cleanup of contaminated, hazardous, toxic, and radioactive waste sites as authorized or requested by others. |
| 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. |

VI-4. Five and Ten Year Funding Streams.

a. The five and ten year development plans for FUSRAP projects will follow the guidance provided in paragraph 12 in the MAIN part of this EC. The BY – BY+9, ten year plan will be finalized at the FUSRAP Budget meeting in April 2015. The Five Year Development Plan (FYDP) will use a subset of the 10 year plan and will be developed separately.

b. The ten year funding stream (BY to BY+9) development for FUSRAP projects will follow the guidance provided in paragraph 12 in the MAIN part of this EC.

c. The Final BY budget amounts will be provided after OMB Passback, and the Divisions' will update the 10 year program based on the Passback. A final 10-year plan will be prepared to support of the President's final submission to Congress in February BY-1. See paragraph 12 in the MAIN part of this EC.

VI-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 program 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 10-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 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, 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) 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 in accordance with the guidance in paragraph 10 in the MAIN part of this EC.

VI-6. Performance Based Budget Increments. Add additional budget items for logical, needed increments that contribute to the program performance measures in the table above.

VI-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.

VI-8. Program Phases.

a. The FUSRAP Study Phase includes the following CERCLA processes:

(1) Preliminary Assessment (PA). A PA 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) Remedial Investigation (RI). 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 publically 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 in accordance with 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.

(9) The FUSRAP Implementation (Construction) phase consists of the following CERCLA processes:

(10) Remedial Action (RA). RA is the actual construction and implementation of a remedial design that results in long-term site cleanup.

(11) 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.

(12) Site Close Out (CO) (including Transition to DOE LM - {Corps program process}). The Site Close out process consists of documenting the completion of the response action in a Site Close Out Report that is in accordance with the ROD and in compliance with CERCLA, as amended, and the NCP. Certain remedies may require a period of operation and maintenance (O&M) , after the remedy is implemented, before the remedial action objectives and cleanup criteria are achieved. Note: Under FUSRAP the Corps is responsible for conducting the first two years of any necessary operations and maintenance and/or site monitoring following remedy completion, after which the site is turned over to the DOE LM for long-term stewardship and is no longer a Corps responsibility.

VI-9. Definition of FUSRAP Budget Increments.

a. Definition of 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. Definition of 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 Remedial Investigation 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.

VI-10. P2 and CW-IFD Requirements.

a. P2 and CW-IFD will be used for developing the BY budget for FUSRAP.

b. This section provides guidance for each program, but there are certain common structures for each program that will be represented within PPM. The program consists of a set of projects that are included in the budget. These projects consist of a set of activities that are required to fulfill the purpose of the project. For a project in FUSRAP, these activities are required to complete CERCLA phases for that project during the budget year. The activities within these projects require resources. These resources are labor, contracts, travel, supplies and materials, etc. The total cost of supplying these resources for a given activity represents the budget amount that the activity requires within the budget. The total cost of all activities represents the total budget required by the project.

c. The common structure of project – activities – resources is consistent across all programs and provides a hierarchy for summarizing the program as a whole. The performance based budget process also requires a different view of the budget by business. To accommodate this view of the program, each activity is assigned to a business. The tagging of each activity by business allows a view of the budget by business as well as program.

d. Identifying the activities that are part of the budget provides a level of detail and classification to help answer questions by all the various stakeholders for the Corps budget.

e. The instructions that follow describe the specific tasks that must be done to develop the BY budget for Corps FUSRAP projects using PPM:

(1) General Directions.

(a) Project managers must assign a program code, if one is not already assigned. The program code must be the six character CWIS code that has been assigned in PRISM for the project. If the project is new and does not have a PRISM created CWIS, the P2 Project number is to be assigned as both the project and program code. If multiple P2 projects have been created from one CWIS, then each P2 project must be assigned the same program code. The program code will allow proposed budgets in P2 to be matched to CW-IFD and CEFMS. A P2 OP local configuration manager has the permission to add the program code to a project.

A current list of program codes is available to select in Oracle Projects. The program code can be added after the budget activities are added to a P2 project.

(b) Each program manager will direct a LCM to create a separate WBS for budget development. The WBS should be named Budget. The WBS should be “Inactive” so that proposed budgets will remain in PM alone until ready for transfer to Oracle Projects. Additional child WBS levels can be added if needed to help prepare the budget. At a later date, the WBS will be marked as “Planned” so that the budgets can be transferred to OP. The proposed budgets will not be transferred to CEFMS.

(c) Each project manager must add the activities and resources needed to complete BY work. This document will guide the content of the work added to P2. All work will be described as one or more activities that require resources to complete.

(2) Budget Data Required for FUSRAP. The following is a brief description of the budget data elements required:

(a) Program Code: The Program Code links the CWIS used to identify FUSRAP projects in the Civil Works budget with the P2 project. In most cases, there will be only one P2 project per CWIS, but there are many cases where there are two or more P2 projects per CWIS. Assigning the program code to each P2 project allows a matching of CWIS to P2 projects. A new code has been added to P2. It is called WBS CODE (OVERRIDE). For WBS's that are not showing up properly, PM’s can assign this code at the WBS to resolve any UNKNOWN WBSs. The P2 team will have to assign a code on each of the WBS's so they show up properly in CW-IFD.

In Oracle Projects, these codes would need to be defined on each project:

FUSRAP SITE ID NO: Defines the FUSRAP site location

PRIMARY BUSINESS PROGRAM: ENV – FUSRAP

REGULATORY DRIVER: CERCLA

(b) Project ID: This is the P2 project ID assigned when the project is created in OP.

(c) Project Name: This is the P2 project name.

(d) Primary Business Program: The primary business program is Civil Works Environmental -- FUSRAP.

