EXPLANATORY STATEMENT FOR THE ENERGY AND WATER DEVELOPMENT APPROPRIATIONS BILL, 2023

PURPOSE

The purpose of this bill is to provide appropriations for fiscal year 2023, beginning October 1, 2022 and ending September 30, 2023, for energy and water development, and for other related purposes. It supplies funds for water resources development programs and related activities of the Corps of Engineers' Civil Works program in Title I; for the Department of the Interior's Bureau of Reclamation and Central Utah Project in Title II; for the Department of Energy's energy research and development activities, including environmental restoration and waste management, and the atomic energy defense activities of the National Nuclear Security Administration in Title III; and for independent agencies and commissions, including the Appalachian Regional Commission, Delta Regional Authority, Denali Commission, Northern Border Regional Commission, and the Nuclear Regulatory Commission in Title IV.

SUMMARY OF ESTIMATES AND RECOMMENDATIONS

The fiscal year 2023 budget estimates for the bill total $55,529,941,000 in new budget (obligational) authority. The recommendation of the Committee totals $57,540,000,000. This is $2,010,059,000 above the budget estimates and $4,558,000,000 above the enacted appropriation for the prior fiscal year.

SUBCOMMITTEE HEARINGS

To develop this recommendation, the Committee held three budget hearings in April and May 2022 in connection with the fiscal year 2023 budget requests. The hearings provided officials from the agencies with an opportunity to present the administration's most pressing priorities to the Committee.

INTRODUCTION

The Committee's recommendation includes funding for the highest priority activities across the agencies funded in the bill. The recommendation includes funds for critical water infrastructure, including our Nation's inland waterways, ports, and harbors; agricultural water supply and drought relief in the West; groundbreaking scientific research and development, including world-class supercomputing; support for the Nation's nuclear weapons, non-proliferation, and nuclear Navy programs; and critical economic development.

TITLE I

CORPS OF ENGINEERS—CIVIL

DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS—CIVIL

OVERVIEW OF RECOMMENDATION

The Committee recommends $8,307,990,000 for the Corps of Engineers [Corps]. The Committee's recommendation sets priorities by supporting our Nation's water infrastructure.

INTRODUCTION

The Corps' Civil Works mission is to provide quality, responsive engineering services to the Nation in peace and war. Approximately 23,000 civilians and about 290 military officers are responsible for executing the Civil Works mission. This bill only funds the Civil Works functions of the Corps.

The Corps maintains our inland waterways, keeps our ports open, manages a portion of our drinking water supply, provides emission-free electricity from dams, restores aquatic ecosystems, looks after many of our recreational waters, helps manage the river levels during flooding, provides environmental stewardship and emergency response to natural disasters. The annual net economic benefit generated by the Corps' Civil Works mission is estimated to be $89,000,000,000, which equates to a return of about $12.00 for every $1.00 expended.

The Corps' responsibilities include:

—Navigation systems, including 13,000 miles of coastal navigation channels, 12,000 miles of inland waterways, 239 lock chambers, and 1,067 harbors, which handle over 2.4 billion tons of cargo annually;

—Flood risk management infrastructure, including 718 dams, 12,400 miles of levees, and multiple hurricane and storm damage risk reduction projects along the coast;

—Municipal and industrial water supply storage at 136 projects spread across 25 States;

—Environmental stewardship, infrastructure, and ecosystem restoration;

—Recreation for approximately 262 million recreation visits per year to Corps projects;

—Regulation of waters under Federal statutes; and

—Maintaining hydropower capacity of nearly 24,000 megawatts at 75 projects.

ADVANCED FUNDS AGREEMENTS

Under the advanced funds authority, the Corps is authorized to accept, from a State or political subdivision thereof, all funds covering both the Federal and non-Federal share of total project costs required to construct an authorized water resources development project or separable element thereof. Based on the non-Federal sponsor's commitment to provide all funds required to construct a project, or separable element thereof, the Corps may undertake construction of the project prior to a new start determination related to Federal funding for the project. In light of a non-Federal sponsor's commitment to provide all funding required for construction of the project, or separable element thereof, the Committee directs that Federal funds shall not be provided for such construction. Instead, for such projects, any Federal funding may be provided only after completion of construction, as repayment of the Federal share of such construction, from funding provided in this or subsequent acts for reimbursements or repayments, and would be subject to a new start designation. The Committee does not intend that this direction apply to any project with an advanced funds project partnership agreement that was in place prior to December 20, 2019.

BUDGET STRUCTURE CHANGES

The fiscal year 2023 budget request for the Corps proposed numerous structural changes, including two accounts—Harbor Maintenance Trust Fund [HMTF] and Inland Waterways Trust Fund [IWTF]; the shifting of various studies and projects between accounts and business lines; and the consolidation of certain line items. The Committee rejects all such proposed changes and instead recommends funding for the requested studies and projects in the manner in which funding has traditionally been provided. Unless expressly noted, the Committee recommends studies and projects remain at the funding levels included in the budget request, but in different accounts than in the budget request. In particular:

—Projects requested in the HMTF account are shown in the Construction, Mississippi River and Tributaries, or Operation and Maintenance accounts, as appropriate;

—Projects requested in the IWTF account are shown in the Construction account;

—Dam safety modification studies requested in the Investigations account are shown in the Dam Safety and Seepage/Stability Correction Program in the Construction account;

—Disposition studies will continue to be funded under the remaining item line Disposition of Completed Projects in the Investigations account;

—Dredged material management plans requested in the Investigations and Mississippi River and Tributaries account are shown in the Operations and Maintenance account;

—Interagency and International Support activities is not consolidated within the Coordination with Other Water Resource Agencies remaining item in Investigations;

—Inspection of Completed Works, Project Condition Surveys, and Scheduling of Reservoir Operations will continue to be funded under States instead of consolidated into a national program as requested in the Operation and Maintenance account and the HMTF account;
—Inspection of Completed Works will continue to be funded under the individual States instead of consolidated into a national program as requested in the Mississippi River and Tributaries account;
—Sand mitigation projects requested in the HMTF account are shown in the Construction account; and
—Tribal Partnership projects will continue to be funded under the Tribal Partnership Program remaining item line in the Investigations account as well as in the remaining line item in the Construction account, and these amounts may also be used to cover necessary administrative expenses prior to agreement execution.

If the Corps proposes budget structure changes in future fiscal years, the proposal shall be accompanied by a display of the funding request in the traditional budget structure.

CONGRESSIONALLY DIRECTED SPENDING

The Committee included congressionally directed spending, as defined in section 5(a) of rule XLIV of the Standing Rules of the Senate. The Committee funded only projects and studies that are authorized by law. In the interest of providing full disclosure of funding provided in this Title, all projects requested and funded are listed in a table accompanying this report. All of the projects funded in this report have gone through the same rigorous process and approvals as those proposed by the President.

CONTINUING CONTRACTS

The Corps is authorized by section 621 of title 33, United States Code to execute Civil Works projects through the use of a Special Continuing Contract Clause as described in Engineer Circulars 11–2-221 and 11–2-222, and the Incremental Funding Clause [DFARS 252.2327–7007]. This permits the Corps to award the entire contract and fund the contract incrementally until completion. This acquisition strategy is well-suited to large, multi-year projects, including those with life safety, national security, or legal concerns, and is being used successfully at multiple projects nationwide. The Administration is directed to continue using its existing continuing contract authorities in accordance with the general provisions in this act as an efficient approach to managing large, multi-year projects.

CONTINUING RESOLUTION APPORTIONMENT

For the purposes of continuing resolutions starting in fiscal year 2018, the Office of Management and Budget changed the long-standing policy by which funding is apportioned to the Civil Works program of the Corps. Under the new policy, funding within an individual account was apportioned separately for amounts from the general fund of the Treasury and from various trust funds. The

Committee has long intended the Corps to have the flexibility to address projects most in need of funding under a continuing resolution. The creation of artificial accounting distinctions has the potential to cause serious impediments to the efficient and effective implementation of the Civil Works program. For example, work on many navigation projects is limited by environmental or other regulatory windows. Further limitations imposed by separately apportioning HMTF monies could cause serious disruptions to the economic activity that depends on these navigation channels.

For these reasons, the Committee disagrees with the change in apportionment policy and directs the Administration to follow the previous policy during any continuing resolutions that may occur in this or any future fiscal years.

DEEP DRAFT NAVIGATION

The CARES Act (Public Law 116–136) made certain changes to the methods by which funds from the HMTF are treated under discretionary budget rules. The Committee recommends an estimated $2,318,000,000 in accordance with these changes. This funding will enable the Corps to make significant progress on the backlog of dredging needs. Meeting these needs, including deeper drafts to accommodate the move toward larger ships, will be essential if the Nation is to remain competitive in international markets and to continue advancing economic development and job creation domestically.

Additionally, the Water Resources Development Act [WRDA] of 2020 made certain changes to the methods by which funds for donor and energy transfer ports under section 2106(c) of the Water Resources Reform and Development Act [WRRDA] of 2014 are treated under discretionary budget rules. The Committee recommends $56,000,000 for these purposes.

INLAND WATERWAYS SYSTEM

The inland waterways system is essential for national security and for sustaining our global economic competitiveness as it serves as an integral component of the Nation's intermodal transportation system. Waterways are more efficient compared to alternative forms of freight transportation because barge transport allows for the movement of more cargo per shipment. Barges on the inland system transport many commodities including coal, petroleum, grain, and other farm products. The importance of modernizing inland waterway infrastructure is essential to the Nation's economy. Congress continues to invest in inland waterway projects and provided over $2,500,000,000 in fiscal year 2022 for new and ongoing work. The Corps shall continue to prioritize funding for ongoing construction projects. The Committee recommends appropriations to fund all ongoing work at full capability for 2023.

INVASIVE CARP

The Corps is undertaking multiple efforts to stop invasive carp from reaching the Great Lakes. The Committee notes that Congress authorized a comprehensive suite of measures to counter invasive carp at the Brandon Road Lock and Dam, critical to keep-

ing invasive carp out of the Chicago Area Waterways System, which is the only continuous connection between the Great Lakes and Mississippi River basins. The Committee notes that the Corps' spend plan for fiscal year 2022 funding provided under the Infrastructure Investment and Jobs Act [IIJA] (Public Law 117–58) included $225,838,000 to initiate construction of the Brandon Road Lock and Dam, Aquatic Nuisance Species Barrier project. Further, the Committee appreciates that the fiscal year 2023 budget request includes $47,880,500 for the project to continue this important effort.

As the Corps prioritizes projects, it shall consider critical projects to prevent the spread of invasive species. The Corps is directed to provide quarterly updates to the Committee on the progress and status of efforts to prevent the further spread of invasive carp, including the Brandon Road Recommended Plan and the second array at the Chicago Sanitary and Ship Canal; the location and density of carp populations; the use of emergency procedures previously authorized by the Congress; and the development, consideration, and implementation of new technological and structural countermeasures; and progress on Preconstruction Engineering and Design [PED] work.

The Corps shall continue to collaborate at levels commensurate with previous years with the U.S. Coast Guard, the U.S. Fish and Wildlife Service, the State of Illinois, and members of the Invasive Carp Regional Coordinating Committee, including identifying navigation protocols that would be beneficial or effective in reducing the risk of vessels inadvertently carrying aquatic invasive species, including invasive carp, through the Brandon Road Lock and Dam in Joliet, Illinois. Any findings of such an evaluation shall be included in the quarterly briefings to the Committees. The Corps is further directed to implement navigation protocols shown to be effective at reducing the risk of entrainment without jeopardizing the safety of vessels and crews. The Corps and other Federal and State agencies are conducting ongoing research on additional potential invasive carp solutions. The Corps is directed to provide to the Committee not later than 30 days after enactment of this act a briefing on such navigation protocols and potential solutions.

ADDITIONAL FUNDING

The Committee recommends funding above the budget request for Investigations, Construction, Operation and Maintenance, Mississippi River and Tributaries, Regulatory, and Expenses. This funding is for additional work that either was not included in the budget request or was inadequately budgeted. A study or project may not be excluded from evaluation for additional funding due to its inconsistency with administration policy. None of the funds may be used for any item for which the Committee has specifically denied funding.

The Committee includes the three new start Investigations studies in the budget request without change. The Committee also includes additional new starts in Investigations and Construction. No further new starts are recommended in this act.

The Administration is reminded these funds are in addition to its budget request, and Administration budget metrics shall not be a

reason to disqualify a study or project from being funded. The focus of the allocation process shall favor the obligation, rather than the expenditure, of funds for work in fiscal year 2023.

Funding associated with each category of Additional Funding may be allocated as appropriate, to any eligible study or project within that category; funding associated with each subcategory may be allocated only to eligible studies or projects, within that subcategory.

Work Plan.—Not later than 60 days after the date of enactment of this act, the Corps shall provide to the Committee a work plan consistent with the following general guidance, as well as the specific direction the Committee provides within each account: (1) a detailed description of the rating system(s) developed and used to evaluate studies and projects; (2) delineation of how these funds are to be allocated; (3) a summary of the work to be accomplished with each allocation, including phase of work and the study or project's remaining cost to complete (excluding Operation and Maintenance); and (4) a list of all studies and projects that were considered eligible for funding but did not receive funding, including an explanation of whether the study or project could have used funds in fiscal year 2023 and the specific reasons each study or project was considered less competitive for allocation of funds.

The Administration shall not delay apportioning the funding for Congressionally Directed Spending while developing the work plan for additional funding. The initiation of construction of an individually authorized project funded within a programmatic line item shall not require a new start designation if some amount of construction funding under such programmatic line item was appropriated and expended during the previous fiscal year. Once a study is completed, PED can be funded in Investigations. The Committee urges the Corps within its Flood and Coastal Storm Damage Reduction mission to strive for a balance between inland and coastal projects. The Corps is encouraged to support opportunities to restore critical habitat and enhance the Nation's economic development, job growth, and international competitiveness.

The following shall not require a new start or new investment decision and shall be considered ongoing work:

—When moving from feasibility to PED;
—To initiate work on a separable element of a project when construction of one or more separable elements of that project was initiated previously;
—Any authorized environmental infrastructure project;
—Study or construction activities related to individual projects authorized under section 1037 of WRRDA;
—Work undertaken to correct a design deficiency on an existing Federal project; and
—Projects that have previously received construction funding for authorized work.

REPORTING REQUIREMENT

The Corps shall provide a quarterly report to the Committee, which includes the total budget authority and unobligated balances by year for each program, project, or activity, including any prior year appropriations. The Assistant Secretary of the Army (Civil

Works) shall provide a quarterly report to the Committee, which includes the total budget authority and unobligated balances by year for each activity funded in the Office of the Assistant Secretary of the Army (Civil Works) account, including any prior year appropriations.

REPROGRAMMING

The Committee is retaining the reprogramming legislation provided in the Energy and Water Development and Related Agencies Appropriations Act, 2020 (Public Law 116–94).

UPDATED CAPABILITIES

Given the nature of the Civil Works program, the Committee understands the assumptions made in the budget request regarding the amount of work that can be accomplished in fiscal year 2023 for a particular project can change for a number of unforeseen reasons. The Committee expects updated capabilities will be addressed and adjusted during conference using the latest data available at that time.

INVESTIGATIONS

Appropriations, 2022	$143,000,000
Budget estimate, 2023	105,910,000
Committee recommendation	165,668,000

The Committee recommends $165,668,000 for Investigations. Funding in this account is used to develop feasibility studies and conduct PED to address the Nation's water infrastructure needs, in support of project authorization.

