

**ARMY CIVIL WORKS PROGRAM  
FY 2020 WORK PLAN - INVESTIGATIONS**

STATE	DIVISION	BUSINESS PROGRAM 1/	STUDY OR PROGRAM	FY 2020 PBDU	FY 2020 EXPLANATORY STATEMENT	ADDITIONAL WORK PLAN AMOUNT	TOTAL FY 2020 ALLOCATION	LINE ITEM OF ADDITIONAL FUNDING 1/	SUMMARY OF WORK TO BE ACCOMPLISHED WITH CONFERENCE ALLOCATION	SUMMARY OF WORK TO BE ACCOMPLISHED WITH FUNDING POT ALLOCATION
AK	POD	2/	APOON MOUTH OF YUKON, AK				150,000		Complete disposition study	
AK	POD	2/	ST. MICHAEL CANAL, AK				150,000		Complete disposition study	
AL	SAD	NHD	MOBILE HARBOR, AL	700,000	700,000		700,000		Complete preconstruction, engineering and design phase	
AR	SWD	NIH	THREE RIVERS, AR	1,500,000	1,500,000	2,500,000	6,050,000	4	Continue preconstruction, engineering and design phase	Continue preconstruction, engineering and design phase
AR	SWD	NIL	THREE RIVERS, AR			2,050,000		6		
CA	SPD	ENR	EAST SAN PEDRO BAY ECOSYSTEM RESTORATION, CA			565,000	565,000	8		Complete the feasibility study phase
CA	SPD	FDRR	GUADALUPE RIVER, CA (GENERAL REEVALUATION REPORT)			1,500,000	1,500,000	1		Initiate and complete a General Reevaluation Report.
CA	SPD	2/	LOS ANGELES COUNTY DRAINAGE AREA (CHANNELS), CA				535,000		Continue disposition study	
CA	SPD	ENR	LOS ANGELES RIVER ECOSYSTEM RESTORATION, CA			1,857,000	1,857,000	7		Continue preconstruction, engineering and design phase
CA	SPD	FDRR	NORTHERN CALIFORNIA STREAMS, LOWER CACHE CREEK, YOLO COUNTY, WOODLAND & VICINITY, CA			635,000	635,000	2		Complete the feasibility study phase
CA	SPD	NHD	OAKLAND INNER HARBOR TURNING BASIN WIDENING, CA			1,500,000	1,500,000	5		New Start: Initiate the feasibility study phase
CA	SPD	FDRR	PAJARO RIVER AT WATSONVILLE, CA			1,307,000	1,800,000	1		Initiate preconstruction, engineering and design phase
CA	SPD	FOTH	PAJARO RIVER AT WATSONVILLE, CA			493,000		2		
CA	SPD	2/	SALINAS RESERVOIR (SANTA MARGARITA LAKE), CA				326,000		Continue disposition study	
CA	SPD	FDRR	SAN CLEMENTE SHORELINE, CA			505,000	505,000	3		Initiate preconstruction, engineering and design phase
CA	SPD	FDRR	SAN DIEGO COUNTY SHORELINE (ENCINITAS-SOLANA BEACH), CA			400,000	400,000	3		Initiate preconstruction, engineering and design phase
CA	SPD	FDRR	SAN FRANCISCO WATERFRONT STORM DAMAGE REDUCTION, CA	800,000	800,000	1,500,000	2,300,000	3	Continue the feasibility study phase	Continue the feasibility study phase
CA	SPD	FDRR	SAN JOAQUIN RIVER BASIN, LOWER SAN JOAQUIN, CA			300,000	300,000	2		Complete preconstruction, engineering and design phase
CA	SPD	FDRR	SOUTH SAN FRANCISCO BAY SHORELINE (PHASE II), CA	600,000	600,000		600,000		Continue the feasibility study phase	
CA	SPD	FDRR	WEST SACRAMENTO, CA	400,000	400,000	1,072,000	1,472,000	2	Continue preconstruction, engineering and design phase	Continue preconstruction, engineering and design phase
CA	SPD	ENR	YUBA RIVER FISH PASSAGE, CA (ENGBRIGHT AND DAGUERRE POINT DAMS)			4,478,000	4,478,000	8		Initiate preconstruction, engineering and design phase
ID	NWD	ENR	ALBENI FALLS DAM (FISH PASSAGE), ID			6,500,000	6,500,000	8		Initiate and complete preconstruction, engineering and design phase