(e) Civil Works FY16 Funding Increment: This data element identifies the business funding increment for each activity. Each activity must be assigned to one and only one increment. The data element, CW FY16 Funding Increment, is used to assign the increment number to each activity. This code will be used to identify an activity as a FY16 budget activity, and will be used to extract FY16 budget activities for both P2 and CW-IFD. Please do not assign this activity code to any activities that are not part of the FY16 budget. This data element is similar to the funding requirements for FY15.

(f) WCC – CEFMS (Civil Works): The project manager must assign to each activity a work category code.

(g) Activity ID: The activity ID is an alphanumeric code assigned to each activity. The code must be unique within each project.

(h) Activity Name: This data element describes the work that will be done under the activity.

(i) Task Organization: The task organization is assigned to each activity. The purpose of the task organization is to represent the office where non-labor dollars are scheduled and potentially costed.

(j) Budgeted Total Cost: The budgeted total cost is the sum of the cost of the budgeted amounts for each resource assigned to an activity. All resources required to complete the activity must be entered for each activity to get a correct total.

(k) Start: This is the expected start date for the activity.

(l) Finish: This is the expected finish date for the activity. For the FY14 budget estimates, the resources for each activity within the limits of the fiscal year must equal the appropriate budget amount.

(m) Ranks – Project, District, Division, Headquarters: These four data elements can be used to specify a rank for each activity within the project, district, division, or Corps. Ranks are not strictly used in the new performance based budget, but these data elements are available for use by each district or MSC, if desired.

(n) Type of Funds: The type of funds describes the appropriation and category/class. This field is usually set at the WBS.

(o) Type of Funds (Override): This data element overrides the Type of Funds. Some projects may receive multiple types of funds. The override can be used to set the type of funds for some activities.

(p) Area of Responsibility: This data element is set for each project and is the same as the EROC that had been assigned in Automated Budgeting System (ABS).

(q) Activity Justification: There is a notebook element called work package justification that must be used to record the justification for an activity. The justification can be "pasted" into the Work Package Justification notebook topic from any Windows document. The term "work package" is a holdover from ABS.

(r) Additional Activity Codes: Additional activity codes may be added to classify an activity. These activity codes will be used to identify special interest codes that may be added to the budget EC.

(s) Budget Data Review: Each 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 by the project manager. Each District and MSC will likely have their own processes to review budget data. Much of the review can be done using Primavera Project Manager and some can be done using Oracle Financial Manager. Budget reports will be developed to show detail and summary data needed to review the budget.

(t) Evaluation of Budget Increments: At the end of the review and approval process for each MSC, the budget data will be extracted. The level of detail of the data, either project-business-increment or process-business-increment-activity, will be determined by the HQ Business Line Manager. Once the data is extracted, each MSC will be responsible for adding performance measure data for each increment. HQ will evaluate each increment in the business area and set the overall rank of each increment.

(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 remedial investigation (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) financial project closeout (identified as "ENF 8").

(b) Schedules will 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.

VI-11. 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 sample.

ILLUSTRATION VI-1.1

FUSRAP J-Sheet Template


illustration_vi-1-1.pdf

ANNEX VII

Revolving Fund
Plant Replacement and Improvement Program (PRIP)

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# ANNEX VII

## Plant, Revolving Fund

## Plant Replacement and Improvement Program (PRIP)

VII-1. Purpose and Scope. This annex 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**.**

VII-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 Annex G of ER 37-1-29, Financial Administration, Financial Management of Capital Investments. The categories and subcategories authorized for use with this program submission are in TABLE 3 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 shall 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.

VII-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 in accordance with 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) shall be submitted with full justification. This justification shall be submitted on ENG Form 4613-R for major items and ENG Form 4943-R for minor items (see ILLUSTRATION IX-1.1). In addition, major item new starts proposed for the BY shall be submitted in accordance with 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 IX-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 IX-1.2). The PRIP plan shall be updated only whenever significant changes occur. A copy of the update and changes shall 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 IX-1.2). The PRIP plan shall be updated only whenever significant changes occur. A copy of the update and changes shall be forwarded to CERM-B.

VII-4. Submission Requirements and Dates. See TABLE 2 in the MAIN part of this EC.

ILLUSTRATION VII-1.1

ENG Forms 4613-R and 4943-R


ILLUSTRATION VII-1.2

Five Year Plan

Ill. V-2.2 Five Year Plan

ILLUSTRATION VII-1.3

Obligation Plan

Ill. V-2.3 Obligation Plan

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ANNEX VIII

Automation Program

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# ANNEX VIII

## Automation Program

VIII-1. Background. House Report 103-135, June 17, 1993, accompanying the Energy and Water Development Appropriations Act, 1994 (P.L.104-46), directs the Corps to "provide separate and distinct data for automation costs" in future program requests. The basis for this request is the Committee's belief that " the cost attributable to the development and implementation of automated programs of the Corps of Engineers is entirely unreasonable." In accordance with this direction, the Civil Works Directorate provides Congress with a display of estimated automation costs with its annual program submissions.

VIII-2. Program Development Concepts. The major Information Technology investments that are reported on the Federal IT Dashboard are determined by the Chief Information Officer in consultation with the owners of the Information Technology Investment Review Boards. The current list of major investments is:

(1) Civil Works Business Intelligence (CWBI)

(2) Corps of Engineers Financial Management System (CEFMS)

(3) Corps Water Management System (CWMS)

(4) Electronic Document and Records Management System (EDRMS)

(5) Enterprise Data Warehouse (EDW)

(6) Facilities and Equipment Maintenance (FEM) System

(7) IT Infrastructure (II)

(8) Program and Project Management System (PROMIS Phase 2) (P2)

(9) Real Estate Management Information System (REMIS)

(10) Rental Facilities Management Information System (RFMIS)

(11) Resident Management System (RMS)

Additionally, distinguish between items proposed for PRIP acquisition (i.e., items supporting more than one project or program and costing more than $250,000), also displayed under the Revolving Fund section of the program; and items costing less than $250,000, and expensed, or acquired using specific study, project or program funds.