COMMITTEE RECOMMENDATION

The table below displays the budget request and the Committee's recommendation for Investigations:

CORPS OF ENGINEERS—INVESTIGATIONS

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
ALABAMA			
CLAIRBORNE AND MILLERS FERRY LOCKS AND DAMS (FISH PASSAGE), LOWER ALABAMA RIVER, AL	400	400	
DEEPENING STUDY FOR TENNESSEE–TOMBIGBEE WATERWAY (TTWW), AL AND MS AND BLACK WARRIOR AND TOMBIGBEE (BWT) RIVERS		2,600	
ALASKA			
AKUTAN HARBOR NAVIGATIONAL IMPROVEMENTS, AK	300		†
HOMER NAVIGATION IMPROVEMENTS, AK		300	
ST. GEORGE HARBOR IMPROVEMENT, AK		2,500	
ARIZONA			
TRES RIOS, AZ (GENERAL REEVALUATION REPORT)	500	500	
CALIFORNIA			
CARBON CANYON DAM, SANTA ANA RIVER BASIN, CA	1,500		‡
LOS ANGELES COUNTY DRAINAGE AREA (CHANNELS), CA	185		†
LOWER SAN JOAQUIN (LATHROP & MANTECA), CA	600	600	
MOJAVE RIVER DAM, CA	100		‡
MURRIETA CREEK, CA (GENERAL REEVALUATION REPORT)	500	500	

CORPS OF ENGINEERS—INVESTIGATIONS—Continued

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
NORTHERN CALIFORNIA STREAMS, LOWER CACHE CREEK, YOLO COUNTY, WOODLAND & VICINITY, CA		5,000	
SACRAMENTO RIVER, YOLO BYPASS, CA	500	500	
UPPER YUBA RIVER, COMPREHENSIVE STUDY, CA		300	
CONNECTICUT			
HARTFORD & EAST HARTFORD, CT		1,000	
FLORIDA			
CENTRAL & SOUTHERN FLORIDA (C&SF) FLOOD RESILIENCY (SECTION 216) STUDY, FL	475	475	
GEORGIA			
BRUNSWICK HARBOR, GA		1,600	
IDAHO			
BOISE RIVER, GARDEN CITY, ADA COUNTY, ID	300	300	
ILLINOIS			
GREAT LAKES COASTAL RESILIENCY STUDY, IL, IN, MI, MN, NY, OH, PA and WI	600	3,000	
SOUTH FORK OF THE SOUTH BRANCH OF THE CHICAGO RIVER, IL		1,300	
KANSAS			
LOWER MISSOURI RIVER BASIN, KS, MO and IA	400	400	
SOLDIER CREEK WATERSHED, KS	200		†
MASSACHUSSETTS			
CITY OF BOSTON COASTAL STORM RISK MANAGEMENT, MA	250	250	
MICHIGAN			
MENOMINEE RIVER DEEPENING, MI & WI		600	
MINNESOTA			
LOWER ST. ANTHONY FALLS, MISSISSIPPI RIVER, MN	550		†
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVP PORTION), MN	750		‡
MISSISSIPPI			
GULFPORT HARBOR, MS		200	
MISSOURI			
LOWER MISSOURI RIVER FLOOD RISK AND RESILIENCY STUDY, MO—BRUNSWICK L–246		500	
LOWER MISSOURI RIVER FLOOD RISK AND RESILIENCY STUDY, MO—HOLT COUNTY		600	
LOWER MISSOURI RIVER FLOOD RISK AND RESILIENCY STUDY, MO—JEFFERSON CITY L–142		500	
LITTLE BLUE RIVER BASIN, JACKSON COUNTY, MO	400	400	
NEW YORK			
NEW YORK—NEW JERSEY HARBOR DEEPENING AND CHANNEL IMPROVEMENTS STUDY, NY & NJ		1,000	
NORTH CAROLINA			
BRUNSWICK COUNTY BEACHES (HOLDEN BEACH), NC		1,000	
BRUNSWICK COUNTY BEACHES (OAK ISLAND), NC		500	
WILMINGTON HARBOR NAVIGATION IMPROVEMENT PROJECT, NC		1,500	
NORTH DAKOTA			
GARRISON DAM, LAKE SAKAKAWEA, ND	4,250		‡
OKLAHOMA			
KEYSTONE LAKE, OK	3,750		‡

CORPS OF ENGINEERS—INVESTIGATIONS—Continued

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
OPTIMA LAKE, OK	200		†
WISTER LAKE, OK	500		‡
OREGON			
COLUMBIA RIVER TREATY 2024 IMPLEMENTATION, OR	10,350		‡
JOHN DAY LOCK & DAM, OR & WA		200	
LOOKOUT POINT LAKE, OR	500		‡
PORTLAND METRO LEVEE SYSTEM, OR	3,775	3,775	
WILLAMETTE RIVER ENVIRONMENTAL DREDGING, OR		374	
PENNSYLVANIA			
KINZUA DAM AND ALLEGHENY RESERVOIR, PA	3,500		‡
RHODE ISLAND			
LITTLE NARRAGANSETT BAY, RI	600	600	
SOUTH CAROLINA			
CHARLESTON PENINSULA, SC		13,325	
CHARLESTON, SC TIDAL & INLAND FLOODING–FLOOD RISK MANAGEMENT		200	
FOLLY BEACH, SC		500	
PORT ROYAL HARBOR, SC	308		†
WACCAMAW RIVER, HORRY COUNTY, SC	300	300	
SOUTH DAKOTA			
WATERTOWN AND VICINITY, SD		850	
TENNESSEE			
HATCHIE/LOOSAHATCHIE, MISSISSIPPI RIVER MILE 775–736 HABITAT RESTORATION, TN & AR	400	400	
TEXAS			
ARKANSAS–RED RIVER BASINS CHLORIDE CONTROL, AREA VIII, TX	557		
ESTELLINE SPRINGS EXPERIMENTAL PROJECT, TX	200		†
JOE POOL LAKE, TX	750		‡
WHITNEY LAKE, TX	200	200	
VERMONT			
NORTH SPRINGFIELD LAKE, VT	1,750		‡
VIRGINIA			
ATLANTIC INTRACOASTAL WATERWAY, NORTH LANDING BRIDGE, VA		5,000	
WASHINGTON			
BONNEVILLE LOCK & DAM, WA		100	
COLUMBIA AND LOWER WILLAMETTE RIVERS BELOW VANCOUVER, WA and PORTLAND, OR	1,850		
COLUMBIA RIVER TURNING BASIN NAVIGATION IMPROVEMENTS, WA & OR		900	
TACOMA HARBOR, WA		1,500	
WEST VIRGINIA			
UPPER GUYANDOTTE FEASIBILITY STUDY, WV		250	
WYOMING			
LITTLE GOOSE CREEK, SHERIDAN, WY	1,000	1,000	
SUBTOTAL, PROJECTS LISTED UNDER STATES	43,250	57,799	
REMAINING ITEMS			
ADDITIONAL FUNDING		11,766	
FLOOD AND STORM DAMAGE REDUCTION		4,000	
ACCESS TO WATER DATA	325	325	
AUTOMATED INFORMATION SYSTEMS SUPPORT Tri-CADD	250	250	

CORPS OF ENGINEERS—INVESTIGATIONS—Continued

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
COASTAL FIELD DATA COLLECTION	660	3,660	
COORDINATION WITH OTHER WATER RESOURCES AGENCIES	600	600	
DISPOSITION OF COMPLETED PROJECTS	.....	1,443	*
ENVIRONMENTAL DATA STUDIES	80	80	
FERC LICENSING	100	100	
FLOOD DAMAGE DATA	275	275	
FLOOD PLAIN MANAGEMENT SERVICES	20,000	20,000	
HYDROLOGIC STUDIES	500	500	
INTERAGENCY WATER RESOURCES DEVELOPMENT	10	10	
INTERNATIONAL WATER STUDIES	85	85	
INVENTORY OF DAMS	500	500	
NATIONAL FLOOD RISK MANAGEMENT PROGRAM	6,400	6,400	
PLANNING ASSISTANCE TO STATES	11,000	11,000	
PLANNING SUPPORT PROGRAM	3,500	3,500	
PRECIPITATION STUDIES	150	150	
REMOTE SENSING/GEOGRAPHIC INFORMATION SYSTEM SUPPORT	75	75	
RESEARCH AND DEVELOPMENT	15,000	35,000	
SCIENTIFIC AND TECHNICAL INFORMATION CENTERS	50	50	
SPECIAL INVESTIGATIONS	750	750	
STREAM GAGING	1,350	1,350	
TRANSPORTATION SYSTEMS	1,000	1,000	
TRIBAL PARTNERSHIP PROGRAM	.....	5,000	*
LOWER MOREAU RIVER, SD	.....	(230)	
THUNDER BUTTE FLOOD RISK MANAGEMENT, SD	.....	(430)	
SUBTOTAL, REMAINING ITEMS	62,660	107,869	
TOTAL, INVESTIGATIONS	105,910	165,668	

† Funded in remaining items.
‡ Funded in a remaining item in another account.
* Includes funds requested in Projects Listed Under States within this account.

Arkansas Red River Chloride.—The Committee rejects the budget request to fund a disposition study of this project. The Corps is directed to brief the Committee within 60 days of enactment of this act on the status of the project.

Baltimore Harbor and Channels, Maryland—Seagirt Loop Deepening.—The Committee understands the importance of the Port of Baltimore and the need to adequately support the significant growth in vessel size and cargo capacities of ships. If funds remain when the study completes, the Committee encourages the Corps to use such funds for PED.

Bubbly Creek.—Unfortunately the EPA and the Corps have not been able to agree on a path forward for this restoration project, despite the importance of the project and the benefit it would provide. The Corps is directed to brief the Committee on proposed solutions within 90 days of enactment of this act.

Chicago River.—The Committee urges the Corps to work with the City of Chicago River Ecology and Governance Task Force towards a comprehensive ecosystem restoration project for the restoration of the Chicago River. The Corps is encouraged to consider including funding for this study in future budget submissions.

Coastal Field Data Collection.—The Committee strongly supports the Corps' commitment to collect and maintain wave data, water level data, and other data critical to making informed decisions in our coastal areas. However, the proposed funding level does not

adequately maintain this critical capability. Therefore, the Committee recommends an additional $2,000,000 to continue data collection and research on the impact of extreme storms in coastal regions. Additionally, with the funds provided, the Committee encourages the Corps to evaluate the readiness of the unique facilities and equipment necessary to support this effort and to include increased funding in future budget submissions in order to revitalize and modernize facilities and equipment in support of this program.

Coordination with Other Water Resource Agencies—River Basin Commissions.—The Corps is reminded of the commitment to cost share with the Susquehanna River Basin Commission, the Delaware River Basin Commission, and the Interstate Commission on the Potomac River Basin. The Committee encourages the Corps to recommend funding in future budget submissions under the Coordination with other Water Resource Agencies remaining item. In accordance with the budget justification sheet, this funding is to "cooperate with Federal, State, and local agencies such as River Basin Commissions; Interstate River Basin Compacts". The Corps is directed to brief the Committee within 90 days of enactment of this act describing the reasons why funds have not been provided since 2015.

Flood Policy in Urban Areas.—The Committee has continually requested the Flood Policy in Urban Areas report as detailed in by section 1211 of America's Water Infrastructure Act of 2018 (Public Law 115–270) [AWIA 2018]. The Corps is reminded that this report can be completed using existing funds, if needed. The Committee directs the Corps to provide a briefing on the findings of this report within 45 days of enactment of this act.

North Atlantic Division Report on Hurricane Barriers and Harbors of Refuge.—The Committee continues to express the importance of the North Atlantic Division report on hurricane barriers and harbors of refuge mandated under Section 1218 of AWIA 2018. While the Corps has completed an initial report focused on the New England area, the report is not complete. The Corps is encouraged to complete the report and is reminded to include reporting requirements in future budget requests, if needed.

Planning Assistance to States.—The Corps is reminded that this program encompasses many types of studies and technical assistance dealing with a number of water resource issues, including but not limited to, sediment management, coastal resilience, State water planning, water distribution, and water supply evaluations.

Research and Development—Future Work.—The Committee appreciates and recognizes the value of research topics addressed by the Army Engineer Research and Development Center [ERDC] that advance the Civil Works missions of the Corps. The Committee understands that responding to critical research needs benefit the Corps by leveraging the expertise of universities through partnerships. The Committee directs the ERDC, within 90 days of enactment of this act, to brief the Committee on future research needs (including multi-year funding requirements) and potential university partnerships related to its strategic goals.

Research and Development—Biopolymers.—The Committee recommends $6,000,000 of additional funding to continue research on

the use of biopolymers to rehabilitate, maintain, and increase resiliency of civil works structures against potential threats. With continued funding, the Committee understands this effort will be completed in 1 year.

Research and Development—Earthen Dams and Levees.—The Committee recognizes the value of work on earthen dams and levees specifically with a focus on comprehensive modeling and the impacts of seepage, slope stability and multiple modes of failure. The Corps is encouraged to include funding for these activities in future budget requests.

Research and Development—Flood and Coastal Systems.—The Committee recognizes the importance of ensuring the integrity of our Nation's flood control systems and employing the most effective technologies to identify potential deficiencies in these systems. The Committee recommends $5,000,000 to utilize partnerships to research and develop advanced technologies to automate assessment and inspection of flood control systems for the purpose of identifying levee deficiencies, such as slope instability, settlement and seepage, and ensuring the safety of the surrounding areas and communities. The Committee expects this work to contribute to existing operations and maintenance activities.

Research and Development—Geophysical Modeling.—Rising sea levels and the increasing severity and frequency of weather events continues to impact coastlines, rivers, and related habitats. Additional funding of $4,000,000 is recommended to continue research using geophysical computational modeling. The Committee understands that with continued funding this effort will be completed in 2 years.

Research and Development—Innovative Materials.—The Committee understands that aging infrastructure and new construction can benefit from modern innovations in construction materials such as self-healing concrete and 3-D printing. Additional funding of $1,500,000 is recommended to conduct a study on innovative materials as detailed in Section 1173 of the Water Infrastructure Improvements for the Nation Act of 2016 [WIIN] (Public Law No. 114–322). The Committee understands the report will be completed in 2024.

Research and Development—Oyster Restoration.—The Committee recognizes the importance of sustainable oyster reefs for maintaining healthy ecosystems, protecting coastal infrastructure and supporting commercial fisheries. Recent restoration efforts have not achieved the intended success for U.S. oyster populations, and the identification of effective restoration strategies remains a critical gap. The Corps is encouraged to continue ongoing partnerships with research universities to leverage expertise to further research coastal restoration methods using oyster reefs.

Research and Development—Polymer Composites.—The Committee recognizes that polymer composites have wide-ranging proven characteristics including lightweight, high strength, corrosion resistance, and long-term durability that could translate to increased safety for inland waterways infrastructure. The Committee understands IIJA funding is being used to conduct an initial report evaluating the benefits of polymer composites and future work to be done. The Corps is directed to brief the Committee within 90

days of enactment of this act on the progress of the report and to provide it upon completion.

Research and Development—Subsurface Drains.—The Committee understands the use of subsurface drain systems as a flood risk reduction measure or coastal storm risk reduction measure are currently not considered during project development. Additional funding of $2,000,000 is recommended for research and development opportunities of subsurface drain systems pursuant to section 227 of WRDA 2020. The Committee understands that with continued funding this effort will be completed in 4 years.

Research and Development—Urban Flood Damage Reduction and Stream Restoration in Arid Regions.—The Committee recommends additional funds of $3,000,000 to continue the work on the management of water resources projects that promote public safety, reduce risk, improve operational efficiencies, reduce flood damage in arid and semi-arid regions, sustain the environment, and position water resources systems to adapt to the implications of a changing climate. The Corps shall continue its focus on addressing needs for resilient water resources infrastructure. The Committee understands that with continued funding this effort will be complete in 3 years.

Shore Protection Easements.—The Committee notes the importance of periodic restoration of Shore Protection Projects and their significance for the protection of public safety, public infrastructure, native vegetation and wildlife, as well as economy stability in oceanfront communities. The Committee understands the challenges facing local governments in obtaining necessary approvals for easements when no work will be performed on the property for which the easement is being required. The Committee encourages the Corps to work with local governments to incorporate flexibility in project agreement language that allows for incremental acquisition of easements necessary for scheduled nourishments.

Upper Rio Grande Basin.—The Committee recognizes the ecological, economic, cultural, and historic importance of the Upper Rio Grande Basin and the increasing stress on its water supply. The Committee encourages a comprehensive approach with the National Academies of Sciences and the Bureau of Reclamation on water and reservoir management, operation issues, and climate resiliency within the Upper Rio Grande Basin (including the Heron, El Vado, Abiquiu, Cochiti, Jemez Canyon, Elephant Butte, and Caballo Dams and Reservoirs). Accordingly, the Corps is directed to brief the Committee within 90 days of the enactment of this act on the work that has been done to date and any additional work that can be done.

Additional Funding.—The Corps is directed to allocate these additional funds in accordance with the direction in the front matter under the heading "Additional Funding". The Committee encourages the Corps to prioritize completing or accelerating ongoing studies for flood risk management projects in areas experiencing dramatic or rapid increases in urban development in and around project sites. The Corps shall include appropriate requests for funding in future budget submissions for PED and new feasibility studies initiated in fiscal year 2023.

Of the additional funding recommended, $4,000,000 shall be for Flood Risk Management PED activities. Additionally, the Corps shall comply with the following direction in allocating funds recommended for Investigations:

—The Corps shall consider completing or accelerating ongoing studies, or initiating new studies that will enhance the Nation's economic development, job growth, and international competitiveness; are located in areas that have suffered recent natural disasters; protect life and property; or address legal requirements; and

—The Corps is urged to consider any national security benefits a project may provide.

CONSTRUCTION

Appropriations, 2022	$2,492,800,000
Budget estimate, 2023	1,221,288,000
Committee recommendation	2,159,642,000

The Committee recommends $2,159,642,000 for Construction. Funding in this account is used for construction, major rehabilitation, and related activities for water resources development projects having navigation, flood and storm damage reduction, water supply, hydroelectric, environmental restoration, and other attendant benefits to the Nation. Funds to be derived from the HMTF will be applied to cover the Federal share of the Dredged Material Disposal Facilities Program.