IL	LRD	ENR	INTERBASIN CONTROL OF GREAT LAKES - MISSISSIPPI RIVER AQUATIC NUISANCE SPECIES, IL, IN, OH & WI	50,000	50,000	265,000	315,000	8	Vertical team coordination, stakeholder coordination and engagement, budget development and defense, public outreach, Asian Carp Regional Coordinating Committee and Chicago Area Waterway System Advisory Committee related activities, and response to Congressional and media inquiries	Vertical team coordination, stakeholder coordination and engagement, budget development and defense, public outreach, Asian Carp Regional Coordinating Committee and Chicago Area Waterway System Advisory Committee related activities, and response to Congressional and media inquiries
IL	LRD	NIH	UPPER MISSISSIPPI RIVER - ILLINOIS WATERWAY SYSTEM, IL, IA, MN, MO & WI			3,000,000	4,500,000	4		Continue preconstruction, engineering and design phase
IL	LRD	ENR	UPPER MISSISSIPPI RIVER - ILLINOIS WATERWAY SYSTEM, IL, IA, MN, MO & WI			1,500,000		7		
KS	NWD	FDRR	KANSAS RIVERS RESERVOIRS FLOOD AND SEDIMENT STUDY, KS, CO & NE			750,000	750,000	1		Complete the feasibility study phase
MD	NAD	ENR	ANACOSTIA WATERSHED RESTORATION, PRINCE GEORGE'S COUNTY, MD			1,935,000	1,935,000	8		Initiate and complete preconstruction, engineering and design phase
MD	NAD	NHD	BALTIMORE HARBOR & CHANNELS (SEAGIRT LOOP DEEPENING), MD			1,500,000	1,500,000	5		New Start: Initiate the feasibility study phase
MD	NAD	ENR	EASTERN SHORE, MID-CHESAPEAKE BAY ISLAND, MD			500,000	500,000	7		Continue preconstruction, engineering and design phase
MO	NWD	FDRR	LOWER MISSOURI BASIN FLOOD RISK AND RESILIENCY STUDY, IA, KS, NE & MO			1,500,000	1,500,000	1		New Start: Initiate the feasibility study phase
MN	MVD	2/	UPPER ST. ANTHONY FALLS, MISSISSIPPI RIVER, MN				354,000		Complete disposition study	
MO	NWD	ENR	LOWER OSAGE RIVER AT LOCK AND DAM NO. 1, MO			1,500,000	1,500,000	8		New Start: Initiate the feasibility study phase
NC	SAD	2/	CAPE FEAR LOCKS AND DAMS 1-3, NC				485,000		Continue disposition study	
NY	NAD	NHD	NEW YORK AND NEW JERSEY HARBOR DEEPENING CHANNEL IMPROVEMENTS, NY & NJ			200,000	200,000	5		Complete the feasibility study phase
PA	NAD	NIH	UPPER OHIO RIVER, ALLEGHENY AND BEAVER COUNTIES, PA			7,700,000	7,700,000	6		Complete preconstruction, engineering and design for the Montgomery Lock
TX	SWD	FDRR	CENTRAL CITY FLOOD AND STORM DAMAGE REDUCTION, TX			1,500,000	1,500,000	2		New Start: Initiate the feasibility study phase
TX	SWD	MULTI	GIWW COASTAL RESILIENCY STUDY, TX			1,500,000	3,000,000	4		New Start: Initiate the feasibility study phase
TX	SWD	MULTI	GIWW COASTAL RESILIENCY STUDY, TX			1,500,000		8		
TX	SWD	NHD	HOUSTON SHIP CHANNEL, TX			1,130,000	1,130,000	5		Initiate preconstruction, engineering and design phase
VA	NAD	FDRR	CITY OF NORFOLK, VA			943,000	2,538,000	1		Continue preconstruction, engineering and design phase
VA	NAD	FDRR	CITY OF NORFOLK, VA			1,595,000		3		
VA	NAD	NHD	NORFOLK HARBOR AND CHANNELS, VA (DEEPENING)	2,500,000	2,500,000		2,500,000		Complete preconstruction, engineering and design phase	
WA	NWD	WTR	HOWARD A. HANSON DAM (FISH PASSAGE), WA			2,143,000	3,000,000	7		Complete post-authorization change report
WA	NWD	JOINT	HOWARD A. HANSON DAM (FISH PASSAGE), WA			857,000		8		
WA	NWD	ENR	PUGET SOUND NEARSHORE MARINE HABITAT RESTORATION, WA (DUCKABUSH RIVER ESTUARY)	1,467,000	1,467,000		1,467,000		Continue preconstruction, engineering and design for Duckabush River Estuary project	
WA	NWD	NHD	SEATTLE HARBOR, WA			1,670,000	1,670,000	5		Initiate and complete preconstruction, engineering and design phase
XX	ERDC	RI	ACCESS TO WATER DATA	360,000	360,000		360,000		Provide access to water resources data and related water quality data to the public.	