VIII-3. Program and Budget Guidance. Electronic Capital Planning and Investment Control (eCPIC) must be maintained up-to-date and reflect your best estimate of what actual requirements will be since it is the data source for the estimate of our automation costs being reported to Congress. The PRIP Five-Year Plan remains primarily a planning tool, but since the data in it is used to prepare our automation costs estimate it is important that it too reflect your best estimate of what actual requirements will be. Justifications to support BY PRIP requirements in plan are to be submitted with the PRIP budget submittal per separate guidance provided by CERM-B. Refer to ER 37-1-29 and Annex V of this EC for instructions for preparing, justifying and submitting PRIP budget requirements.

VIII-4. Submission Dates and Requirements. Electronic Capital Planning and Investment Control (eCPIC). The annual Operations Order beginning the IT Capital Planning Cycle will give specific deadlines and data entry requirements for budget year plus 1 in order to collect the data required for the

OMB reporting,

(In accordance with ER 25-1-2, the functional proponent has Life Cycle Management of Information Systems (LCMIS) responsibility for any Automated Information System AIS. Although this party may not be responsible for entering data into the eCPIC, it is responsible for the accuracy of the data.). More information about the CPIM process is available in ER 25-1-106.

# APPENDIX A

## References

Section I - Required Publications

This section contains no entries

Section II - Related Publications

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. Public Laws (PL):

   PL 84-99
   USACE Flood Control and Coastal Emergencies Act

   PL 85-500
   Water Supply Act of 1958

   PL 89-72
   Federal Water Project Recreation Act of 1965

   PL 91-190
   National Environmental Policy Act of 1969

   PL 92-500
   Federal Water Pollution Control Act Amendments of 1972

   PL 93-251
   Water Resources Development Act of 1974

   PL 97-348
   Coastal Barrier Resources Act, Oct 18, 1982

   PL 99-662
   Water Resources Development Act of 1986

   PL 100-676
   Water Resources Development Act of 1988

   PL 100-707
   Robert T. Stafford Disaster Relief and Emergency Assistance Act

   PL 101-508
   Revenue Reconciliation Act of 1990

PL 101-509
Federal Employees Pay Comparability Act of 1990

PL 101-591
Coastal Barrier Improvement Act of 1990

PL 101-601
Native American Graves Protection and Repatriation Act, Nov 16, 1990

PL 101-640
Water Resources Development Act of 1990

PL 101-646
Coastal Wetlands Planning, Protection and Restoration Act of 1990

PL 102-580
Water Resources Development Act of 1992

PL 103-62
Government Performance and Results Act of 1993

PL 104-46
Energy and Water Development Appropriations Act, 1994

PL 104-303
Water Resources Development Act of 1996

PL 105-33
Balanced Budget Act of 1997

PL 106-53
Water Resources Development Act of 1999
PL 106-541
Water Resources Development Act of 2000

PL 108-137
Energy and Water Development Appropriations Act, 2004

PL 108-447
Consolidated Appropriations Act, 2005

PL 109-58
Energy Policy Act, 2005

PL 109-103
Energy and Water Development Appropriations Act, 2006

PL 110-5
Revised Continuing Appropriations Resolution, 2007

PL 110-114
Water Resources Development Act, 2007

PL 110-140
Energy Independence and Security Act, 2007

PL 110-161
Consolidated Appropriations Act, 2008

PL 111-8
Omnibus Appropriations Act, 2009

PL 111-85
Energy and Water Development Appropriations Act, 2010

PL 111-322
Continuing Appropriations and Surface Transportation Extensions Act, 2011

PL 111-352
GPRA Modernization Act of 2010

PL 112-175
Continuing Appropriations Resolution, 2013 to 27 March 2013

PL 113-6
Consolidated and Further Continuing Appropriations Act, 2013

3. Executive Orders (EO):

EO 11514
Protection and Enhancement of Environmental Quality. March 5, 1970

EO 12088
Federal Compliance with Pollution Control Standards, 1978

EO 12322
Water Resources Projects, 1981

EO 12512
Federal Real Property Management, 1985

EO 12893
Principles for Federal Infrastructure Investment, 1994

EO 12906
Coordinating Geographic Data Acquisition and Access: The National Spatial Data Infrastructure, 1994

EO 13423
Strengthening Federal Environmental, Energy and Transportation Management, 2007

EO 13450
Improving Government Program Performance, 2007

EO 13514
Federal Leadership in Environmental, Energy and Economic Performance, 2009

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

Budget of the United States Government, Fiscal Year 2013, Analytical Perspectives

Budget of the United States Government, Fiscal Year 2013, Appendix

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

Section III – Prescribed Forms

This section contains no entries

Section IV – Referenced Forms

This section contains no entries

5. Corps of Engineers Publications -- Engineer Circulars (EC), Regulations (ER), Manuals (EM), Pamphlets (EP), and Civil Works Policy Memorandums (CWPM):

EM 1110-1-2909
Geospatial Data and Systems

ER 5-1-11
USACE Business Process

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 1105-2-100

Planning Guidance Notebook

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

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 1110-2-1302
Civil Works Cost Engineering

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 Benefit-to-Cost Ratios (BCR) for Budget Development

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# GLOSSARY

## Terms and Abbreviations

General. This glossary contains definitions of terms and CW-IFD codes used in the budget development process. ***Note that due to the extent of some definitions that are specific to major accounts (GI, CG, O&M) or Business Lines, many definitions have been retained in the Annexes/Appendices of this EC and the Program Development Manuel.***

Definitions of budget increments are located in this EC as follows:

Investigations – ANNEX I, paragraph I-1-5.
Construction (including MR&T) – ANNEX II, paragraph II-2-3.
Operation and Maintenance – ANNEX III, paragraph III-2-12.e.
FUSRAP – ANNEX VI, paragraph VI-1-9.