COMMITTEE RECOMMENDATION

The table below displays the budget request and Committee's recommendation for Construction:

CORPS OF ENGINEERS–CONSTRUCTION

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation
ALASKA		
UNALASKA (DUTCH HARBOR) CHANNELS, AK		25,600
ARKANSAS		
MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM (MKARNS), AR & OK		10,000
ARIZONA		
WESTERN RURAL WATER—ARIZONA, IDAHO, MONTANA, RURAL NEVADA, NEW MEXICO, RURAL UTAH, AND WYOMING (DOUGLAS, AZ)		2,175
WESTERN RURAL WATER—ARIZONA, IDAHO, MONTANA, RURAL NEVADA, NEW MEXICO, RURAL UTAH, AND WYOMING (FORT TUTHILL, AZ)		3,300
CALIFORNIA		
AMERICAN RIVER COMMON FEATURES, NATOMAS BASIN, CA	172,700	172,700
CALAVERAS COUNTY, SECTION 219, CA		1,000
DESERT HOT SPRINGS, SECTION 219, CA		800
HAMILTON AIRFIELD WETLANDS RESTORATION, CA		40,000
MURRIETA CREEK, CA		8,500
PRADO DAM, CA (DAM SAFETY)	50,000	50,000
SAN JOAQUIN RIVER BASIN, LOWER SAN JOAQUIN, CA	40,000	40,000
WEST SACRAMENTO, CA	79,701	79,701
DELAWARE		
DELAWARE COAST PROTECTION, DE		150

CORPS OF ENGINEERS–CONSTRUCTION—Continued

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
DISTRICT OF COLUMBIA			
CHESAPEAKE BAY ENVIRONMENTAL RESTORATION & PROTECTION PROGRAM, DC, DE, MD, NY, PA, VA & WV	.....	11,250	
FLORIDA			
SOUTH FLORIDA ECOSYSTEM RESTORATION, FL	406,982	406,982	
GEORGIA			
ALBANY, GA	.....	4,000	
ILLINOIS			
BRANDON ROAD LOCK AND DAM, AQUATIC NUISANCE SPECIES BARRIER, IL	47,881	47,881	
DES PLAINES RIVER, PHASE II, IL	.....	11,000	
MADISON & ST. CLAIR COUNTIES, IL (CAHOKIA HEIGHTS)	.....	3,500	
MADISON & ST. CLAIR COUNTIES, IL (WOOD RIVER & BELLEVILLE)	.....	3,500	
UPPER MISSISSIPPI RIVER—ILLINOIS WW SYSTEM, IL, IA, MN, MO and WI	.....	49,300	
UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO and WI	55,000	55,000	
IOWA			
MISSOURI RIVER FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, NE, ND and SD	25,212	25,212	
KANSAS			
ATCHISON, KS CSO ENVIRONMENTAL INFRASTRUCTURE	.....	500	
LOUISIANA			
CALCASIEU SHIP CANNEL, LA	.....	9,000	
LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION, LA	4,500	4,500	
SOUTHWEST COASTAL LOUISIANA HURRICANE PROTECTION, LA	.....	10,000	
MARYLAND			
CHESAPEAKE BAY ENVIRONMENTAL RESTORATION & PROTECTION PROGRAM, DC, DE, MD, NY, PA, VA & WV (HOOPERS ISLAND, MD)	.....	100	
CHESAPEAKE BAY OYSTER RECOVERY, MD and VA	3,500	7,500	
POPLAR ISLAND, MD	.....	21,345	*
MICHIGAN			
MICHIGAN COMBINED SEWER OVERFLOWS, LANSING, MI	.....	6,000	
MISSOURI			
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REG WORKS), MO and IL	10,000	10,000	
MISSISSIPPI			
DESOTO COUNTY REGIONAL WASTEWAY SYSTEM, MS	.....	7,835	
NEW JERSEY			
BARNEGAT INLET TO LITTLE EGG INLET, NJ	.....	20,000	
TOWNSENDS INLET TO CAPE MAY INLET, NJ	.....	1,000	
NEW YORK			
HUDSON–RARITAN ESTUARY ECOSYSTEM RESTORATION STONY CREEK MARSH, NY & NJ	.....	500	
NEW MEXICO			
ACEQUIAS ENVIRONMENTAL INFRASTRUCTURE, NM	.....	9,600	
WESTERN RURAL WATER—ARIZONA, IDAHO, MONTANA, RURAL NEVADA, NEW MEXICO, RURAL UTAH AND WYOMING (NM ENVIRONMENTAL INFRASTRUCTURE)	.....	11,000	
NORTH DAKOTA			
PIPESTEM LAKE, ND	25,330	25,330	

CORPS OF ENGINEERS–CONSTRUCTION—Continued

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
OHIO			
OHIO ENVIRONMENTAL INFRASTRUCTURE, SECTION 594, AVON LAKE, OH	.....	1,000	
OHIO ENVIRONMENTAL INFRASTRUCTURE, SECTION 594, CANFIELD TOWNSHIP, OH	.....	1,000	
OHIO ENVIRONMENTAL INFRASTRUCTURE, SECTION 594, CLEVELAND, OH	.....	1,000	
OHIO RIVERFRONT, CINCINNATI, OH	.....	900	
OKLAHOMA			
LUGERT–ALTUS IRRIGATION DISTRICT, OK	.....	5,000	
OREGON			
COLUMBIA RIVER CHANNEL IMPROVEMENTS, OR & WA	.....	4,000	
PENNSYLVANIA			
SOUTH CENTRAL, PA, ENVIRONMENTAL RESTORATION	.....	4,000	
SOUTH CENTRAL, PA, ENVIRONMENTAL RESTORATION (ALLEGHANY COUNTY)	.....	2,000	
RHODE ISLAND			
PAWCATUCK RIVER COASTAL STORM RISK MANAGEMENT, RI	.....	10,000	
SOUTH CAROLINA			
CHARLESTON HARBOR, SC	.....	10,000	
LAKES MARION AND MOULTRIE, SC	.....	10,512	
TENNESSEE			
CHICKAMAUGA LOCK, TENNESSEE RIVER, TN	25,545	39,300	*
TEXAS			
CORPUS CHRISTI SHIP CHANNEL, TX (MAIN CHANNEL AND BARGE LANES)	157,263	157,263	
VIRGINIA			
NORFOLK HARBOR & CHANNELS, CRANEY ISLAND, VA	.....	30,000	
WASHINGTON			
COLUMBIA RIVER FISH MITIGATION, WA, OR and ID (CRFM)	29,175	29,175	
DUWAMISH & GREEN RIVER BASIN, WA	.....	2,000	
MOUNT ST. HELENS SEDIMENT CONTROL, WA	3,000	3,000	
MUD MOUNTAIN DAM, WA	.....	10,612	
PUGET SOUND NEARSHORE MARINE HABITAT RESTORATION, WA	.....	6,000	
WEST VIRGINIA			
CENTRAL WEST VIRGINIA ENVIRONMENTAL INFRASTRUCTURE, WV (SECTION 571)	.....	10,000	
SOUTHERN WEST VIRGINIA ENVIRONMENTAL INFRASTRUCTURE, WV (SECTION 340)	.....	10,000	
SUBTOTAL, PROJECTS LISTED UNDER STATES	1,135,788	1,542,522	
REMAINING ITEMS			
ADDITIONAL FUNDING	.....	391,243	
FLOOD AND STORM DAMAGE REDUCTION	.....	37,276	
NAVIGATION	.....	10,000	
ENVIRONMENTAL INFRASTRUCTURE	.....	13,000	
AQUATIC PLANT CONTROL PROGRAM	.....	33,500	
BENEFICIAL USE OF DREDGED MATERIAL PILOT PROGRAM	.....	1,366	
CONTINUING AUTHORITIES PROGRAM			
AQUATIC ECOSYSTEM RESTORATION (SECTION 206)	1,000	15,000	
UPPER SANTA CLARA RIVER WATERSHED MANAGEMENT PROJECT, CA	.....	(50)	
BENEFICIAL USES DREDGED MATERIAL (SECTION 204)	.....	10,000	
HAMPTON ROADS BENEFICIAL USE, VA	.....	(200)	
EMERGENCY STREAMBANK AND SHORELINE PROTECTION (SECTION 14)	.....	10,000	
BIA ROUTE 2 NEAR ON THE TREE, SD	.....	(100)	
RING THUNDER ROAD, MELLETTE COUNTY, SD	.....	(1,300)	
FLOOD CONTROL PROJECTS (SECTION 205)	1,000	15,000	

CORPS OF ENGINEERS–CONSTRUCTION—Continued

[In thousands of dollars]

Project title	Budget estimate	Committee recommendation	
GRAND RAPIDS RIVERFRONT, MI	.....	(100)	
JEFFERSON CHALMERS AREA, MI	.....	(300)	
SILVER CREEK, BRISTOL, RI	.....	(50)	
MITIGATION OF SHORE DAMAGES (SECTION 111)	.....	1,000	
NAVIGATION PROGRAM (SECTION 107)	.....	5,000	
PROJECT MODIFICATIONS FOR IMPROVEMENT OF THE ENVIRONMENT (SECTION 1135)	1,500	11,000	
REMOVAL OF OBSTRUCTIONS (SECTION 208)	.....	1,000	
SHORE PROTECTION (SECTION 103)	.....	1,000	
LAKESHORE DRIVE SEAWALL RESTORATION, MI	.....	(100)	
NORTH BEACH BOARDWALK EROSION CONTROL & SHORELINE RESILIENCY, VA	.....	(50)	
DAM SAFETY AND SEEPAGE/STABILITY CORRECTION PROGRAM	20,000	38,300	*
CAVES BUTTES DAM FEASIBILITY STUDY	.....	(200)	
EMPLOYEES' COMPENSATION	12,000	12,000	
INLAND WATERWAYS USERS BOARD—BOARD EXPENSE	.....	60	
INLAND WATERWAYS USERS BOARD—CORPS EXPENSE	.....	275	
RESTORATION OF ABANDONED MINES	.....	3,000	
TRIBAL PARTNERSHIP PROGRAM	.....	8,100	
INNOVATIVE FUNDING PARTNERSHIPS	50,000	.....	
SUBTOTAL, REMAINING ITEMS	85,500	617,120	
TOTAL, CONSTRUCTION	1,221,288	2,159,642	

*Includes funds requested in other accounts.

Alternative Delivery.—The Committee continues to support alternative delivery approaches such as Public Private Partnerships [P3s] and split delivery methods that leverage public and private resources to reduce cost and risk to populations by delivering infrastructure sooner. The use of P3s and split delivery methods can be a viable strategy to help address the Corps' backlog of projects while reducing scheduling and funding risk to the Federal Government. The Corps is reminded that projects which use an alternative delivery approach are eligible to compete for additional funding recommended in this account.

Advanced Measures.—The Corps is encouraged to fully use the authorities granted to it under the Advanced Measures program to mitigate the impacts of high water levels in the Great Lakes Basin.

Aquatic Plant Control Program.—Of the funding recommended for the Aquatic Plant Control Program, $1,000,000 shall be for activities for monitoring, surveys, and control of flowering rush and hydrilla. Additionally, $7,000,000 shall be for nationwide research and development to address invasive aquatic plants, within which the Corps is encouraged to support cost-shared aquatic plant management programs. Finally, $16,000,000 shall be for watercraft inspection stations and rapid response as authorized in section 104 of the River and Harbor Act of 1958, subsections (d)(1)(A)(i), (d)(1)(A)(ii), (d)(1)(A)(iii), and (d)(A)(iv); and $3,000,000 shall be for related monitoring.

Aquatic Plant Control Program—Connecticut River Basin.—Additional funding of $6,000,000 is recommended for hydrilla control, research, and demonstration work in the Connecticut River basin. The Corps is encouraged to consider the benefits of establishing a rapid response task force to cover the multistate watershed.

Aquatic Plant Control Program—Mississippi River Basin.—The Committee recognizes that the Corps is engaged in a multipronged effort to combat invasive species in our country's waterways and protect the Mississippi River Basin, which is one of the most valued ecosystems in the world. The Committee recommends $500,000 for the Corps, in partnership with other Federal partners, to continue planning, designing, initial engineering and project management activities for construction of carp barriers in the Mississippi River Basin and the Tennessee-Tombigbee waterway.

Beneficial Use of Dredged Material Pilot Program.—The Committee has repeatedly encouraged the Corps to implement beneficial use of dredged material as part of its construction and maintenance of our Nation's waterways. Additional funding of $1,366,000 is recommended for the 10 pilot projects selected to date within the "Beneficial Use of Dredged Material Pilot Program." The Corps is further directed to provide the Committee with a list of beneficial use projects with its fiscal year 2023 work plan and to brief the Committee prior to any effort to solicit or select any additional pilot projects as authorized by AWIA 2018.

Bipartisan Budget Act [BBA] of 2018.—The Committee remains frustrated with the lack of urgency in completing the BBA 2018 construction projects. The purpose of the supplemental disaster funding was to accelerate completion of high-priority flood control projects nationwide, including areas affected by hurricanes Harvey, Irma, and Maria. The Committee does not understand why the full cost of the project must be available before starting any construction especially when discrete elements are ready and there are funds to complete them. The Corps has never been funded in this manner and this interpretation does not align with the intent of Congress—to accelerate construction. As the BBA 2018 program progresses, it is possible that projects will not be completed within available supplemental funds. The Committee does not intend for those projects to be delayed. The Corps shall brief the Committee quarterly on the status of the program and the plan for completion of projects.

Bird Drive Basin Conveyance, Seepage Collection, and Recharge.—The Committee encourages the Corps to work with the Department of the Interior and the South Florida Water Management District to quickly identify a consensus project footprint between SW 8th Street and the C–1W Canal to the south, immediately east of Krome Avenue. This work is intended to enable Miami-Dade County and MDX to begin necessary land acquisitions in support of the creation of a West Kendall Everglades Buffer and progress towards completing this important element of the Comprehensive Everglades Restoration Plan [CERP].

Biscayne Bay Coastal Wetlands Project.—The Committee notes support from Miami-Dade County and the South Florida Water Management District to incorporate highly treated, reclaimed wastewater as an additional source of freshwater to assist the rehydration of these coastal wetlands. The Committee encourages the Corps to consider the incorporation of this potential source of freshwater into further study, design, and construction of the project and to evaluate the potential to use additional volumes of reclaimed wastewater to restore freshwater artesian springs within

the Bay through underground injection to the shallow, underlying aquifer.

Central Everglades Planning Project.—The Committee recognizes the importance of restoring America's Everglades, and strongly encourages the Corps to expedite the required validation reports for PPA North. The Committee strongly encourages the Corps to design and construct the recently-authorized Everglades Agricultural Area Storage Reservoir as quickly as possible to utilize the expanded water delivery capabilities of completed PPA South elements.

Central and South Florida Project.—The Committee recognizes the importance of the Central and South Florida Project and urges the Corps to maintain continued attention to the need of the South Florida economy and environment for a functioning flood control system.

Charleston Harbor.—The funding is provided for reimbursement of the advanced funds provided by the non-Federal sponsor to cover the Federal share of the cost of the National Economic Development plan. The Committee is aware the non-Federal sponsor may be eligible for additional reimbursement in the future.

Chesapeake Bay Comprehensive Water Resources Restoration Plan and Oyster Recovery.—The Committee supports the Corps' Chesapeake Bay Comprehensive Water Resources and Restoration Plan and the Chesapeake Bay Oyster Recovery Program and encourages the Corps to provide sufficient funding in future budget requests.

Chicago Sanitary and Ship Canal Dispersal Barrier, Illinois.—No funds recommended in this act may be used for construction of hydrologic separation measures.

CERP–Indian River Lagoon-South.—The Committee recognizes the importance of restoring America's Everglades, and the challenge of balancing discharges from Lake Okeechobee and harmful algal blooms in the St. Lucie River and Indian River Lagoon. The Committee urges the Corps to expedite design work on the C–23 and C–24 Reservoirs that will serve as crucial elements of the Indian River Lagoon-South CERP project.

Columbia River Treaty.—The Corps is directed to brief, in a classified setting and in coordination with the Department of State, within 60 days after enactment of this act on post-fiscal year 2023 flood control operations as dictated by the Columbia River Treaty. Further, not later than 90 days after enactment of this act the Corps shall provide a classified detailed assessment, in coordination with Department of State, of its funding requirements and plan for post-fiscal year 2023 for flood control operations as dictated by the Columbia River Treaty.