XX	ERDC	RI	AUTOMATED INFORMATION SYSTEMS SUPPPORT TRI-SERVICE CADDIGIS TECHNOLOGY CENTER	250,000	250,000		250,000		Develop and publish geospatial standards.	
XX	ERDC	RI	COASTAL FIELD DATA COLLECTION	1,000,000	2,500,000		2,500,000		Operating and maintaining coastal field research facility to develop coastal flood data. Systematically measure, analyze, and assemble long term coastal data that field offices use to accomplish the Corps mission in coastal navigation and storm damage reduction.	
XX	IWR	RI	COMMITTEE ON MARINE TRANSPORTATION SYSTEMS	50,000	50,000		50,000		Fund Corps participation on the CMTS and support publication of related reports	
XX	HQ	RI	COORDINATION WITH OTHER WATER RESOURCE AGENCIES	350,000	1,000,000		1,000,000		Participation in the North American Waterfowl Management Program; National Estuary Program; and Regional Planning Bodies of the National Ocean Council. Review of environmental impacts resulting from installation of USDA project features. Review and determination of the flood control benefits of studies conducted by the Bureau of Reclamation for proposed Bureau of Reclamation projects.	
XX	HQ	RI	DISPOSITION OF COMPLETED PROJECTS 2/	1,000,000	2,000,000		[2,000,000]		Undertake disposition studies needed to identify necessary actions to safely dispose of infrastructure. Funded studies are listed individually under the State and Project the study is being conducted.	
XX	IWR	RI	ENVIRONMENTAL DATA STUDIES	80,000	80,000		80,000		Maintain and support a web-based geospatial data system that displays national ecological data	
XX	MVD	RI	FERC LICENSING	100,000	100,000		100,000		Conduct reviews of Federal Energy Regulatory Commission (FERC) preliminary permit & license applications for development of hydroelectric power.	
XX	IWR	RI	FLOOD DAMAGE DATA	230,000	230,000		230,000		Collect and maintain basic flood damage data to support research efforts and to inform specific project studies	
XX	HQ	RI	FLOOD PLAIN MANAGEMENT SERVICES	15,000,000	15,000,000		15,000,000		Provide site specific flood and flood plain data and assistance to State and local communities	

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XX	MVD	RI	HYDROLOGIC STUDIES	500,000	500,000		500,000		Collect and study basic hydrologic data for major storm events or special hydrologic processes; Develop flood inundation data for improved real time flood forecasting	
XX	HQ	RI	INTERAGENCY AND INTERNATIONAL SUPPORT		400,000		400,000		Support other Federal agencies, international organizations and foreign governments to address problems of national significance, and to collaborate with these entities	
XX	HQ	RI	INTERAGENCY WATER RESOURCE DEVELOPMENT	100,000	100,000		100,000		Coordinate with potential non Federal sponsors	
XX	IWR	RI	INTERNATIONAL WATER STUDIES	125,000	125,000		125,000		Participation in and support of boundary water treaties and related international agreements between the United States and Canada	
XX	IWR	RI	INVENTORY OF DAMS	400,000	400,000		400,000		Maintain and administer the National Inventory of Dams database and web site	
XX	IWR	RI	NATIONAL FLOOD RISK MANAGEMENT PROGRAM	5,000,000	5,000,000		5,000,000		Continue flood risk management coordination actions and plan development at the National, Regional and State levels and participate in state level intergovernmental teams to support states and local communities address flood hazard mitigation priorities	
XX	IWR	RI	NATIONAL SHORELINE MANAGEMENT STUDY		5,000,000		5,000,000		Support the Coastal Systems Portfolio Initiative	