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 CWIFD system – they have assigned durations, resources, and relationships.

Acronyms. Acronyms used throughout this document are defined in ILLUSTRATION 7 in the MAIN part (SECTION 1) of this EC..

Asset Management Portfolio Analytics (AMPA). AMPA is a portfolio analytic and budgetary decision support tool. AMPA analysis makes use of CW-IFD data in order to "operationalize" the 5x5 qualitative risk matrices used by USACE business lines.

Army Rank. Army rank identifies the level of funding the Army assigns to individual work packages in the BY budget. The Army rank is entered into the CW-IFD database by BLMs following ASA(CW) review of the BY budget and prior to submitting the budget to OMB. Army Rankings are defined as follows:

Army Rank 1 = IN the budget
Army Rank 2 = NOT in the budget
Army Rank 8 = Authorized but not budgetable, eg. no report/against Admin position
Army Rank 9 = Not Authorized
Army Rank 10 = Work package considered under another Business Line

See also HQ Rank and PRESIDENT'S Rank definitions in this Glossary.

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

Below Ceiling Level of Funding. This level of funding is generally a percentage below the Ceiling level (see below). The percentage is prescribed by Army or OMB and reflects some intermediate funding level between the Initial and the Ceiling programs. The Decrement Program level only applies when directed by Army.

Ceiling Level of Funding. This level of funding is established by Army as the "target" level of funding (budget

authority) for the Corps CW budget in the BY. It is the funding level that all other funding levels are compared to in the BY and the funding level that is provided in the BY-2 publication entitled: Budget of the United States Government, Historical Tables (unless provided otherwise by OMB).

Above Ceiling . The funding levels above the Ceiling that may be requested by Army and are used to evaluate additional workload and the associated increased costs above the Ceiling program.

Decrement Level of Funding. This level of funding is generally a percentage below the Ceiling level (see below). The percentage is prescribed by Army or OMB and reflects some intermediate funding level between the Initial and the Ceiling programs. The Decrement Program level only applies when directed by Army.

Recommended 1, 2 or 3 Levels of Funding. These are additional (incremental) funding levels above the Ceiling that may be requested by Army and are used to evaluate additional workload and the associated increased costs above the Ceiling program

Caretaker Status. Real or personal property at a project site, in part or in whole, that is currently not utilitized 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.

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.

(2) 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.

(3) 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.

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.

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, MCSs 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. If requested by HQUSACE, the justification for critical work activities/packages must be supported by a risk vs consequence “type” analysis. All "operations", "maintenance" and "joint cost" work activities/packages in the budget that are identified as "critical", whether routine or non-routine, 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 routine actions (security and operations personnel training, security patrol and monitoring, routine security equipment maintenance, security risk assessments, blast damage assessment studies, dam security exercises, operating interim risk reduction measures, and physical

security inspections) and non-routine actions (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).

- Critical infrastructure refers to those systems and assets, whether physical or virtual, so vital that the incapacity or destruction of such may have a debilitating impact on the security, economy, public health or safety, environment, or any combination of these matters, across any Federal, State, regional, territorial, or local jurisdiction (USA Patriot Act of 2001). Well functioning infrastructure systems are vital to the nation’s prosperity and well-being. Critical infrastructure must be planned, funded, designed, constructed, and operated as a system that is appropriately integrated with all other interdependent systems. Critical infrastructure systems must also be resilient and sustainable throughout the system’s life cycle. The systems must be properly maintained, operated, and modified, as necessary, to perform effectively under changing conditions.

- Operating projects which have been screened using the Dams Consequence-Based Top Screen (CTS) methodology process shall serve as the framework for identification and prioritization of USACE critical projects assigned by HQUSACE. The CTS methodology represents a consistent portfolio-wide process to identify and characterize high-consequence facilities. This systematic process provides the initial step of the security risk assessment and management framework needed to implement an effective CIPR program across USACE.

- Some of the Critical Infrastructure Protection and Resilience (CIPR) Work Items/Activities:

Consequence-Based Screening Efforts
Security Risk Assessments
Blast Damage Assessment Studies
Consequence Analysis Studies
Comprehensive Facility Studies
Dam Security Exercises
Security Personnel Training
Security Patrol and Monitoring
Security Equipment Maintenance

Operating Interim Risk Reduction Measures
Physical Security Inspections
Physical Security Measures
Protection/Operational Vulnerability Mitigation Measures
Construction Retrofits and Hardening
Protection (Security Surge) Measures

- In support of the Flood Risk Management, Hydropower, and Navigation Business line goals for FY2015, the Critical Infrastructure Protection and Resilience (CIPR) Program's priority goal is to assess and prioritize Corps civil works critical infrastructure to address key vulnerabilities to manmade incidents by implementing protective programs to minimize consequences.

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
- 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.

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 the budget execution system. A FEM WON is required for all non-routine maintenance budget work packages in CW-IFD in increments 2 thru 9 (for all BLs) and should be assigned at the appropriate asset level. **Note that a new column (#13) has been established in CW-IFD 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. Additionally, it is **required** that in FEM the Work Order:

- description should mirror the work package description and be preceded

by "FY15 NRWP. "

- the FEM work order long description field should contain exactly the same information as the budget work package description.

- type should be "NRWP," Non-routine Work Package.