Construction Funding Schedules.—A complete and reliable cost estimate with an out-year funding schedule is essential to understanding current funding and future funding requirements within the Corps' construction portfolio. A comprehensive outlook of these dynamic requirements is necessary for Congress to consider and balance funding allocations annually, and to assess the long-term effects of new investment decisions. Therefore, within 90 days of enactment of this act and annually thereafter, the Chief of Engineers shall submit directly to the Committee on Appropriations of

both houses of Congress, a breakdown, by fiscal year, of the full and efficient Federal funding needs for each ongoing construction project in the Corps' Civil Works program. For each project identified, the Corps shall also provide the total project cost with a breakdown between the Federal and non-Federal costs, and any applicable authorization ceiling. For the purposes of this report, an active project shall mean any project which has received construction account appropriations, including those funded in a supplemental, and has remaining costs to be funded from the Construction account. These funding requirements shall be based on technical construction sequencing, and realistic workflow and shall not be altered to reflect administrative policies and priorities or any assumed limitation on funding available.

Continuing Authorities Program.—The Committee recommends $69,000,000 for the Continuing Authorities Program [CAP]. CAP is a useful tool for the Corps to undertake small localized projects without being encumbered by the lengthy study and authorization phases typical of most Corps projects. The management of CAP shall continue consistent with direction provided in previous fiscal years.

The Corps shall allow for the advancement of flood control projects in combination with ecological benefits using natural and nature-based solutions alone, or in combination with, built infrastructure where appropriate for reliable risk reduction during the development of projects under section 205 of CAP. Additionally, within the section 1135 CAP authority, and to the extent already authorized by law, the Committee encourages the Corps to consider projects that restore degraded wetland habitat and stream habitat impacted by construction of Corps levees with executed Feasibility Cost Share Agreements.

Environmental Infrastructure.—Authorized environmental infrastructure projects shall not require a new start designation. This includes projects in regional authorities that have not received funding and projects authorized under section 219 of the WRDA of 1992 (Public Law 102–580), as amended. The Committee reminds the Corps that environmental infrastructure authorities include caps on Federal participation, but do not provide a guarantee that the project authorization level will be met. Projects shall only receive funding if there is a separable element that can be funded to completion in a fiscal year without the requirement for continued funding in future years.

Innovative Funding Partnerships Program.—The Committee is troubled by what appears to be an avenue to circumvent the performance based budgeting approach the Corps uses to evaluate projects. It is unclear how equity will be maintained if funding in excess of legally required cost share is used as a criterion for funding decisions allowing non-Federal sponsors to contribute funds and jump the line is contrary to long-standing congressional direction. The Committee recommends no funds for this proposal. The Committee notes, however, that any project that could have received funding under such a program is eligible to compete for the additional funding provided in this account based on the project performance criteria described in this report.

Kentucky Lock and Dam, Kentucky.—There is concern about major delays on construction projects, particularly the Kentucky Lock and Dam, which was provided funding by IIJA that the Administration states will physically complete and fiscally close out the project. The Corps is strongly urged to expedite construction.

Lake Champlain Watershed.—The Lake Champlain Watershed is an officially designated resource of national significance that spans the States of New York and Vermont and into Canada. The Committee reminds the Corps that section 542 of WRDA of 2000 (Public Law 106–541) as amended, authorizes the Corps to provide assistance to non-Federal interests to address a range of environmental issues in the Lake Champlain Watershed in Vermont and New York.

McClellan-Kerr Arkansas River Navigation System [MKARNS].—The Committee recognizes the importance of the MKARNS as an established Marine Highway for waterborne commerce to include agriculture and aggregate commodities (sand, gravel, and rock) from the Gulf Coast to the Mid-West. Deepening the MKARNS to a consistent 12-foot navigation channel will provide tow drafts that are more compatible with navigation on the Mississippi River, which will reduce inefficient barge operations and transportation costs.

The Committee understands the Corps has allocated funding to complete PED and begin construction and urges the Corps to prioritize this project in fiscal year 2023 to accelerate construction. The Committee continues to encourage the Corps to provide funds for nonstructural activities, such as channel deepening, with low annual funding needs in years where appropriated funds for IWTF cost shared projects are sufficient to accommodate such projects without impacting ongoing construction projects. Lastly, the Committee encourages the Corps to prioritize inland waterways projects consistent with the update to the Capital Investment Strategy, pursuant to section 2002(d) of WRRDA 2014.

New Savannah Bluff Lock and Dam, Georgia and South Carolina.—The Committee maintains interest in the New Savannah Bluff Lock and Dam and recognizes the long standing challenges of the project. The Committee encourages the Corps to work with all stakeholders towards a mutually beneficial resolution that will ensure waters levels for existing activities and functions are maintained, as detailed in section 1319 of the WIIN Act.

Non-Federal Implementation Pilot Program.—Due to ongoing concerns initially expressed in the fiscal year 2020 Senate Report, the Corps shall notify the Committee upon receiving any proposal from a non-Federal interest requesting to utilize the section 1043(b) of WRRDA authority. The Corps shall not negotiate or enter into a project partnership agreement to transfer funds to a non-Federal interest utilizing this authority unless approval is received from the Committee on Appropriations of both Houses of Congress. None of the funds recommended in this act shall be used under this authority for a project where construction has been started but not completed. The Corps shall brief the Committees not later than 45 days after enactment of this act on activities carried out under the section 1043 pilot program, including the Corps' implementation guidance and any existing or potential agreements.

Prioritization of Projects in Drought-Stricken Areas.—The Committee urges the Corps to prioritize any authorized projects that would alleviate water supply issues in areas that have been afflicted by severe droughts in the last four fiscal years, to include projects focused on the treatment of backish water.

Riverbank Erosion.—The Committee encourages the Corps to prioritize projects to stabilize the Indiana shoreline of the Ohio River damaged by the operation of federally-owned dams on the Ohio River as authorized in Section 9 of the 1946 Flood Control Act (33 USC 701q).

Restoration of Abandoned Mine Sites, Tribal Partnerships.—The Committee recognizes that abandoned and inactive hardrock mine sites in the western United States pose water quality challenges for Tribal communities and that many Tribes have struggled to receive adequate assistance to identify and remediate risks. Additional funding is recommended to provide technical, planning, and design assistance to Federal and non-Federal interests carrying out projects to address water quality problems caused by drainage and related activities from abandoned and inactive noncoal mines under section 560 of the WRDA of 1999. Additionally, the Corps is directed to develop an action plan to proactively engage with Tribal communities in the western United States and brief the Committee no later than 90 days after enactment of this act on such plan.

South Florida Ecosystem Restoration [SFER].—For fiscal year 2023, the Committee directs the Corps to make publicly available a comprehensive snapshot of all SFER cost share accounting down to the project level and directs the Corps to ensure the accuracy of all budget justification sheets that inform SFER Integrated Financial Plan documents by September 30, 2023.

Tulsa and West-Tulsa Levee System [TWTLS].—The Committee recognizes that the TWTLS protected area is home to a substantial population of elderly and low income residents, and was classified by the Corps as a high risk of failure and life loss in 2019. Therefore, the Committee encourages the Corps to expeditiously complete construction.

Upper Mississippi River Restoration Program [UMRR], Quincy Bay.—Over the past 70 years, river traffic has led to the environmental degradation of Quincy Bay. Therefore, the Committee encourages the Corps to prioritize the environmental restoration project in Quincy Bay near Quincy, Illinois as a Tier 1 project for immediate commencement through the UMMR Program.

Additional Funding.—The Corps shall allocate these additional funds in accordance with the direction in the front matter under the heading "Additional Funding". The Corps shall not condition these funds, or any funds appropriated in this act, on a non-Federal interest paying more than their required share in any phase of a project.

Of the additional funding recommended in this account for flood and storm damage reduction and flood control, $37,276,000 shall be to continue construction of projects that principally address drainage in urban areas. Of the additional funding recommended, $10,000,000 shall be for authorized reimbursements for navigation projects. Of the additional funding recommended, $13,000,000 shall

be for environmental infrastructure to make environmentally sound repairs and upgrades to water infrastructure in communities.

When allocating the additional funding provided in this account, the Corps is encouraged to evaluate authorized reimbursements in the same manner as if the projects were being evaluated for new or ongoing construction and shall consider giving priority to the following:

—Benefits of the funded work to the National economy;
—Extent to which the work will enhance national, regional, or local economic development;
—Number of jobs created directly by the funded activity;
—Ability to obligate the funds allocated within the calendar year, including consideration of the ability of the non-Federal sponsor to provide any required cost share;
—Ability to complete the project, separable element, or project phase with the funds allocated;
—Legal requirements, including responsibilities to Tribes;
—For flood and storm damage reduction projects (including authorized nonstructural measures and periodic beach renourishments): population, safety of life, economic activity, or public infrastructure at risk, as appropriate; the severity of risk of flooding or the frequency with which an area has experienced flooding; and preservation of historically significant communities, culture, and heritage;
—For shore protection projects, projects in areas where there is risk to life and public health and safety, and risk of environmental contamination;
—For navigation projects, the number of jobs or level of economic activity to be supported by completion of the project, separable element, or project phase;
—For other authorized project purposes and environmental restoration or compliance projects, the beneficial use of dredged material; and
—For environmental infrastructure, projects in rural communities, projects with greater economic impact, projects in counties or parishes with high poverty rates, projects owed past reimbursements, and projects that provide backup raw water supply in the event of an emergency.

MISSISSIPPI RIVER AND TRIBUTARIES

Appropriations, 2022	$370,000,000
Budget estimate, 2023	225,000,000
Committee recommendation	373,075,000

The Committee recommends $373,075,000 for Mississippi River and Tributaries. Funds recommended in this account are for planning, construction, and operation and maintenance activities associated with water resource projects located in the lower Mississippi River Valley from Cape Girardeau, Missouri to the Gulf of Mexico.

The table below displays the budget request and Committee's recommendation:

MISSISSIPPI RIVER AND TRIBUTARIES

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
INVESTIGATIONS			
LAFITTE AREA FLOOD RISK MANAGEMENT, LA	500	500	
LOWER MISSISSIPPI RIVER COMPREHENSIVE MANAGEMENT STUDY, LA	1,000	1,000	
WAPPAPELLO LAKE, MO	1,000	.....	‡
YAZOO BASIN, ARKABUTLA LAKE, MS	500	.....	‡
RUNNING REELFOOT BAYOU, TN	600	600	
CONSTRUCTION			
BAYOU METO BASIN, AR	.....	14,000	
GRAND PRAIRIE REGION, AR	.....	12,000	
CHANNEL IMPROVEMENT, AR, IL, KY, LA, MS, MO & TN	42,600	42,600	
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO and TN	22,340	22,340	
ATCHAFALAYA BASIN, LA	1,700	1,700	
MORGANZA TO THE GULF, LA	.....	31,000	
YAZOO BASIN, DELTA HEADWATERS PROJECT, MS	.....	7,400	
YAZOO BASIN, UPPER YAZOO PROJECTS, MS	.....	25,000	
YAZOO BASIN, YAZOO BACKWATER AREA, MS	.....	4,500	
OPERATION & MAINTENANCE			
CHANNEL IMPROVEMENT, AR, IL, KY, LA, MS, MO and TN	23,852	23,852	
HELENA HARBOR, PHILLIPS COUNTY, AR	.....	540	*
INSPECTION OF COMPLETED WORKS, AR	.....	222	†
LOWER ARKANSAS RIVER, NORTH BANK, AR	239	239	
LOWER ARKANSAS RIVER, SOUTH BANK, AR	205	205	
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO and TN	8,776	8,776	
ST. FRANCIS BASIN, AR and MO	7,350	7,350	
TENSAS BASIN, BOEUF AND TENSAS RIVER, AR and LA	1,494	1,494	
WHITE RIVER BACKWATER, AR	1,569	1,569	
INSPECTION OF COMPLETED WORKS, IL	.....	31	†
INSPECTION OF COMPLETED WORKS, KY	.....	26	†
ATCHAFALAYA BASIN, LA	14,783	14,783	
ATCHAFLAYA BASIN FLOODWAY SYSTEM, LA	1,580	1,580	
BATON ROUGE HARBOR, DEVILS SWAMP, LA	.....	563	*
BAYOU COCODRIE AND TRIBUTARIES, LA	50	50	
BONNET CARRE, LA	3,658	3,658	
INSPECTION OF COMPLETED WORKS, LA	.....	592	†
LOWER RED RIVER, SOUTH BANK LEVEES, LA	499	499	
MISSISSIPPI DELTA REGION, LA	715	715	
OLD RIVER, LA	46,204	46,204	
TENSAS BASIN, RED RIVER BACKWATER, LA	2,654	2,654	
GREENVILLE HARBOR, MS	.....	932	*
INSPECTION OF COMPLETED WORKS, MS	.....	94	†
VICKSBURG HARBOR, MS	.....	942	*
YAZOO BASIN, ARKABUTLA LAKE, MS	5,758	5,758	
YAZOO BASIN, BIG SUNFLOWER RIVER, MS	230	230	
YAZOO BASIN, ENID LAKE, MS	5,669	5,669	
YAZOO BASIN, GREENWOOD, MS	1,587	1,587	
YAZOO BASIN, GRENADA LAKE, MS	5,709	5,709	
YAZOO BASIN, MAIN STEM, MS	873	873	
YAZOO BASIN, SARDIS LAKE, MS	6,697	6,697	
YAZOO BASIN, TRIBUTARIES, MS	582	582	
YAZOO BASIN, WILL M. WHITTINGTON AUXILIARY CHANNEL, MS	295	295	
YAZOO BASIN, YAZOO BACKWATER AREA, MS	713	713	
YAZOO BASIN, YAZOO CITY, MS	386	386	
INSPECTION OF COMPLETED WORKS, MO	.....	258	†
WAPPAPELLO LAKE, MO	4,993	4,993	
INSPECTION OF COMPLETED WORKS, TN	.....	26	†
MEMPHIS HARBOR, MCKELLAR LAKE, MEMPHIS, TN	.....	2,338	*
SUBTOTAL, PROJECTS LISTED UNDER STATES	217,360	316,324	
REMAINING ITEMS			
ADDITIONAL FUNDING	.....	45,360	

MISSISSIPPI RIVER AND TRIBUTARIES—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation
DREDGING	.....	5,000
COLLECTION AND STUDY OF BASIC DATA (INVESTIGATIONS)	6,150	6,150
MAPPING, AR, IL, KY, LA, MS, MO and TN (Operation)	151	151
MISSISSIPPI RIVER COMMISSION	90	90
INSPECTION OF COMPLETED WORKS (OPERATION)	1,249	.....
SUBTOTAL, REMAINING ITEMS	7,640	56,751
TOTAL, MISSISSIPPI RIVER AND TRIBUTARIES	225,000	373,075

‡Funded in a remaining item in another account.
*Includes funds requested in other accounts.
†Includes funds requested in remaining items.

Lower Mississippi River Main Stem.—The budget request proposes to consolidate several activities across multiple States into one line item. The Committee rejects this change and instead recommends continuing to fund these activities as separate line items.

Yazoo Basin, Yazoo Backwater Area, Mississippi.—For mitigation of previously constructed features.

Additional Funding for Ongoing Work.—When allocating the additional funding recommended in this account, the Corps shall consider giving priority to completing or accelerating ongoing work that will enhance the Nation's economic development, job growth, and international competitiveness, or to studies or projects located in areas that have suffered recent natural disasters. The Corps shall use such sums as are necessary to carry out remaining unconstructed features of projects authorized by law, in response to recent flood disasters. While this funding is shown under remaining items, the Corps shall use these funds in investigations, construction, and operation and maintenance, as applicable.

The Committee recognizes the importance of erosion control in headwater streams and tributaries, and the environmental, water quality, and sediment reduction benefits it provides downstream. When allocating additional funds recommended in this account, the Corps is directed to give adequate consideration to cooperative projects addressing watershed erosion, sedimentation, flooding, and environmental degradation.

OPERATION AND MAINTENANCE

Appropriations, 2022	$4,570,000,000
Budget estimate, 2023	2,599,047,000
Committee recommendation	5,131,605,000

The Committee recommends $5,131,605,000 for Operation and Maintenance. Funding in this account is used to fund operations, maintenance, and related activities at water resource projects that the Corps operates and maintains. These activities include dredging, repair, and operation of structures and other facilities, as authorized in the various river and harbor, flood control, and water resources development acts. Related activities include aquatic plant control, monitoring of completed projects where appropriate, removal of sunken vessels, and the collection of domestic waterborne commerce statistics.