XX	HQ	RI	PLANNING ASSISTANCE TO STATES	5,000,000	9,000,000		9,000,000		Provide planning and technical assistance to States and local communities for a wide variety of water resource efforts, including watershed activities benefiting environmental restoration, flood risk management, and other watershed resources	
XX	HQ	RI	PLANNING SUPPORT PROGRAM	3,500,000	3,500,000		3,500,000		Support Planning Associates Program, Planning Centers of Expertise, and Planning Modernization efforts	
XX	IWR	RI	PRECIPITATION STUDIES	200,000	200,000		200,000		Conduct hydro meteorological studies coordination/support with the National Weather Service	
XX	ERDC	RI	REMOTE SENSING / GEOGRAPHIC INFORMATION SYSTEM SUPPORT	75,000	575,000		575,000		Provide technical support within USACE for remote sensing and GIS	
XX	ERDC	RI	RESEARCH AND DEVELOPMENT	13,000,000	27,115,000		27,115,000		Take advantage of rapidly developing technologies and techniques that will promote significant monetary savings and greater reliability, safety, enhanced efficiency, and environmental sustainability in planning, design, construction, operation and maintenance of civil works activities, which include Navigation (including Hydropower); Flood and Coastal Storm Damage Reduction; Emergency Management, Water Supply, and Recreation; and Environmental (including Regulatory)	
XX	ERDC	RI	SCIENTIFIC AND TECHNICAL INFORMATION CENTERS	50,000	50,000		50,000		Gather and disseminate information as required by P.L. 99 802, Federal Technology Transfer Act of 1986	
XX	HQ	RI	SPECIAL INVESTIGATIONS	1,000,000	1,000,000		1,000,000		Support efforts on requests from sources outside the Corps of Engineers, for information relating to unauthorized projects and other unauthorized and unfunded projects and/or activities, and which are not accomplished with a view toward determining whether a project can be developed.	
XX	IWR	RI	STREAM GAGING	3,550,000	4,550,000		4,550,000		Pay USGS to gather data and operate and maintain approximately 80 existing stream gaging stations, including repair and replacement, and to install new stream gaging equipment, at locations that are not directly associated with a project that the Corps owns or with a particular Corps study, where such data are needed to support the Corps' understanding of flood risk (\$3.55 million); Work with NRCS and the states of Montana, North Dakota, South Dakota, and Wyoming on soil moisture and snowpack monitoring (\$1 million).	
XX	IWR	RI	TRANSPORTATION SYSTEMS	1,000,000	1,000,000		1,000,000		Fund information and technical services and support for navigation projects; Update Regional Economic System Modeling tool	
XX	HQ	RI	TRIBAL PARTNERSHIP PROGRAM	500,000	2,548,000		2,548,000		Funds will be used to initiate, continue, and complete studies with Tribes and for program management	
<b>GRAND TOTAL</b>				<b>60,437,000</b>	<b>90,650,000</b>	<b>60,350,000</b>	<b>151,000,000</b>			

1/ KEY:	FUNDING POT NAME	ADDITIONAL FUNDING
1	FLOOD AND STORM DAMAGE REDUCTION	6,000,000
2	FLOOD AND STORM DAMAGE REDUCTION (FLOOD CONTROL)	4,000,000
3	FLOOD AND STORM DAMAGE REDUCTION (SHORE PROTECTION)	4,000,000
4	NAVIGATION	7,000,000
5	NAVIGATION (COASTAL AND DEEP-DRAFT)	6,000,000
6	NAVIGATION (INLAND)	9,750,000
7	OTHER AUTHORIZED PROJECT PURPOSES	6,000,000
8	OTHER AUTHORIZED PROJECT PURPOSES (ENVIRONMENTAL RESTORATION OR COMPLIANCE)	17,600,000
FDRR	FLOOD DAMAGE REDUCTION RIVERINE	
FDRC	FLOOD DAMAGE REDUCTION COASTAL	
FOTH	FLOOD DAMAGE REDUCTION OTHER	
NHS	COASTAL NAVIGATION SHALLOW DRAFT	
NHD	DEEP DRAFT NAVIGATION COASTAL	
NIH	INLAND WATERWAYS HIGH USE	
NIL	INLAND WATERWAYS LOW USE	

2/ The studies funded in Disposition of Completed Projects are listed individually under the State and Project where the study is being conducted.