- 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

HQ Rank. HQ rank identifies the level of funding the HQ assigns to individual work packages in the BY budget. The HQ rank is entered into the CW-IFD database by BLMs after the BY budget is finalized by CECW-I and prior to ASA(CW) review of the BY budget. HQ Rankings are defined as follows:

HQ Rank 1 = Decrement Level (Below Ceiling Level)
HQ Rank 2 = Ceiling Level
HQ Rank 3 = Above Ceiling Level
HQ Rank 7 = Capability Level
HQ Rank 8 = Authorized but not budgetable, eg. no report/against Admin position
HQ Rank 9 = Not Authorized
HQ Rank 10 = Work package considered under another Business Line

See also ARMY Rank and PRESIDENT'S Rank definitions in this Glossary.

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 required Level of Service (LoS), may be used in considering asset demand/capacity. Maintenance 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->Marginally Functional->Fully Functional->Service Life. Maintenance 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.

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.

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 million, 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 waterwayprojects, as either: (a) 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); or (b) 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). The updated threshold for (a) is $16 million and for (b) is $2 million.

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, routine and non-routine maintenance or rehabilitations are maintenance so long as the action does not expand the capacity, or alter use.

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.

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.

Non-Routine Maintenance. A budget category for unique maintenance actions with a specific beginning and end; including cyclical maintenance greater than $3M and component renewal . Each non-routine activity must be shown separately to allow for individual funding decisions based on performance metrics and risk-based indices.

Operation. Work that is of a recurring nature, and is integral to providing authorized benefits to the public. Operations includes facility operations 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 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 Rank. President's 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 rank is entered into the CW-IFD database by BLMs prior to submitting the budget to Congress. President's Rankings are defined as follows:

- President's Rank 1 = IN the budget
- President's 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). For any appropriation, a Statutory Earmark from which any Funding remains available for expenditure. For the FUSRAP appropriation, any funded project. For the I, C, O&M, or MR&T appropriation, a specifically authorized project study, project, or program; or a First-Tier Line Item in a table of allocations in the Statement of Managers accompanying the most recent Act; or a First-Tier Line Item in a table of allocations in the Statement of Managers accompanying a previous Act from which any

Funding allocated in such table remains available for expenditure.

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" shall 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 non-routine actions which exceed cost thresholds of P.L. 102-580 (WRDA 1992) Section 205.

Rounding. All cost estimates shall be rounded to the nearest one thousand dollar ($1000) unless otherwise specified.

Resumption (CG only). Projects that have not performed any physical work under a construction contract in the past three consecutive fiscal years. "Physical work under a construction contract" is further defined as not including activities related to project planning, engineering and design, relocation, or the acquisition of lands, easements, or rights-of-way

Routine Maintenance. A budget category for maintenance actions conducted every year for at least the last five years including preventive maintenance, monitoring, estimated corrective maintenance, recurring (cyclical) dam maintenance, training, operating interim risk reduction measures, emergency preparations and inspections.

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

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 an 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.

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.

Watershed-based budget. Is a sustainable, five-year set of prioritized and VTN project-level investment options. Development of these investment options must include collaboration with local, state, federal, Tribal and non-government organizational stakeholders, thus providing the broad-based support and leveraging of resources for the watershed and coastal system activities that will be proposed for Federal funding each year.

Watershed-informed budget. Is a set of prioritized VTN investment options that take into consideration the watershed context of projects in the watershed, enabling the Corps to make better informed decisions about how it invests in the national water resource infrastructure. While collaborating with others, USACE retains Civil Works budget decision-making authority and responsibility.

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.

CW-IFD Common Data Field Definitions (all Business Lines):

(1) BUSINESS PROGRAM = Abbreviation for Business Line, such as ENR.

(2) EROC = Two character code for district, such as B1 for Memphis District.

(3) MSC = Three letter abbreviation for the MSC, such as MVD. This is a display-only field which is auto-populated based on the EROC. Data entry is not required.

(4) DISTRICT = Three letter abbreviation for district, such as NWK. This is a display-only field which is auto-populated based on the EROC. Data entry is not required.

(5) APPROP ABBREV = An abbreviation for the Appropriation Account. The abbreviations are: I (Investigations), C (Construction), OM (O&M), MRT-I (MR&T Investigations), MRT-C (MR&T Construction), MRT-OM (MR&T O&M), FCCE, and FUSRAP. This is a display-only field which is auto-populated based on the CW TYPE OF FUNDS. Data entry is not required.

(6) CW TYPE OF FUNDS = An 11 character code that combines the numeric Appropriation Account codes with the numeric Category-Class-Subclass (CCS) codes. Appropriation Account codes (characters 1-7) are Investigations (96 3121), Construction (96 3122), Operations and Maintenance (96 3123), Mississippi River and Tributaries (96 3112), FCCE (96 3125), and FUSRAP (96 3130). These are followed by a space (character 8) and then the three digit CCS code (characters 9-11) which can be found in TABLE 3 below.

(7) PROGRAM CODE = A code which identifies the AMSCO/CWIS/PWI associated with a CW-IFD project. A Program Code must be assigned to every CW CW-IFD project for which funds are requested. The Program Code is a project level code which is entered in Primavera. Refer to Appendix N in the most recent Execution EC for further guidance concerning Program Codes.

(8) PRIMARY FEATURE CODE = Required for all PED, Construction, and Operation & Maintenance work packages for which a Budget Request – Fed amount is entered. Select the Feature Code number below which most closely relates to the predominant asset category for the work package. "N/A" will be auto-populated for EM and FUSRAP. "N/A" is not valid except for EM, FUSRAP and Inspection of Completed Work packages that involve multiple projects.