COMMITTEE RECOMMENDATION

The table below displays the budget request and Committee's recommendation for Operation and Maintenance:

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
ALABAMA			
ALABAMA RIVER LAKES, AL	23,248	29,948	
BAYOU LA BATRE, AL		2,148	*
BLACK WARRIOR AND TOMBIGBEE (BWT) RIVERS, AL	63,945	71,195	
DAUPHIN ISLAND BAY, AL		7,000	
GULF INTRACOASTAL WATERWAY (GIWW), AL	6,410	6,410	
INSPECTION OF COMPLETED WORKS, AL		140	†
MOBILE HARBOR, AL		44,081	*
PROJECT CONDITION SURVEYS, AL		155	*
SCHEDULING RESERVOIR OPERATIONS, AL		100	†
TENNESSEE—TOMBIGBEE WATERWAY—WILDLIFE MITIGATION, AL and MS	1,800	1,800	
TENNESSEE—TOMBIGBEE WATERWAY (TTWW), AL & MS	29,301	29,301	
WALTER F. GEORGE LOCK AND DAM, AL & GA	8,890	11,140	
WATER/ENVIRONMENTAL CERTIFICATION, AL		30	*
ALASKA			
ANCHORAGE HARBOR, AK		11,968	*
CHENA RIVER LAKES FLOOD CONTROL PROJECT, NORTH POLE, AK	6,152	6,152	
DILLINGHAM HARBOR, AK		1,006	*
HOMER HARBOR, AK		683	*
INSPECTION OF COMPLETED WORKS, AK		220	†
NINILCHIK HARBOR, AK		494	*
NOME HARBOR, AK		2,418	*
PROJECT CONDITION SURVEYS, AK		750	*
ARIZONA			
ALAMO LAKE, AZ	6,417	6,417	
INSPECTION OF COMPLETED WORKS, AZ		58	†
PAINTED ROCK DAM, AZ	1,050	1,050	
SCHEDULING RESERVOIR OPERATIONS, AZ		150	†
WHITLOW RANCH DAM, AZ	675	675	
ARKANSAS			
BEAVER LAKE, AR	9,937	9,937	
BLAKELY MOUNTAIN DAM, LAKE OUACHITA, AR	8,028	8,028	
BLUE MOUNTAIN LAKE, AR	3,103	3,103	
BULL SHOALS LAKE, AR	9,796	9,796	
DEGRAY LAKE, AR	6,445	6,445	
DEQUEEN LAKE, AR	2,000	2,000	
DIERKS LAKE, AR	1,521	1,521	
GILLHAM LAKE, AR	1,422	1,422	
GREERS FERRY LAKE, AR	10,498	10,498	
HELENA HARBOR, AR		540	*
INSPECTION OF COMPLETED WORKS, AR		1,251	†
MCCLELLAN–KERR ARKANSAS RIVER NAVIGATION SYSTEM, AR	88,909	88,909	
MILLWOOD LAKE, AR	2,743	2,743	
NARROWS DAM, LAKE GREESON, AR	5,500	5,500	
NIMROD LAKE, AR	3,249	3,249	
NORFORK LAKE, AR	10,886	10,886	
OSCEOLA HARBOR, AR		615	*
OUACHITA AND BLACK RIVERS, AR and LA	10,017	10,017	
PROJECT CONDITION SURVEYS, AR		5	*
WHITE RIVER, AR	325	325	
YELLOW BEND PORT, AR		125	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
CALIFORNIA			
BLACK BUTTE LAKE, CA	5,250	5,250	
BUCHANAN DAM—H.V. EASTMAN LAKE, CA	2,503	2,503	
CHANNEL ISLANDS HARBOR, CA	.....	5,500	*
COYOTE VALLEY DAM, LAKE MENDOCINO, CA	6,054	6,054	
DRY CREEK (WARM SPRINGS) LAKE AND CHANNEL, CA	8,369	8,369	
FARMINGTON DAM, CA	575	575	
FISHERMAN'S WHARF AREA, CA	.....	20	*
HIDDEN DAM—HENSLEY LAKE, CA	2,472	2,472	
HUMBOLDT HARBOR AND BAY, CA	.....	8,767	*
INSPECTION OF COMPLETED WORKS, CA	.....	3,227	†
ISABELLA LAKE, CA	2,126	2,126	
LOS ANGELES COUNTY DRAINAGE AREA, CA	26,146	26,146	
MARINA DEL REY, CA	.....	6,910	*
MERCED COUNTY STREAMS, CA	1,267	1,267	
MOJAVE RIVER DAM, CA	943	943	
MORRO BAY HARBOR, CA	.....	3,840	*
NEW HOGAN LAKE, CA	5,303	5,303	
NEW MELONES LAKE (DOWNSTREAM CHANNEL), CA	2,825	2,825	
NOYO RIVER AND HARBOR, CA	.....	4,450	*
OAKLAND HARBOR, CA	.....	27,398	*
OCEANSIDE HARBOR, CA	.....	1,790	*
PINE FLAT LAKE, CA	10,600	10,600	
PROJECT CONDITION SURVEYS, CA	.....	515	*
REDWOOD CITY HARBOR, CA	.....	5,828	*
RICHMOND HARBOR, CA	.....	6,036	*
SACRAMENTO RIVER (30 FOOT CHANNEL), CA	.....	6,309	*
SACRAMENTO RIVER AND TRIBUTARIES (DEBRIS CONTROL), CA	840	12,670	*
SACRAMENTO RIVER (SHALLOW DRAFT CHANNEL), CA	.....	220	*
SAN FRANCISCO BAY DELTA MODEL STRUCTURE, CA	20	20	
SAN FRANCISCO BAY LONG TERM MANAGEMENT STRATEGY (LTMS), CA	.....	472	*
SAN FRANCISCO HARBOR AND BAY (DRIFT REMOVAL), CA	.....	3,839	*
SAN FRANCISCO HARBOR, CA	.....	5,702	*
SAN JOAQUIN RIVER (PORT OF STOCKTON), CA	.....	10,241	*
SAN PABLO BAY AND MARE ISLAND STRAIT, CA	.....	3,045	*
SAN RAFAEL CREEK, CA	.....	7,175	*
SANTA ANA RIVER BASIN, CA	7,327	7,327	
SANTA BARBARA HARBOR, CA	.....	3,040	*
SANTA CRUZ HARBOR, CA	.....	540	*
SCHEDULING RESERVOIR OPERATIONS, CA	.....	1,721	†
SUCCESS LAKE, CA	3,468	3,468	
SUISUN BAY CHANNEL, CA	.....	6,293	*
TERMINUS DAM (LAKE KAWEAH), CA	3,728	3,728	
VENTURA HARBOR, CA	.....	4,820	*
YUBA RIVER, CA	155	2,350	*
COLORADO			
BEAR CREEK LAKE, CO	633	633	
CHATFIELD LAKE, CO	1,820	1,820	
CHERRY CREEK LAKE, CO	1,126	1,126	
INSPECTION OF COMPLETED WORKS, CO	.....	396	†
JOHN MARTIN RESERVOIR, CO	9,604	9,604	
TRINIDAD LAKE, CO	4,082	4,082	
SCHEDULING RESERVOIR OPERATIONS, CO	.....	550	†
CONNECTICUT			
BLACK ROCK LAKE, CT	992	992	
BRANFORD HARBOR, CT	.....	380	
COLEBROOK RIVER LAKE, CT	959	959	
GULIFORD HARBOR, GUILFORD, CT	.....	500	
HANCOCK BROOK LAKE, CT	757	757	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
HOP BROOK LAKE, CT	1,773	1,773	
INSPECTION OF COMPLETED WORKS, CT		550	†
MANSFIELD HOLLOW LAKE, CT	1,876	1,876	
NEW HAVEN HARBOR, CT		13,875	*
NORTHFIELD BROOK LAKE, CT	809	809	
PROJECT CONDITION SURVEYS, CT		1,133	*
STAMFORD HURRICANE BARRIER, CT	639	639	
STONY CREEK, CT		600	
THOMASTON DAM, CT	1,054	1,054	
WEST THOMPSON LAKE, CT	1,189	1,189	
DELAWARE			
CEDAR CREEK, DE		1,110	
INDIAN RIVER INLET & BAY, DE		281	*
INSPECTION OF COMPLETED WORKS, DE		71	†
INTRACOASTAL WATERWAY, DELAWARE RIVER TO CHESAPEAKE BAY, DE and MD		22,327	*
INTRACOASTAL WATERWAY, REHOBOTH BAY TO DELAWARE BAY, DE		7,550	*
PROJECT CONDITION SURVEYS, DE		225	*
WILMINGTON HARBOR, DE		10,537	*
DISTRICT OF COLUMBIA			
INSPECTION OF COMPLETED WORKS, DC		83	†
POTOMAC AND ANACOSTIA RIVERS, DC AND MD (DRIFT REMOVAL)		1,450	*
PROJECT CONDITION SURVEYS, DC		30	*
WASHINGTON HARBOR, DC		30	*
FLORIDA			
CANAVERAL HARBOR, FL		11,745	*
CENTRAL & SOUTHERN FLORIDA (C&SF), FL	15,696	17,388	*
INSPECTION OF COMPLETED WORKS, FL		1,033	†
INTRACOASTAL WATERWAY (IWW)—CALOOSAHATCHEE RIVER TO ANCLOTE RIVER, FL		1,660	*
INTRACOASTAL WATERWAY (IWW)—JACKSONVILLE TO MIAMI, FL	4,230	4,230	
JACKSONVILLE HARBOR, FL		10,741	*
JIM WOODRUFF LOCK AND DAM, FL, AL and GA	7,681	7,931	
MANATEE HARBOR, FL		4,490	*
MIAMI HARBOR, FL		50	*
OKEECHOBEE WATERWAY (OWW), FL	1,403	4,556	*
PALM BEACH HARBOR, FL		3,959	*
PANAMA CITY HARBOR, FL		1,164	*
PENSACOLA HARBOR, FL		1,705	*
PONCE DE LEON INLET, FL		2,300	*
PORT EVERGLADES HARBOR, FL		239	*
PROJECT CONDITION SURVEYS, FL		1,285	*
REMOVAL OF AQUATIC GROWTH, FL		3,532	*
SCHEDULING RESERVOIR OPERATIONS, FL		100	†
SOUTH FLORIDA ECOSYSTEM RESTORATION, FL	10,665	10,665	
ST. LUCIE INLET, FL		5,750	*
TAMPA HARBOR, FL		11,754	*
WATER/ENVIRONMENTAL CERTIFICATION, FL		180	*
GEORGIA			
ALLATOONA LAKE, GA	8,717	8,717	
APALACHICOLA, CHATTAHOOCHEE AND FLINT (ACF) RIVERS, GA, AL and FL	1,495	1,851	
ATLANTIC INTRACOASTAL WATERWAY (AIWW), GA	3,777	3,777	
BRUNSWICK HARBOR, GA		15,604	*
BUFORD DAM AND LAKE SIDNEY LANIER, GA	10,589	10,589	
CARTERS DAM AND LAKE, GA	7,854	7,854	
HARTWELL LAKE, GA and SC	12,249	12,249	
INSPECTION OF COMPLETED WORKS, GA		202	†
J. STROM THURMOND (JST) DAM AND LAKE, GA and SC	11,626	11,626	
PROJECT CONDITION SURVEYS, GA		77	*
RICHARD B. RUSSELL (RBR) DAM AND LAKE, GA and SC	9,618	9,618	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
SAVANNAH HARBOR, GA		39,861	*
SAVANNAH RIVER BELOW AUGUSTA, GA		228	*
WEST POINT DAM AND LAKE, GA and AL	8,672	8,672	
GUAM.			
AGAT SMALL BOAT HARBOR, GU		3,640	*
HAWAII			
BARBERS POINT DEEP DRAFT HARBOR, OAHU, HI	282	282	
INSPECTION OF COMPLETED WORKS, HI		750	†
MANELE SMALL BOAT HARBOR, HI		542	
PROJECT CONDITION SURVEYS, HI		125	*
IDAHO			
ALBENI FALLS DAM, ID	803	803	
DWORSHAK DAM AND RESERVOIR, ID	2,502	2,502	
INSPECTION OF COMPLETED WORKS, ID		707	†
LUCKY PEAK DAM AND LAKE, ID	3,327	3,327	
SCHEDULING RESERVOIR OPERATIONS, ID		772	†
ILLINOIS			
CALUMET HARBOR AND RIVER, IL and IN		6,419	*
CARLYLE LAKE, IL	6,308	6,308	
CHICAGO HARBOR, IL		5,004	*
CHICAGO RIVER, IL	653	653	
CHICAGO SANITARY AND SHIP CANAL DISPERSAL BARRIERS, IL	14,329	14,329	
FARM CREEK RESERVOIRS, IL	709	709	
ILLINOIS WATERWAY (MVR PORTION), IL and IN	63,114	63,114	
ILLINOIS WATERWAY (MVS PORTION), IL and IN	2,342	2,342	
INSPECTION OF COMPLETED WORKS, IL		2,108	†
KASKASKIA RIVER NAVIGATION, IL	5,250	5,250	
LAKE MICHIGAN DIVERSION, IL		1,517	*
LAKE SHELBYVILLE, IL	6,543	6,543	
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVR PORTION), IL	61,435	61,435	*
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVS PORTION), IL	28,692	28,692	
PROJECT CONDITION SURVEYS, IL		112	*
REND LAKE, IL	5,405	5,405	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IL		195	*
WAUKEGAN HARBOR, IL		15	*
INDIANA			
BROOKVILLE LAKE, IN	2,746	2,746	
BURNS WATERWAY HARBOR, IN		2,209	*
BURNS WATERWAY SMALL BOAT HARBOR, IN		8	*
CAGLES MILL LAKE, IN	1,437	1,437	
CECIL M. HARDEN LAKE, IN	1,716	1,716	
INDIANA HARBOR, IN		8,654	*
INSPECTION OF COMPLETED WORKS, IN		1,229	†
J. EDWARD ROUSH LAKE, IN	2,369	2,369	
MICHIGAN CITY HARBOR, IN		10	*
MISSISSINEWA LAKE, IN	1,759	1,759	
MONROE LAKE, IN	1,776	1,776	
PATOKA LAKE, IN	1,601	1,601	
PROJECT CONDITION SURVEYS, IN		201	*
SALAMONIE LAKE, IN	6,527	6,527	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IN		65	*
IOWA			
CORALVILLE LAKE, IA	5,244	5,244	
DAVENPORT SMALL BOAT HARBOR		750	*
INSPECTION OF COMPLETED WORKS, IA		1,517	†
MISSOURI RIVER, SIOUX CITY TO THE MOUTH, IA, KS, MO and NE	16,250	16,250	
PROJECT CONDITION SURVEYS, IA		2	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
RATHBUN LAKE, IA	2,677	2,677	
RED ROCK DAM AND LAKE RED ROCK, IA	9,234	9,234	
SAYLORVILLE LAKE, IA	12,306	12,306	
KANSAS			
CLINTON LAKE, KS	3,146	3,146	
COUNCIL GROVE LAKE, KS	1,896	1,896	
EL DORADO LAKE, KS	1,107	1,107	
ELK CITY LAKE, KS	1,848	1,848	
FALL RIVER LAKE, KS	3,505	3,505	
HILLSDALE LAKE, KS	4,840	4,840	
INSPECTION OF COMPLETED WORKS, KS		1,032	†
JOHN REDMOND DAM AND RESERVOIR, KS	2,011	2,011	
KANOPOLIS LAKE, KS	1,974	1,974	
MARION LAKE, KS	4,622	4,622	
MELVERN LAKE, KS	2,950	2,950	
MILFORD LAKE, KS	3,086	3,086	
PEARSON–SKUBITZ BIG HILL LAKE, KS	1,805	1,805	
PERRY LAKE, KS	3,184	3,184	
POMONA LAKE, KS	4,085	4,085	
SCHEDULING RESERVOIR OPERATIONS, KS		474	†
TORONTO LAKE, KS	894	894	
TUTTLE CREEK LAKE, KS	3,061	5,861	
WILSON LAKE, KS	2,205	2,205	
KENTUCKY			
BARKLEY DAM AND LAKE BARKLEY, KY and TN	21,452	21,452	
BARREN RIVER LAKE, KY	3,081	3,081	
BIG SANDY HARBOR, KY		2,037	*
BUCKHORN LAKE, KY	2,519	2,519	
CARR CREEK LAKE, KY	2,520	2,520	
CAVE RUN LAKE, KY	1,444	1,444	
DEWEY LAKE, KY	2,589	2,589	
ELVIS STAHR (HICKMAN) HARBOR, KY		935	*
FALLS OF THE OHIO NATIONAL WILDLIFE, KY and IN	101	101	
FISHTRAP LAKE, KY	2,517	2,517	
GRAYSON LAKE, KY	2,129	2,129	
GREEN AND BARREN RIVERS, KY	2,826	2,826	
GREEN RIVER LAKE, KY	3,228	3,228	
INSPECTION OF COMPLETED WORKS, KY		1,163	†
LAUREL RIVER LAKE, KY	2,741	2,741	
MARTINS FORK LAKE, KY	1,533	1,533	
MIDDLESBORO CUMBERLAND RIVER, KY	298	298	
NOLIN LAKE, KY	3,311	3,311	
OHIO RIVER LOCKS AND DAMS, KY, IL, IN and OH	54,036	54,036	
OHIO RIVER OPEN CHANNEL WORK, KY, IL, IN and OH	10,844	10,844	
PAINTSVILLE LAKE, KY	1,898	1,898	
PROJECT CONDITION SURVEYS, KY		5	*
ROUGH RIVER LAKE, KY	4,588	4,588	
TAYLORSVILLE LAKE, KY	1,671	1,671	
WOLF CREEK DAM, LAKE CUMBERLAND, KY	12,329	12,329	
YATESVILLE LAKE, KY	1,755	1,755	
LOUISIANA			
ATCHAFALAYA RIVER AND BAYOUS CHENE, BOEUF and BLACK, LA		10,096	*
BARATARIA BAY WATERWAY, LA		105	*
BAYOU BODCAU DAM AND RESERVOIR, LA	1,825	1,825	
BAYOU LAFOURCHE AND LAFOURCHE JUMP WATERWAY, LA		3,967	*
BAYOU PIERRE, LA	35	35	
BAYOU SEGNETTE WATERWAY, LA		11	*
BAYOU TECHE AND VERMILION RIVER, LA		182	*
BAYOU TECHE, LA		202	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
CADDO LAKE, LA	337	337	
CALCASIEU RIVER AND PASS, LA		28,161	*
FRESHWATER BAYOU, LA		19,424	*
GULF INTRACOASTAL WATERWAY, LA	17,286	17,286	
HOUMA NAVIGATION CANAL, LA		3,667	*
INSPECTION OF COMPLETED WORKS, LA		1,297	†
J. BENNETT JOHNSTON WATERWAY, LA	13,197	13,197	
LAKE PROVIDENCE HARBOR, LA		1,407	*
MADISON PARISH PORT, LA		219	*
MERMENTAU RIVER, LA		2,499	*
MISSISSIPPI RIVER OUTLETS AT VENICE, LA		3,805	*
MISSISSIPPI RIVER, BATON ROUGE TO THE GULF OF MEXICO, LA		209,192	*
PROJECT CONDITION SURVEYS, LA		65	*
REMOVAL OF AQUATIC GROWTH, LA		200	*
TANGIPAHOA RIVER, LA		22	*
WALLACE LAKE, LA	2,085	2,085	
WATERWAY FROM EMPIRE TO THE GULF, LA		61	*
WATERWAY FROM INTRACOASTAL WATERWAY TO BAYOU DULAC, LA		16	*
MAINE			
DISPOSAL AREA MONITORING, ME		1,050	*
GEORGE'S RIVER, ME		500	
INSPECTION OF COMPLETED WORKS, ME		123	†
PROJECT CONDITION SURVEYS, ME		1,133	*
SCARBOROUGH RIVER, ME		4,800	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ME		4	*
TOWN OF ISLE AU HAUT, ME		150	
WELLS HARBOR, ME		1,000	
MARYLAND			
BALTIMORE HARBOR AND CHANNELS (50 FOOT), MD		25,050	*
BALTIMORE HARBOR, MD (DRIFT REMOVAL)		945	*
CHESTER RIVER, MD		205	*
CLAIBORNE HARBOR, MD		5	*
CUMBERLAND, MD AND RIDGELEY, WV	227	227	
HONGA RIVER AND TAR BAY, MD		3,220	*
INSPECTION OF COMPLETED WORKS, MD		217	†
JENNINGS RANDOLPH LAKE, MD and WV	3,670	3,670	
OCEAN CITY HARBOR AND INLET AND SINEPUXENT BAY, MD		515	*
PROJECT CONDITION SURVEYS, MD		630	*
ROCK HALL HARBOR, MD		2,170	*
SCHEDULING RESERVOIR OPERATIONS, MD		123	†
SLAUGHTER CREEK, MD		5	*
WICOMICO RIVER, MD		4,525	*
MASSACHUSETTS			
BARRE FALLS DAM, MA	1,528	1,528	
BIRCH HILL DAM, MA	1,074	1,074	
BUFFUMVILLE LAKE, MA	1,159	1,159	
CAPE COD CANAL, MA	2,049	11,508	*
CHARLES RIVER NATURAL VALLEY STORAGE AREAS, MA	407	407	
CHATHAM (STAGE) HARBOR, MA		800	
CONANT BROOK DAM, MA	390	390	
EAST BRIMFIELD LAKE, MA	1,690	1,690	
HODGES VILLAGE DAM, MA	1,165	1,165	
HYANNIS HARBOR, MA		800	*
INSPECTION OF COMPLETED WORKS, MA		624	†
KNIGHTVILLE DAM, MA	1,120	1,120	
LITTLEVILLE LAKE, MA	1,276	1,276	
NEW BEDFORD HURRICANE BARRIER, MA	490	490	
NEWBURYPORT HARBOR, MA		240	*
PROJECT CONDITION SURVEYS, MA		1,288	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
TULLY LAKE, MA	1,981	1,981	
WEST HILL DAM, MA	952	952	
WESTVILLE LAKE, MA	1,404	1,404	
MICHIGAN			
ALPENA HARBOR, MI		29	*
ARCADIA HARBOR, MI		2	*
AU SABLE HARBOR, MI		5	*
BIG BAY HARBOR, MI		5	*
BLACK RIVER HARBOR, GOGEBIC CO—UP, MI		2	*
BLACK RIVER, PORT HURON, MI		2	*
BOLLES HARBOR, MI		11	*
CASEVILLE HARBOR, MI		7	*
CEDAR RIVER HARBOR, MI		4	*
CHANNELS IN LAKE ST. CLAIR, MI		248	*
CHARLEVOIX HARBOR, MI		25	*
CHEBOYGAN HARBOR, MI		5	*
DETROIT RIVER, MI		8,041	*
EAGLE HARBOR, MI		2	*
FRANKFORT HARBOR, MI		14	*
GRAND HAVEN HARBOR AND GRAND RIVER, MI		3,425	*
GRAND MARAIS HARBOR, MI		13	*
GRAND TRAVERSE BAY HARBOR, MI		23	*
HAMMOND BAY HARBOR, MI		2	*
HARBOR BEACH HARBOR, MI		5	*
HARRISVILLE HARBOR, MI		6	*
HOLLAND HARBOR, MI		1,317	*
INSPECTION OF COMPLETED WORKS, MI		309	†
INLAND ROUTE, MI		127	*
KEWEENAW WATERWAY, MI	10	1,458	*
LAC LA BELLE, MI		4	*
LELAND HARBOR, MI		22	*
LEXINGTON HARBOR, MI		505	*
LITTLE LAKE HARBOR, MI		204	*
LUDINGTON HARBOR, MI		1,164	*
MANISTEE HARBOR, MI		12	*
MANISTIQUE HARBOR, MI		7	*
MARQUETTE HARBOR, MI		805	*
MENOMINEE HARBOR, MI and WI		5	*
MONROE HARBOR, MI		1,286	*
MUSKEGON HARBOR, MI		981	*
NEW BUFFALO HARBOR, MI		26	*
ONTONAGON HARBOR, MI		12	*
PENTWATER HARBOR, MI		16	*
POINT LOOKOUT HARBOR, MI		4	*
PORT AUSTIN HARBOR, MI		9	*
PORT SANILAC HARBOR, MI		506	*
PORTAGE LAKE HARBOR, MI		9	*
PRESQUE ISLE HARBOR, MI		5	*
PROJECT CONDITION SURVEYS, MI		843	*
ROUGE RIVER, MI		2	*
SAGINAW RIVER, MI		4,058	*
SAUGATUCK HARBOR, KALAMAZOO RIVER, MI		6	*
SEBEWAING RIVER, MI	65	68	*
SOUTH HAVEN HARBOR, MI		16	*
ST. CLAIR RIVER, MI		833	*
ST. JOSEPH HARBOR, MI		3,033	*
ST. MARYS RIVER, MI	10,024	82,566	*
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MI		1,800	*
WHITE LAKE HARBOR, MI		8	*
WHITEFISH POINT HARBOR, MI		2	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
MINNESOTA			
BIG STONE LAKE AND WHETSTONE RIVER, MN and SD	282	282	
DULUTH–SUPERIOR HARBOR, MN and WI	185	6,185	*
INSPECTION OF COMPLETED WORKS, MN	.....	150	†
KNIFE RIVER HARBOR, MN	.....	22	*
LAC QUI PARLE LAKES, MINNESOTA RIVER, MN	1,020	1,020	
MINNESOTA RIVER, MN	.....	275	*
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVP PORTION), MN	101,167	101,917	*
ORWELL LAKE, MN	1,032	1,032	
PROJECT CONDITION SURVEYS, MN	.....	99	*
RED LAKE RESERVOIR, MN	200	200	
RESERVOIRS AT HEADWATERS OF MISSISSIPPI RIVER, MN	6,344	6,344	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MN	.....	927	*
TWO HARBORS, MN	.....	6	*
MISSISSIPPI			
BILOXI HARBOR, MS	.....	1,560	*
EAST FORK, TOMBIGBEE RIVER, MS	290	290	
GULFPORT HARBOR, MS	.....	8,600	*
INSPECTION OF COMPLETED WORKS, MS	.....	71	†
MOUTH OF YAZOO RIVER, MS	.....	331	*
OKATIBBEE LAKE, MS	1,744	1,744	
PASCAGOULA HARBOR, MS	.....	10,004	*
PEARL RIVER, MS and LA	139	139	
PROJECT CONDITION SURVEYS, MS	.....	155	*
ROSEDALE HARBOR, MS	.....	937	*
WATER/ENVIRONMENTAL CERTIFICATION, MS	.....	30	*
YAZOO RIVER, MS	.....	271	*
MISSOURI			
CARUTHERSVILLE HARBOR, MO	.....	791	*
CLARENCE CANNON DAM AND MARK TWAIN LAKE, MO	6,241	6,241	
CLEARWATER LAKE, MO	6,689	6,689	
HARRY S. TRUMAN DAM AND RESERVOIR, MO	12,846	12,846	
INSPECTION OF COMPLETED WORKS, MO	.....	2,093	†
LITTLE BLUE RIVER LAKES, MO	1,587	1,587	
LONG BRANCH LAKE, MO	993	993	
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REG WORKS), MO and IL	28,344	28,344	
NEW MADRID COUNTY HARBOR, MO	.....	520	*
NEW MADRID HARBOR, MO (MILE 889)	.....	440	*
POMME DE TERRE LAKE, MO	3,146	3,146	
PROJECT CONDITION SURVEYS, MO	.....	5	*
SCHEDULING RESERVOIR OPERATIONS, MO	.....	174	†
SMITHVILLE LAKE, MO	1,874	1,874	
SOUTHEAST MISSOURI PORT, MISSISSIPPI RIVER, MO	.....	9	*
STOCKTON LAKE, MO	5,838	5,838	
TABLE ROCK LAKE, MO and AR	12,871	12,871	
MONTANA			
FT PECK DAM AND LAKE, MT	6,826	6,826	
INSPECTION OF COMPLETED WORKS, MT	.....	162	†
LIBBY DAM, MT	2,976	2,976	
SCHEDULING RESERVOIR OPERATIONS, MT	.....	130	†
NEBRASKA			
GAVINS POINT DAM, LEWIS AND CLARK LAKE, NE and SD	10,091	10,091	
HARLAN COUNTY LAKE, NE	3,161	3,161	
INSPECTION OF COMPLETED WORKS, NE	.....	772	†
MISSOURI RIVER—KENSLERS BEND, NE TO SIOUX CITY, IA	113	113	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
PAPILLION CREEK AND TRIBUTARIES LAKES, NE	800	800	
SALT CREEK AND TRIBUTARIES, NE	1,310	1,310	
NEVADA			
INSPECTION OF COMPLETED WORKS, NV	.....	70	†
MARTIS CREEK LAKE, NV and CA	8,325	8,325	
PINE AND MATHEWS CANYONS DAMS, NV	997	997	
NEW HAMPSHIRE			
BLACKWATER DAM, NH	1,034	1,034	
EDWARD MACDOWELL LAKE, NH	1,287	1,287	
FRANKLIN FALLS DAM, NH	1,150	1,150	
HOPKINTON–EVERETT LAKES, NH	2,127	2,127	
INSPECTION OF COMPLETED WORKS, NH	.....	88	†
OTTER BROOK LAKE, NH	1,950	1,950	
PROJECT CONDITION SURVEYS, NH	.....	361	*
SURRY MOUNTAIN LAKE, NH	1,593	1,593	
NEW JERSEY			
COLD SPRING INLET, NJ	.....	20	*
DELAWARE RIVER AT CAMDEN, NJ	.....	15	*
DELAWARE RIVER, PHILADELPHIA TO THE SEA, NJ, PA and DE	.....	46,249	*
INSPECTION OF COMPLETED WORKS, NJ	.....	323	†
MANASQUAN RIVER, NJ	.....	435	*
NEW JERSEY INTRACOASTAL WATERWAY, NJ	.....	1,060	*
NEWARK BAY, HACKENSACK AND PASSAIC RIVERS, NJ	.....	20,020	*
PASSAIC RIVER FLOOD WARNING SYSTEMS, NJ	525	525	
PROJECT CONDITION SURVEYS, NJ	.....	2,198	*
SALEM RIVER, NJ	.....	100	*
SHARK RIVER, NJ	.....	1,150	*
NEW MEXICO			
ABIQUIU DAM, NM	5,152	5,152	
COCHITI LAKE, NM	4,532	4,532	
CONCHAS LAKE, NM	3,265	3,265	
GALISTEO DAM, NM	711	711	
INSPECTION OF COMPLETED WORKS, NM	.....	515	†
JEMEZ CANYON DAM, NM	1,341	1,341	
MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM, NM	.....	2,000	
SANTA ROSA DAM AND LAKE, NM	1,508	1,508	
SCHEDULING RESERVOIR OPERATIONS, NM	.....	225	†
TWO RIVERS DAM, NM	814	814	
UPPER RIO GRANDE WATER OPERATIONS MODEL, NM	1,235	1,235	
NEW YORK			
ALMOND LAKE, NY	1,732	1,732	
ARKPORT DAM, NY	448	448	
BARCELONA HARBOR, NY	.....	19	*
BLACK ROCK CHANNEL AND TONAWANDA HARBOR, NY	.....	2,277	*
BRONX RIVER, NY	.....	6	*
BROWN'S CREEK, NY	.....	5	*
BUFFALO HARBOR, NY	.....	2,711	*
CAPE VINCENT HARBOR, NY	.....	3	*
CATTARAUGUS HARBOR, NY	.....	3	*
DUNKIRK HARBOR, NY	.....	4,753	*
EAST RIVER, NY	.....	7,610	*
EAST SIDNEY LAKE, NY	1,425	1,425	
FIRE ISLAND INLET TO JONES INLET, NY	.....	37,340	*
GREAT SODUS BAY HARBOR, NY	.....	7	*
GREAT SODUS BAY HARBOR, BREAKWATER, NY	.....	20,000	
HUDSON RIVER CHANNEL, NY	.....	10	*
HUDSON RIVER, NY (MAINT)	.....	5,410	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
HUDSON RIVER, NY (O and C)		2,600	*
INSPECTION OF COMPLETED WORKS, NY		1,068	†
IRONDEQUOIT BAY HARBOR, NY		6	*
LITTLE RIVER, NY		1	*
LITTLE SODUS BAY HARBOR, NY		5	*
LONG ISLAND INTRACOASTAL WATERWAY, NY		6,065	*
MORRISTOWN HARBOR, NY		1	*
MOUNT MORRIS DAM, NY	4,334	4,334	
NEW YORK AND NEW JERSEY CHANNELS, NY		406	*
NEW YORK AND NEW JERSEY HARBOR, NY and NJ		58,300	*
NEW YORK & NEW JERSEY HARBOR (DMMP), NY AND NJ		(3000)	
NEW YORK HARBOR, NY		18,035	*
NEW YORK HARBOR, NY and NJ (DRIFT REMOVAL)		12,584	*
NEW YORK HARBOR, NY (PREVENTION OF OBSTRUCTIVE DEPOSITS)		1,790	*
OAK ORCHARD HARBOR, NY		5	*
OGDENSBURG HARBOR, NY		1	*
OLCOTT HARBOR, NY		8	*
OSWEGO HARBOR, NY		17,971	*
PORT ONTARIO HARBOR, NY		5	*
PROJECT CONDITION SURVEYS, NY		2,497	*
ROCHESTER HARBOR, NY		10	*
SOUTHERN NEW YORK FLOOD CONTROL PROJECTS, NY	1,199	1,199	
STURGEON POINT HARBOR, NY		4	*
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, NY		710	*
WHITNEY POINT LAKE, NY	2,422	2,422	
WILSON HARBOR, NY		8	*
NORTH CAROLINA			
ATLANTIC INTRACOASTAL WATERWAY (AIWW), NC	15,955	15,955	
B. EVERETT JORDAN DAM AND LAKE, NC	1,942	1,942	
CAPE FEAR RIVER ABOVE WILMINGTON, NC	146	484	*
FALLS LAKE, NC	1,910	1,910	
INSPECTION OF COMPLETED WORKS, NC		188	†
MANTEO (SHALLOWBAG) BAY, NC		7,265	*
MOREHEAD CITY HARBOR, NC		24,919	*
NEW RIVER INLET, NC		560	*
PROJECT CONDITION SURVEYS, NC		600	*
ROLLINSON CHANNEL, NC		3,665	*
SILVER LAKE HARBOR, NC		560	*
W. KERR SCOTT DAM AND RESERVOIR, NC	4,010	4,010	
WATERWAY CONNECTING PAMLICO SOUND AND BEAUFORT HARBOR, NC		2,615	
WILMINGTON HARBOR, NC		21,657	*
NORTH DAKOTA			
BOWMAN HALEY LAKE, ND	258	258	
GARRISON DAM, LAKE SAKAKAWEA, ND	17,472	17,472	
HOMME LAKE, ND	365	365	
INSPECTION OF COMPLETED WORKS, ND		263	†
LAKE ASHTABULA AND BALDHILL DAM, ND	1,929	1,929	
PIPESTEM LAKE, ND	620	620	
SCHEDULING RESERVOIR OPERATIONS, ND		128	†
SOURIS RIVER, ND	374	374	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ND		347	*
OHIO			
ALUM CREEK LAKE, OH	2,212	2,212	
ASHTABULA HARBOR, OH		2,293	*
BERLIN LAKE, OH	3,335	3,335	
CAESAR CREEK LAKE, OH	3,585	3,585	
CLARENCE J. BROWN DAM AND RESERVOIR, OH	2,234	2,234	
CLEVELAND HARBOR, OH		10,908	*
CONNEAUT HARBOR, OH		2,020	*