Feature Code Defined – "Features" are the permanent project constructed features and their "Codes" are the two digit account numbers found in Appendix A, Chapter 14 of ER 37-1-30, "Financial Administration: Accounting and Reporting. " *(NOTE: Chapter 14 of the current version of the ER is focused on "Financial Reporting and Accounting Treatment for Multiple - Purpose Projects with Power" and is not all inclusive of valid asset category permanent features representative of all Corps water resource projects. Therefore, for asset management purposes, the Feature Codes in ER 37-1-30 have been supplemented as noted in this change document below in italics. They are derived from previous versions of the Finance and Accounting regulation, specifically ER 37-2-10, which is no longer an active publication. )*

Applicable Feature Codes (enter two-digit number only):

01 - Land
03 - Reservoirs
04 - Dams
05 - Locks
06 - Fish and Wildlife
07 - Power Plants
08 - Roads, Railroads and Bridges
09 - Channels and Canals
10 - Breakwaters and Seawalls
11 - Levees and Floodwalls
12 - Navigation Ports and Harbors
13 - Pumping Plants
14 - Recreation
15 - Floodway Control and Diversion Structures
16 - Bank Stabilization
17 - Beach Replenishment
18 - Cultural Resource Preservation
19 - Buildings, grounds and utilities
20 - Permanent Operating Equipment

Narrative definitions of Feature Code asset categories -- The current ER lists "sub-features" (or "plant items") associated with each Feature and is not all inclusive as mentioned above. For ease of understanding for the purposes of this EC, the narratives from the prior ER 37-2-10 which is no longer an active publication see: http://140.94.76.129/publications/eng-regs/er37-2-10/ch08.pdf

01 Land. While the referenced ER is focused on the "acquisition" of land, for the purposes of Asset Management and this requirement, that definition is too limiting. Land will be defined as "any work to be performed on the land. " This completes the entire portfolio of assets: buildings, structures and now land.

02 Do not use this Feature Code.

03 Reservoirs. This feature includes clearing lands in reservoirs of debris, brush, trees, improvements and structures. Also includes the sale of salvage obtained by sale or disposal of material in clearing

operations. Also includes bank stabilization, shoreline improvement, fire breaks, fencing, boundary line surveys and improvement, fencing, boundary line surveys and marking of land which has been acquired or is to be acquired, rehabilitation of natural resource, erosion control, drainage and rim grouting and mine sealing etc., to prevent leakage.

04 Dams and Other Water Collecting Facilities. This feature includes the cost of all dams and other water collecting facilities, whether man made or natural, together with appurtenant water diversion, regulation, and delivery facilities.

05 Locks. This feature includes facilities to provide for passage of waterborne traffic, including gates, valves, operating mechanisms, cribs, fills, lock walls, guide and guard walls, and operating buildings.

06 Fish and Wildlife Facilities. This feature includes items such as ladders, elevators, locks and related facilities for passage of fish at dams and navigation locks and maintenance of fish runs; and provision for wildlife preservation.

07 Power Plant. This feature includes those facilities specifically required for the production of power other than those included in the feature “Dams,” and consists of the following: powerhouse, turbines, and governors, generators, accessory electrical equipment, miscellaneous power plant equipment, switchyard, and tailrace improvement for power. In the case where the powerhouse is an integral part of the power intake dam, the cost of the power intake dam is included in this feature. Where the structure of a dam also forms the foundation of the powerhouse, such foundation is considered a part of the dam. The cost of a cofferdam or the appropriate part thereof is charged to this feature. Units for production of power for the operation only of navigation, flood control, or other purpose projects (excluding those projects with power as a feature) are included in other features as appropriate.

08 Roads, Railroads and Bridges. This feature includes permanent roads, railroads, and bridges required for access and other purposes in connection with the construction and operation of the project. This feature does not include access roads to recreation facilities and areas, which will be charged to the feature “Recreation Facilities,” and service roads and service railroads on structures, which will be charged to the appropriate feature for the structure.

09 Channels and Canals. This feature includes all forms of excavation (including dredging, preparation of spoil disposal areas, and attendant facilities) necessary for the development and construction of channels, or improving existing watercourses for flood control and major drainage. Excavation of natural watercourses to provide adequate depths for navigation is Included. Excavation for specific structures, such as dams and locks used in the development of waterways and conservation of water resources, is Included with such structures. The removal of trees, brush, accumulated snags, drift, debris, water hyacinths and other aquatic growths from canals, harbors, and channels in navigable streams and tributaries thereof for navigation is included in this feature. Excavation, clearing and removal of accumulated snags, drifts, debris, and vegetable growth from streams for flood control and major drainage purposes also is included. Included in this feature are revetments, linings, dikes, and bulkheads constructed as channel improvement works forflood control or navigation, as against such items constructed for bank stabilization only. Also included are jetties constructed in connection with flood control channel improvements.

10 Breakwaters and Seawalls. This feature includes breakwaters, seawalls, piers, and like improvements constructed in connection with the protection of beaches, harbors, shores, and port facilities against the force of waves and encroachment of seas or lakes by direct wave action. Jetties, groins, and like structures provided in seas, lakes, tidewater reaches of rivers and canals, and harbors to control water flow and current, to maintain depth of channels, and to provide protection are included in this feature.

11 Levees and Floodwalls and Flood-proofing. This feature includes embankments and walls constructed to protect areas from inundation by overflow from creeks, rivers, lakes, canals, and other bodies of water. This feature consists of such items as: service roads on levee crown or landside berms, road ramps, closure structures, seepage control measures, erosion protection measures on levee slopes and on berms and bank slopes when an integral part of the levees or floodwalls; and drainage facilities, constructed to provide means for the passage of accumulated drainage and seepage water and sewage from the protected are over or through levees and floodwalls, comprising such items as interceptor and collection sewers and ditches, and pressurized sewers and drainage structures, including outfalls through levees of floodwalls. Levees locally called dikes are included in this feature. Flood-proofing includes construction activities associated with raising the buildings in the flood zone. Pumping plants are included in the feature "Pumping Plants. "

12 Navigation Ports and Harbors. (no description available, derived from a previous F&A regulation)

| | |
|---|---|
| 12100 | BULKHEADS, JETTIES, PIERS, DOCKS, SPOIL DISPOSAL AREA ATTENDANT FACILITIES, ETC. |
| 12200 | REVETMENTS AND LININGS |
| 12300 | EXCAVATION/DREDGING OF NAVIGATION PORTS AND HARBORS |
| 12400 | REMOVAL OF TREES, BRUSH, ACCUMULATED SNAGS, DRIFT, AQUATIC AND VEGETABLE GROWTHS AND DEBRIS |
| 12900 | ALL OTHER |

13 Pumping Plants. This feature includes pumping plants constructed to pass accumulated drainage and seepage water and sewage from the protected area over or through levees and floodwalls.

14 Recreation Facilities. This feature includes access roads; parking areas; public camping and picnicking areas, including tables and fireplaces; water supply; sanitary facilities; boat launching ramps; directional signs; and other facilities constructed primarily for public recreational use, including essential safety measures in connection therewith. The latter includes, as appropriate, sheltered anchorage areas for small craft, bathing areas readily accessible and reasonably safe, and safety provisions for visitors and fishermen in the project area.

15 Floodway Control and Diversion Structures. This feature included floodway control and diversion structures to provide for the release of flood waters from streams where discharges exceed flood capacity of the stream, including such items as diversion dams, gated or un-gated discharge structures, training walls, stilling basin, and those adjacent embankment sections forming part of the control structure. Construction of channels and levees not forming part of the main control structure, but necessary for operation of such structures is included in the appropriate feature "Channels and Canals" or "Levees and Floodwalls."

16 Bank Stabilization. This feature includes revetments, linings, training dikes, and bulkheads for stabilization of banks and watercourse to prevent erosion, sloughing, or meandering. Bank stabilization constructed in navigation channels or in connection with flood control channel improvement is included in the feature "Channels and Canals."

17 Beach Replenishment. This feature includes replacement of eroded beaches, for purposes of recreation and shore protection, by direct deposit of materials obtained by dredging or land excavation.

18 Cultural Resources Preservation. This feature pertains to the preservation, recovery, or other mitigation of significant scientific, pre-historical, historical, or archeological data, buildings, sites, districts,

structures, or objects. This feature covers costs during construction and includes excavation, preparation of areas, recovery of data, movement of artifacts, relics and objects of antiquity, analysis of data and preparation of reports thereon, and construction of cultural facilities.

19 Buildings, Grounds and Utilities. This feature includes permanent facilities such as operators quarters, administration and shop buildings, storage buildings and areas, garage buildings and areas, community buildings, local streets and sidewalks, landscaping, and electric, gas, water, and sewage facilities. Where space in a dam, powerhouse, or other basic structure is used in lieu of construction of any of the above-mentioned buildings, such allocated space is not separated from the basic structure.

20 Permanent Operating Equipment. This feature includes all project-owned operation and maintenance tools and equipment, such as laboratory, shop, warehousing, communications, and transportation equipment, and office furniture and equipment.

Source(s). The current Feature Codes and list of “plant Items” associated with each Feature Code are identified in Chapter 14 of ER 37-1-30 which may be found on the HQ Resource Management Sharepoint site at:https://Usace.army.mil/sites/RM/FAPolicy/default.aspx

Or direct link at:
https://cops.usace.army.mil/sites/rm/fapolicy/shared%20documents/forms/allitems.aspx?RootFolder=%2fsites%2fRM%2fFAPolicy%2fShared%20Documents%2fREGs&FolderC

Specific information on the supplemental Feature Codes (in *italics* above) are found in ER 37-2-10 http://140.194.76.129/publications/eng-regs/er37-2-10/ch08.pdf. ] which was superseded by the previously referenced ER 37-1-30.

(9) ADDITIONAL FEATURE CODE(S) = Required, if applicable, for all PED, Construction, and Operation and Maintenance work packages for which a Budget Request – Fed amount is entered. List all of the additional Feature Code(s) that are secondarily supporting other feature code asset categories. As an example, a budget work package to construct a new "storage building" would have a "Primary" Feature Code of 19 but also have an "Additional" Feature Code of 14 if it is associated with a recreation area. Note, not all work packages will have an "additional" Feature Code, in fact the vast majority will not. One or more Feature Code numbers above will be selected and entered into CW-IFD. Separate multiple entries with commas.

(10) MITIGATION REQUIREMENT CODE = Required for all PED, Construction and O&M work packages. Indicates that the Project, not necessarily the specific line item, will have, has, or had required mitigation as specified in a decision document or NEPA document. Includes all mitigation since 1970 not just that subject to P.L. 99-662 (WRDA 1986) Section 906 as amended. Values are: Y = Project includes mitigation requirements, N = Project does not include mitigation requirements. Check with planning/environmental staff if you are uncertain regarding the proper response. Generally N for ENR items. "N/A" will be auto-populated for FUSRAP, and business lines EM, RC, and WS.

(11) SUSTAINABILITY (EO13514) = A code used to track investments that will support implementation of Executive Order (EO) 13514 , EO 13423, Energy Policy Act, 2005 (EPAct) and Energy Independence and Security Act, 2007 (EISA) sustainability requirements. Valid values are 1-8 and N/A. The values 1-8 refer to the numbered goals (1-8) in the FY 12 USACE Sustainability Plan, which is available at https://team.usace.army.mil/sites/HQ/PDT/craft/Sustainability_Budget_Data_Spreadsheets. A single package may address one goal or multiple goals. Separate multiple entries with commas. Use the "Budget Item Justification" (for Hydropower use "Work Package Justification") column to provide more detail on how the item will support the sustainability goal(s) identified.

(12) P2 PROJECT NUMBER = A six digit numeric code which identifies a project in P2. This code is system-generated when a project is initiated in Primavera. In CW-IFD it is a display-only data field.