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
COOLEY CANAL, OH		5	*
DEER CREEK LAKE, OH	2,561	2,561	
DELAWARE LAKE, OH	2,667	2,667	
DILLON LAKE, OH	3,571	3,571	
FAIRPORT HARBOR, OH		2,346	*
HURON HARBOR, OH		1,509	*
INSPECTION OF COMPLETED WORKS, OH		1,430	†
LORAIN HARBOR, OH		966	*
MASSILLON LOCAL PROTECTION PROJECT, OH	186	186	
MICHAEL J. KIRWAN DAM AND RESERVOIR, OH	1,756	1,756	
MOSQUITO CREEK LAKE, OH	1,547	1,547	
MUSKINGUM RIVER LAKES, OH	19,550	19,550	
NORTH BRANCH KOKOSING RIVER LAKE, OH	767	767	
OHIO–MISSISSIPPI FLOOD CONTROL, OH	1,500	1,500	
PAINT CREEK LAKE, OH	1,814	1,814	
PORT CLINTON HARBOR, OH		1,010	*
PROJECT CONDITION SURVEYS, OH		346	*
PUT–IN–BAY, OH		2	*
ROCKY RIVER, OH		2	*
ROSEVILLE LOCAL PROTECTION PROJECT, OH	104	104	
SANDUSKY HARBOR, OH		1,007	*
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OH		285	*
TOLEDO HARBOR, OH		6,588	*
TOM JENKINS DAM, OH	1,747	1,747	
TOUSSAINT RIVER, OH		5	*
VERMILION HARBOR, OH		1,007	*
WEST FORK OF MILL CREEK LAKE, OH	1,967	1,967	
WEST HARBOR, OH		5	*
WILLIAM H. HARSHA LAKE, OH	2,361	2,361	
OKLAHOMA			
ARCADIA LAKE, OK	559	559	
BIRCH LAKE, OK	996	996	
BROKEN BOW LAKE, OK	2,958	2,958	
CANTON LAKE, OK	2,138	2,138	
COPAN LAKE, OK	1,235	1,235	
EUFAULA LAKE, OK	7,928	7,928	
FORT GIBSON LAKE, OK	4,760	4,760	
FORT SUPPLY LAKE, OK	1,214	1,214	
GREAT SALT PLAINS LAKE, OK	609	609	
HEYBURN LAKE, OK	839	839	
HUGO LAKE, OK	6,648	6,648	
HULAH LAKE, OK	1,314	1,314	
INSPECTION OF COMPLETED WORKS, OK		80	†
KAW LAKE, OK	3,117	3,117	
KEYSTONE LAKE, OK	5,398	5,398	
MCCLELLAN–KERR ARKANSAS RIVER NAVIGATION SYSTEM, OK	69,197	87,497	
OOLOGAH LAKE, OK	3,103	3,103	
OPTIMA LAKE, OK	98	98	
PENSACOLA RESERVOIR, LAKE OF THE CHEROKEES, OK	18	18	
PINE CREEK LAKE, OK	1,483	1,483	
SARDIS LAKE, OK	1,203	1,203	
SCHEDULING RESERVOIR OPERATIONS, OK		2,000	†
SKIATOOK LAKE, OK	2,234	2,234	
TENKILLER FERRY LAKE, OK	5,849	5,849	
WAURIKA LAKE, OK	1,733	1,733	
WISTER LAKE, OK	5,546	5,546	
OREGON			
APPLEGATE LAKE, OR	1,370	1,617	
COLE RIVER HATCHERY, APPLEGATE LAKE, OR		(247)	
BLUE RIVER LAKE, OR	1,417	1,417	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
BONNEVILLE LOCK AND DAM, OR and WA	1,407	8,900	*
CHETCO RIVER, OR		1,048	*
COLUMBIA RIVER AT THE MOUTH, OR and WA		20,687	*
COOS BAY, OR		18,576	*
COQUILLE RIVER, OR		894	*
COTTAGE GROVE LAKE, OR	1,875	1,875	
COUGAR LAKE, OR	7,683	7,683	
DEPOE BAY, OR		101	*
DETROIT LAKE, OR	1,933	1,933	
DORENA LAKE, OR	1,715	1,715	
ELK CREEK LAKE, OR	225	225	
FALL CREEK LAKE, OR	1,962	1,962	
FERN RIDGE LAKE, OR	3,114	3,114	
GREEN PETER—FOSTER LAKES, OR	3,707	3,707	
HILLS CREEK LAKE, OR	2,146	2,146	
INSPECTION OF COMPLETED WORKS, OR		1,182	†
JOHN DAY LOCK AND DAM, OR and WA	7,533	8,493	
LOOKOUT POINT LAKE, OR	4,774	4,774	
LOST CREEK LAKE, OR	4,972	6,967	
COLE RIVER HATCHERY, LOST CREEK, OR		(1,995)	
MCNARY LOCK AND DAM, OR and WA	14,362	14,362	
PORT ORFORD, OR		393	*
PROJECT CONDITION SURVEYS, OR		510	*
ROGUE RIVER AT GOLD BEACH, OR		1,531	*
SCHEDULING RESERVOIR OPERATIONS, OR		107	†
SIUSLAW RIVER, OR		1,059	*
SKIPANON CHANNEL, OR		59	*
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OR		10,352	*
TILLAMOOK BAY & BAR, OR		389	*
UMPQUA RIVER, OR		1,980	*
WILLAMETTE RIVER AT WILLAMETTE FALLS, OR	176	176	
WILLAMETTE RIVER BANK PROTECTION, OR	164	164	
WILLOW CREEK LAKE, OR	988	988	
YAQUINA BAY AND HARBOR, OR		4,529	*
YAQUINA RIVER, OR		47	*
PENNSYLVANIA			
ALLEGHENY RIVER, PA	9,428	9,428	
ALVIN R. BUSH DAM, PA	1,225	1,225	
AYLESWORTH CREEK LAKE, PA	858	858	
BELTZVILLE LAKE, PA	1,744	1,744	
BLUE MARSH LAKE, PA	4,357	4,357	
CONEMAUGH RIVER LAKE, PA	16,354	16,354	
COWANESQUE LAKE, PA	2,384	2,384	
CROOKED CREEK LAKE, PA	2,620	2,620	
CURWENSVILLE LAKE, PA	1,463	1,463	
DELAWARE RIVER, PHILADELPHIA TO TRENTON, PA and NJ		17,725	*
EAST BRANCH CLARION RIVER LAKE, PA	2,533	2,533	
ERIE HARBOR, PA		13	*
FOSTER J. SAYERS DAM, PA	2,009	2,009	
FRANCIS E. WALTER DAM AND RESERVOIR, PA	2,273	2,273	
GENERAL EDGAR JADWIN DAM AND RESERVOIR, PA	392	392	
INSPECTION OF COMPLETED WORKS, PA		998	†
JOHNSTOWN, PA	4,433	4,433	
KINZUA DAM AND ALLEGHENY RESERVOIR, PA	2,597	2,597	
LOYALHANNA LAKE, PA	5,249	5,249	
MAHONING CREEK LAKE, PA	4,372	4,372	
MONONGAHELA RIVER, PA AND WV	21,932	21,932	
OHIO RIVER LOCKS AND DAMS, PA, OH and WV	55,788	55,788	
OHIO RIVER OPEN CHANNEL WORK, PA, OH and WV	877	877	
PROJECT CONDITION SURVEYS, PA		178	*
PROMPTON LAKE, PA	584	584	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
PUNXSUTAWNEY, PA	1,703	1,703	
RAYSTOWN LAKE, PA	17,851	17,851	
SCHEDULING RESERVOIR OPERATIONS, PA	.....	82	†
SCHUYLKILL RIVER, PA	.....	100	*
SHENANGO RIVER LAKE, PA	4,343	4,343	
STILLWATER LAKE, PA	1,392	1,392	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, PA	.....	115	*
TIOGA–HAMMOND LAKES, PA	5,518	5,518	
TIONESTA LAKE, PA	3,039	3,039	
UNION CITY LAKE, PA	674	674	
WOODCOCK CREEK LAKE, PA	1,434	1,434	
YORK INDIAN ROCK DAM, PA	1,440	1,440	
YOUGHIOGHENY RIVER LAKE, PA and MD	4,326	4,326	
PUERTO RICO			
INSPECTION OF COMPLETED WORKS, PR	.....	209	†
PROJECT CONDITION SURVEYS, PR	.....	106	*
SAN JUAN HARBOR, PR	.....	50	*
RHODE ISLAND			
FOX POINT HURRICANE BARRIER, RI	995	995	
INSPECTION OF COMPLETED WORKS, RI	.....	27	†
PROJECT CONDITION SURVEYS, RI	.....	515	*
PROVIDENCE RIVER AND HARBOR, RI	.....	20,000	*
WOONSOCKET LOCAL PROTECTION PROJECT, RI	1,022	1,022	
SOUTH CAROLINA			
ATLANTIC INTRACOASTAL WATERWAY (AIWW), SC	4,515	4,515	
CHARLESTON HARBOR, SC	.....	34,396	*
COOPER RIVER, CHARLESTON HARBOR, SC	.....	4,575	*
FOLLY RIVER, SC	.....	1,655	*
GEORGETOWN HARBOR, SC	.....	25	*
MURRELLS INLET, SC	.....	500	*
INSPECTION OF COMPLETED WORKS, SC	.....	65	†
PROJECT CONDITION SURVEYS, SC	.....	875	*
SOUTH DAKOTA.			
BIG BEND DAM AND LAKE SHARPE, SD	11,307	11,307	
COLD BROOK LAKE, SD	346	346	
COTTONWOOD SPRINGS LAKE, SD	238	238	
FORT RANDALL DAM, LAKE FRANCIS CASE, SD	13,305	13,305	
INSPECTION OF COMPLETED WORKS, SD	.....	219	†
LAKE TRAVERSE, SD and MN	685	685	
OAHE DAM AND LAKE OAHE, SD	13,301	13,301	
SCHEDULING RESERVOIR OPERATIONS, SD	.....	149	†
TENNESSEE			
CENTER HILL LAKE, TN	10,824	10,824	
CHEATHAM LOCK AND DAM, TN	8,293	8,293	
CORDELL HULL DAM AND RESERVOIR, TN	8,375	8,375	
DALE HOLLOW LAKE, TN	8,469	8,469	
J. PERCY PRIEST DAM AND RESERVOIR, TN	5,768	5,768	
INSPECTION OF COMPLETED WORKS, TN	.....	194	†
NORTHWEST TENNESSEE REGIONAL HARBOR, TN	.....	540	*
OLD HICKORY LOCK AND DAM, TN	31,959	31,959	
PROJECT CONDITION SURVEYS, TN	.....	5	*
TENNESSEE RIVER, TN	27,200	27,200	
WOLF RIVER HARBOR, TN	.....	655	*
TEXAS			
AQUILLA LAKE, TX	2,646	2,646	
ARKANSAS—RED RIVER BASINS CHLORIDE CONTROL—AREA VIII, TX	1,438	1,438	
BARDWELL LAKE, TX	3,220	3,220	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
BELTON LAKE, TX	4,696	4,696	
BENBROOK LAKE, TX	3,195	3,195	
BRAZOS ISLAND HARBOR, TX	.....	14,300	*
BUFFALO BAYOU AND TRIBUTARIES, TX	3,648	3,648	
CANYON LAKE, TX	6,038	6,038	
CHANNEL TO HARLINGEN, TX	.....	3,100	*
CHANNEL TO PORT BOLIVAR, TX	.....	600	*
CORPUS CHRISTI SHIP CHANNEL, TX	.....	6,500	*
DENISON DAM, LAKE TEXOMA, TX	9,784	9,784	
ESTELLINE SPRINGS EXPERIMENTAL PROJECT, TX	41	41	
FERRELLS BRIDGE DAM—LAKE O' THE PINES, TX	7,115	7,115	
FREEPORT HARBOR, TX	.....	10,900	*
GALVESTON HARBOR AND CHANNEL, TX	.....	25,150	*
GIWW, CHANNEL TO VICTORIA, TX	.....	6,950	*
GRANGER LAKE, TX	3,786	3,786	
GRAPEVINE LAKE, TX	3,077	3,077	
GULF INTRACOASTAL WATERWAY, TX	57,650	57,650	
GULF INTRACOASTAL WATERWAY, CHOCOLATE BAYOU, TX	.....	4,650	*
HORDS CREEK LAKE, TX	1,860	1,860	
HOUSTON SHIP CHANNEL, TX	.....	40,300	*
INSPECTION OF COMPLETED WORKS, TX	.....	1,638	†
JIM CHAPMAN LAKE, TX	2,422	2,422	
JOE POOL LAKE, TX	3,595	3,595	
LAKE KEMP, TX	461	461	
LAVON LAKE, TX	13,453	13,453	
LEWISVILLE DAM, TX	4,146	4,146	
MATAGORDA SHIP CHANNEL, TX	.....	7,950	*
MOUTH OF THE COLORADO RIVER, TX	.....	2,100	*
NAVARRO MILLS LAKE, TX	2,401	2,401	
NORTH SAN GABRIEL DAM AND LAKE GEORGETOWN, TX	4,027	4,027	
O. C. FISHER DAM AND LAKE, TX	1,774	1,774	
PAT MAYSE LAKE, TX	1,309	1,309	
PROCTOR LAKE, TX	2,330	2,330	
PROJECT CONDITION SURVEYS, TX	.....	325	*
RAY ROBERTS LAKE, TX	1,928	1,928	
SABINE—NECHES WATERWAY, TX	.....	23,250	*
SAM RAYBURN DAM AND RESERVOIR, TX	20,878	20,878	
SCHEDULING RESERVOIR OPERATIONS, TX	.....	393	†
SOMERVILLE LAKE, TX	3,194	3,194	
STILLHOUSE HOLLOW DAM, TX	3,132	3,132	
TEXAS CITY SHIP CHANNEL, TX	.....	9,700	*
TOWN BLUFF DAM, B. A. STEINHAGEN LAKE AND ROBERT DOUGLAS WILLIS HYDROPOWER PROJECT, TX	3,554	3,554	
WACO LAKE, TX	4,706	4,706	
WALLISVILLE LAKE, TX	3,191	3,191	
WHITNEY LAKE, TX	7,875	7,875	
WRIGHT PATMAN DAM AND LAKE, TX	4,473	4,473	
UTAH			
INSPECTION OF COMPLETED WORKS, UT	.....	35	†
SCHEDULING RESERVOIR OPERATIONS, UT	.....	405	†
VERMONT			
BALL MOUNTAIN LAKE, VT	1,477	1,477	
INSPECTION OF COMPLETED WORKS, VT	.....	108	†
NARROWS OF LAKE CHAMPLAIN, VT & NY	.....	10	*
NORTH HARTLAND LAKE, VT	1,607	1,607	
NORTH SPRINGFIELD LAKE, VT	1,885	1,885	
TOWNSHEND LAKE, VT	1,456	1,456	
UNION VILLAGE DAM, VT	1,019	1,019	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
VIRGIN ISLANDS			
INSPECTION OF COMPLETED WORKS, VI	.....	36	†
PROJECT CONDITION SURVEYS, VI	.....	53	*
VIRGINIA			
ATLANTIC INTRACOASTAL WATERWAY—ALBEMARLE AND CHESAPEAKE CANAL ROUTE, VA	7,035	7,035	
ATLANTIC INTRACOASTAL WATERWAY—DISMAL SWAMP CANAL ROUTE, VA	3,971	3,971	
CHINCOTEAGUE HARBOR OF REFUGE, VA	.....	250	*
CHINCOTEAGUE INLET, VA	.....	800	*
GATHRIGHT DAM AND LAKE MOOMAW, VA	3,990	3,990	
HAMPTON ROADS DRIFT REMOVAL, VA	.....	2,183	*
HAMPTON ROADS, PREVENTION OF OBSTRUCTIVE DEPOSITS, VA	.....	225	*
INSPECTION OF COMPLETED WORKS, VA	.....	596	†
JAMES RIVER CHANNEL, VA	.....	11,116	*
JOHN H. KERR LAKE, VA and NC	12,043	12,043	
JOHN H. KERR LAKE, VA and NC	2,605	2,605	
LITTLE WICOMICO RIVER, VA	.....	105	*
LYNNHAVEN INLET, VA	.....	350	*
NORFOLK HARBOR, VA	.....	28,645	*
NORTH FORK OF POUND RIVER LAKE, VA	705	705	
PHILPOTT LAKE, VA	4,480	4,480	
PROJECT CONDITION SURVEYS, VA	.....	1,884	*
RUDEE INLET, VA	.....	425	*
WATER AND ENVIRONMENTAL CERTIFICATIONS, VA	.....	215	*
WATERWAY ON THE COAST OF VIRGINIA, VA	.....	2,160	*
WILLOUGHBY CHANNEL, VA	.....	2,837	*
WASHINGTON			
CHIEF JOSEPH DAM, WA	518	518	
COLUMBIA AND LOWER WILLAMETTE RIVERS BELOW VANCOUVER, WA and PORTLAND, OR	.....	81,076	*
COLUMBIA RIVER AT BAKER BAY, WA	.....	1,249	*
COLUMBIA RIVER BETWEEN CHINOOK AND SAND ISLAND, WA	.....	1,209	*
COLUMBIA RIVER BETWEEN VANCOUVER, WA AND THE DALLES, OR	.....	1,129	*
EDIZ HOOK, WA	.....	155	*
EVERETT HARBOR AND SNOHOMISH RIVER, WA	.....	3,110	*
GRAYS HARBOR, WA	.....	17,910	*
HOWARD A. HANSON DAM, WA	5,251	5,251	
ICE HARBOR LOCK AND DAM, WA	23,485	23,485	
INSPECTION OF COMPLETED WORKS, WA	.....	1,001	†
LAKE WASHINGTON SHIP CANAL, WA	815	10,564	*
LITTLE GOOSE LOCK AND DAM, WA	13,948	13,948	
LOWER GRANITE LOCK AND DAM, WA	15,061	15,061	
LOWER MONUMENTAL LOCK AND DAM, WA	10,494	10,494	
MILL CREEK LAKE, WA	4,541	4,541	
MOUNT ST. HELENS SEDIMENT CONTROL, WA	696	856	
MUD MOUNTAIN DAM, WA	8,861	8,861	
NEAH BAY, WA	.....	225	*
PORT TOWNSEND, WA	.....	315	*
PROJECT CONDITION SURVEYS, WA	.....	840	*
PUGET SOUND AND TRIBUTARY WATERS, WA	.....	1,343	*
QUILLAYUTE RIVER, WA	.....	3,384	*
SEATTLE HARBOR, WA	.....	1,985	*
SCHEDULING RESERVOIR OPERATIONS, WA	.....	605	†
STILLAGUAMISH RIVER, WA	528	528	
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WA	.....	65	*
SWINOMISH CHANNEL, WA	.....	1,857	*
TACOMA–PUYALLUP RIVER, WA	319	319	
THE DALLES LOCK AND DAM, WA and OR	5,353	5,353	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
WEST VIRGINIA			
BEECH FORK LAKE, WV	1,979	1,979	
BLUESTONE LAKE, WV	2,509	2,509	
BURNSVILLE LAKE, WV	3,078	3,078	
EAST LYNN LAKE, WV	3,171	3,171	
ELKINS, WV	59	59	
INSPECTION OF COMPLETED WORKS, WV	.....	515	†
KANAWHA RIVER LOCKS AND DAMS, WV	26,400	26,400	
OHIO RIVER LOCKS AND DAMS, WV, KY and OH	54,697	54,697	
OHIO RIVER OPEN CHANNEL WORK, WV, KY and OH	2,802	2,802	
R. D. BAILEY LAKE, WV	3,424	3,424	
STONEWALL JACKSON LAKE, WV	1,809	1,809	
SUMMERSVILLE LAKE, WV	2,988	2,988	
SUTTON LAKE, WV	4,705	4,705	
TYGART LAKE, WV	2,085	2,085	
WISCONSIN			
ALGOMA HARBOR, WI	.....	7,494	*
ASHLAND HARBOR, WI	.....	2	*
BAYFIELD HARBOR, WI	.....	3	*
CORNUCOPIA HARBOR, WI	.....	7	*
EAU GALLE RIVER LAKE, WI	823	823	
FOX RIVER, WI	7,716	7,716	
GREEN BAY HARBOR, WI	.....	3,378	*
INSPECTION OF COMPLETED WORKS, WI	.....	46	†
KENOSHA HARBOR, WI	.....	3,505	*
KEWAUNEE HARBOR, WI	.....	952	*
LA POINTE HARBOR, WI	.....	22	*
MANITOWOC HARBOR, WI	.....	562	*
MILWAUKEE HARBOR, WI	.....	10,064	*
OCONTO HARBOR, WI	.....	5	*
PENSAUKEE HARBOR, WI	.....	4	*
PORT WASHINGTON HARBOR, WI	.....	5	*
PORT WING HARBOR, WI	.....	8	*
PROJECT CONDITION SURVEYS, WI	.....	369	*
SAXON HARBOR, WI	.....	4	*
SHEBOYGAN HARBOR, WI	.....	5	*
STURGEON BAY HARBOR AND LAKE MICHIGAN SHIP CANAL, WI	7	5,623	*
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WI	.....	485	*
TWO RIVERS HARBOR, WI	.....	211	*
WYOMING			
INSPECTION OF COMPLETED WORKS, WY	.....	51	†
JACKSON HOLE LEVEES, WY	2,251	2,251	
SCHEDULING RESERVOIR OPERATIONS, WY	.....	112	†
SUBTOTAL, PROJECTS LISTED UNDER STATES	2,411,077	4,277,418	
REMAINING ITEMS			
ADDITIONAL FUNDING FOR ONGOING WORK	.....	45,022	
NAVIGATION MAINTENANCE	.....	25,000	
DEEP–DRAFT HARBOR AND CHANNEL	.....	355,000	
DONOR AND ENERGY TRANSFER PORTS	.....	56,000	
INLAND WATERWAYS	.....	15,000	
SMALL, REMOTE, OR SUBSISTENCE NAVIGATION	.....	56,000	
OTHER AUTHORIZED PROJECT PURPOSES	.....	12,300	
AQUATIC NUISANCE CONTROL RESEARCH	100	20,100	
CIVIL WORKS WATER MANAGEMENT SYSTEM (CWWMS)	8,000	8,000	
COASTAL INLETS RESEARCH PROGRAM	100	12,600	
COASTAL OCEAN DATA SYSTEMS (CODS) PROGRAM	3,500	10,500	
CULTURAL RESOURCES	1,300	1,300	
CYBERSECURITY	4,000	4,000	