(13) FEM Work Order Number = an alpha-numeric field from FEM (Facilities and Equipment Maintenance) program that is a unique identifier connecting the budget work package to the budget execution system (FEM). The FEM Work Order Number is <u>required</u> for all non-routine maintenance budget work packages in increments 2 thru 9 (for **all** BLs) and should be assigned at the appropriate asset level. Selection of the specific work order numbering schema is at the discretion of the activity submitting the budget work package. Additionally, it is required that in FEM the Work Order:

(a) description should mirror the work package description and be preceded by "FY15 NRWP. "

(b) type should be "NRWP," Non-routine Work Package and

(c) the Command Work Type should be Deferred Maintenance (DM).

(14) BUDGET ITEM ID = A code to uniquely identify multiple entries within the same EROC, P2 Project, CW Type of Funds (Approp/CCS), Business Line, Increment, and Phase Activity. See paragraphs 15.c.(1)(d) and (l) in the MAIN part of this EC for more information concerning Budget Item ID.

(15) INCREMENT = Enter the appropriate number in accordance with the guidance in the Definitions/Glossary section in the main EC. Enter a "1" if the budget item meets the requirements for inclusion in the Initial increment as defined. Enter a "2" if the budgetable item should be considered for the second Increment, etc. Every project may not necessarily have a budget item in the first two Increments. A project may have multiple budget items in an increment.

(16) DIST RANK = The budget item's rank in the district's BY request.

(17) MSC RANK = The budget item's rank in the MSC BY request.

(18) HQ RANK = The budget item's rank in the HQ request. HQ will complete this item. It is not available for District or MSC entry.

(19) ARMY RANK = The budget item's rank in the Army request. HQ will complete this item. It is not available for District or MSC entry.

(20) PRESIDENT'S BUDGET RANK = The budget item's rank in the President's Budget Rank, will be entered by HQ after OMB Passback. It is not available for District or MSC entry.

(21) PHASE = A letter code used to indicate phase. See Table 3 for a list of valid values. Note that Joint activities on multi-purpose hydropower projects (Cat-Class 300) will have a phase code of OJ or MJ.

(22) PHASE ACTIVITY = A one or two letter code used to indicate categorizations of work within phases. See Table 3 for a list of valid values.

(23) PHASE STATUS = Status of the Phase listed in column 20 will be indicated with a letter code. NS = New Start; NP = New Phase; CN=Continuing Phase; LY= Last year of phase. See TABLE 3 in the MAIN part of this EC for definitions. If a study or a project is completing one phase and starting a new one in the BY (e.g. finish Feasibility and start PED), each should be a separate entry (one LY and one NP or NS). If there are multiple budget items for one phase of a project (especially construction) this code may vary. Perhaps the first entry would be NP and the second one CN and the last one if funded would complete the phase and be LY.

(24) PHASE COMPL = Required for all items in all accounts. Enter the fiscal year the phase for which funds are being requested is scheduled to complete. This is a 4-digit numeric field.

(a) See ANNEX I, Paragraph I-2-4 for Investigations program phase completion definitions.

(b) Construction completion is defined as when the project is turned over to the non-Federal sponsor to operate and maintain. The milestone for completion of construction and the point at which no more construction funds are required, is the District Commander's notice of completion of the project. See ANNEX II, paragraph II-2-10 for more information.

(c) For items in the O&M account, enter the BY unless the requested funds are scheduled to be carried over. For APPROP ABBREV "OM" and "MRT-OM", N/A will be auto-populated for the EN-Stewardship, RC and WS business lines. For APPROP ABBREV "OM" and "MRT-OM", the BY will be auto-populated for the EN-Restoration, FRM, H and N business lines.

**(d) For the ENR business line ONLY – this column must be populated with the FY the project is physically complete --- NOT when the project is turned over to the sponsor.**

(25) PROGRAM NAME = Name associated with the Program Code which is entered in Primavera. In CW-IFD it is a display-only data field.

(26) P2 PROJECT NAME = Name of the P2 project. The project name is entered in Primavera. In CW-

IFD it is a display-only data field.

(27) SYSTEM CODE = The System Code is used to identify the primary system in which the project or study (Program Code) is located. See ANNEX III, TABLE III-5-1 for a list of valid system codes. Required entry for all items.

(28) BASIN CODE = The USGS Hydrologic Unit Codes (HUC) is used to identify systems/watersheds. The four-digit code for the appropriate sub-region as defined by USGS will be entered for every budget item. These codes may be found at http://water.usgs.gov/GIS/huc_name.html. Some programmatic elements may cover more than one sub-region. If there are separable elements enter the code that is appropriate for the separable element. If there are no separable elements enter the code applicable to most of the project or area where funding will be applied. Required entry for all items.

(29) STATE = Enter the two letter abbreviation for the primary state in which the study or project (Program Code) is located.

(30) CONTRACT TYPE = Required for all contract items in Construction and any contract with a remaining amount over $20,000,000 in any phase. Enter one of the following: CC for continuing contract; CF for fully funded contract; CB for base contract with options; or CI for incrementally funded contract.

(31) CURRENT BUD - FED = This is a display-only field which is auto-populated from the project's current schedule in Primavera. It displays the BY 'At Completion Cost' Federal (Corps) amount for the budget item.

(32) BUDGET REQUEST - FED = The Federal (Corps) amount requested for the work proposed to be accomplished with this budget item in the BY. Enter the amount in whole dollars, rounded to the nearest thousand. Example: Five million four hundred thirty two thousand dollars should be entered as 5,432,000.

(33) WORK CATEGORY CODE = The Work Category Codes (WCCs) is used to further identify the business line specific type of work to be performed within a work package. For the FY 2016 Budget, enter the WCCs for the budgeted work package into CWIFD that have following HQ Ranks; HQ Rank 1, HQ Rank 2, and HQ Rank 3. For FY17 Budget Development, enter the WCCs for all applicable work packages