CORPS OF ENGINEERS—OPERATION AND MAINTENANCE—Continued

[In thousands of dollars]

Item	Budget estimate	Committee recommendation	
DREDGE MCFARLAND READY RESERVE	.....	11,000	*
DREDGE WHEELER READY RESERVE	.....	14,000	*
DREDGING DATA AND LOCK PERFORMANCE MONITORING SYSTEM	1,100	1,100	
DREDGING OPERATIONS AND ENVIRONMENTAL RESEARCH (DOER) PROGRAM	5,000	7,000	
DREDGING OPERATIONS TECHNICAL SUPPORT PROGRAM (DOTS)	2,000	5,000	
EARTHQUAKE HAZARDS REDUCTION PROGRAM	250	2,250	
ELECTRIC VEHICLE FLEET AND CHARGING INFRASTRUCTURE	20,000	20,000	
ENGINEERING WITH NATURE	.....	20,000	
FACILITY PROTECTION	4,000	4,000	
FISH AND WILDLIFE OPERATION FISH HATCHERY REIMBURSEMENT	5,400	5,400	
HARBOR MAINTENANCE FEE DATA COLLECTION	.....	795	*
INLAND WATERWAY NAVIGATION CHARTS	4,000	8,000	
INSPECTION OF COMPLETED FEDERAL FLOOD CONTROL PROJECTS	18,000	18,000	
INSPECTION OF COMPLETED WORKS	32,500	.....	‡
MONITORING OF COMPLETED NAVIGATION PROJECTS	100	12,100	
NATIONAL COASTAL MAPPING PROGRAM	4,000	15,000	
NATIONAL DAM SAFETY PROGRAM (PORTFOLIO RISK ASSESSMENT)	10,000	10,000	
NATIONAL EMERGENCY PREPAREDNESS PROGRAM (NEPP)	5,500	5,500	
NATIONAL (LEVEE) FLOOD INVENTORY	7,500	7,500	
NATIONAL (MULTIPLE PROJECT) NATURAL RESOURCES MANAGEMENT ACTIVITIES	2,500	2,500	
NATIONAL PORTFOLIO ASSESSMENT FOR REALLOCATIONS	600	600	
OPTIMIZATION TOOLS FOR NAVIGATION	350	350	
PERFORMANCE–BASED BUDGETING SUPPORT PROGRAM	.....	.....	
RECREATION MANAGEMENT SUPPORT PROGRAM	1,000	1,000	
REGIONAL SEDIMENT MANAGEMENT	100	4,700	
RESPONSE TO CLIMATE CHANGE AT CORPS PROJECTS	6,000	11,000	
REVIEW OF NON–FEDERAL ALTERATIONS OF CIVIL WORKS PROJECTS (SECTION 408)	10,000	10,000	
SCHEDULING OF RESERVOIR OPERATIONS	8,500	.....	‡
SOIL MOISTURE & SNOWPACK MONITORING	.....	8,000	
STEWARDSHIP SUPPORT PROGRAM	900	900	
SUSTAINABLE RIVERS PROGRAM (SRP)	5,000	5,000	
VETERAN'S CURATION PROGRAM AND COLLECTIONS MANAGEMENT	6,500	6,500	
WATERBORNE COMMERCE STATISTICS	4,670	4,670	
WATER OPERATIONS TECHNICAL SUPPORT (WOTS)	5,500	10,500	
SUBTOTAL, REMAINING ITEMS	187,970	854,187	
TOTAL, OPERATION AND MAINTENANCE	2,599,047	5,131,605	

*Includes funds requested in other accounts.
‡Funded under projects listed under states.
†Requested in remaining items.

Arkansas Red River Chloride Control.—The Committee reminds the Corps of their existing obligations to continue operations and maintenance activities for the Red River Chloride Control project, Oklahoma and Texas, at Federal expense and encourages the Corps to prioritize funding for these projects when allocating additional funding recommended in this account.

Aquatic Nuisance Control Research.—The additional funding recommended in the Aquatic Nuisance Control Research remaining item is to supplement and advance Corps activities to address Harmful Algal Blooms including: early detection, prevention, and management techniques and procedures to reduce the occurrence and impacts of harmful algal blooms in our Nation's water resources; work with university partners to develop prediction, avoidance and remediation measures focused on environmental triggers in riverine ecosystems; and to advance state-of-the-art unmanned ariel system based detection, monitoring, and mapping of invasive aquatic plant species in conjunction with University partners.

Asset Management/Facilities and Equipment Maintenance [FEM].—The Committee notes that the Corps was previously provided $1,000,000 under the Asset Management/FEM remaining item to complete this study. The Committee is frustrated by how long it has taken the Corps to make progress on reviewing their inventory, in accordance with Section 6002 of the WRRDA of 2014. Nonetheless, the Committee understands the second phase of inventory and assessment is taking place and is eager to receive the completed report that was directed in previous Committee Reports. The Corps is directed to provide a briefing that includes details on the percentage of this work that has already been done and a timeline for completion of the inventory to the Committee no later than 60 days after enactment of this act.

Coastal Inlet Research Program.—The Committee understands that communities, infrastructure, and resources tied to coastal regions are vulnerable to damage from extreme coastal events and long-term coastal change. Funding in addition to the budget request is recommended for Corps led, multi-university effort to identify engineering frameworks to address coastal resilience needs; to develop adaptive pathways that lead to coastal resilience; that measure the coastal forces that lead to infrastructure damage and erosion during extreme storm events; and to improve coupling of terrestrial and coastal models. Funding in addition to the budget request is also recommended for the Corps to continue work with the National Oceanic and Atmospheric Administration's [NOAA] National Water Center on protecting the Nation's water resources.

Debris Removal.—The Committee recommendation includes $5,000,000 for debris removal activities as authorized by section 1164 of the WIIN Act. The Committee encourages the Corps to complete ongoing bridge removal projects; and when removing bridges and bridge pilings, to consider also removing other pilings and obstructions in close proximity to the bridge, and in or adjacent to the Federal navigation channel pursuant to this authority.

Dredging Operations & Environmental Research [DOER]—Contaminated Sediment Management.—The Committee recognizes that assessment and management of contaminated sediments represents a significant cost to the Federal Government and impacts the Nation's inland and coastal navigation system affecting the free flow of commerce. There is a critical need for investment in technology and approaches to enable more cost effective and sustainable practices for the assessment and management of contaminated sediments. The Committee directs the Corps to develop a public-private partnership focused on research, development, and implementation of solutions for the assessment and management of contaminated sediments through the DOER program.

Dredge Operations Technical Support Program [DOTS].—The Committee recommends additional funds in the remaining item to support the research and application of artificial intelligence, machine learning, and advanced modeling capabilities to improve streamflow forecasting for channel shoaling and dredging to help reduce interruptions in waterborne inland commerce as a result of flooding and other silting activities.

Dredge Operations Technical Support Program [DOTS]—Integrated Navigation Analysis and Visualization.—The Committee

recommendation includes $2,200,000 for the further development of the Integrated Navigation Analysis and Visualization platform related to the operation and maintenance of the U.S. Marine Transportation System.

Engineering With Nature [EWN].—The Committee is impressed with the positive impact on the environment this program provides. With the funds recommended, the Corps is encouraged to continue collaboration across research programs on nature-based infrastructure and with university partners to develop standards, design guidance, and testing protocols to fully evaluate and standardize nature-based and hybrid infrastructure solutions, including those in drought and fire-prone lands and post-fire recovery areas. Of the funding recommended, at least $5,000,000 is included to support ongoing research and advance work with university partners to develop standards, design guidance, and testing protocols to improve and standardize nature-based and hybrid infrastructure solutions.

Additionally, the Corps is encouraged to expand the EWN initiative to support science and engineering practices that support long-term resilience and sustainability of water infrastructure and their supporting systems. Of the funding recommended, at least $10,000,000 is to support research and development of natural infrastructure solutions for the Nation's bays and estuaries, to design innovative nature-based infrastructure with landscape architecture, coastal modeling, and engineering. Funding under this line item is intended for EWN activities having a national or regional scope or that benefit the Corps' broader execution of its mission areas. It is not intended to replace or preclude the appropriate use of EWN practices at districts using project-specific funding, or work performed across other Corps programs that might involve EWN. The Committee encourages the Corps to identify EWN efforts in future budget requests.

Enhanced Options for Sand Acquisition for Beach Renourishment Projects.—The Committee urges the Corps to provide States with guidance and recommendations to implement cost effective measures and planning for sand management.

Flood and Earthquake Modeling.—Last fiscal year the Committee provided additional funds in the Earthquake Hazards Reduction Program to facilitate coordination with the Levee Safety program to develop a plan for leveraging existing knowledge related to potential seismic concerns relevant to levees. The Committee understands the Corps is evaluating whether earthquake models would aid in assessment and if collaboration with Universities would be beneficial. The Corps is directed to brief the Committee within 90 days of enactment of this act on the progress to date and the future work to be completed.

Inland Water Navigation Charts.—Of the funding recommended $2,000,000 shall be for the eHydro program to modernize and enhance the distribution of the navigation charts, and an additional $2,000,000 shall be to support the transition of the National Dredging Quality Management Program's automated dredging monitoring data to a cloud environment.

Kennebec River Long-Term Maintenance Dredging.—The Committee continues to support the Memorandum of Agreement signed in January 2019 denoting responsibilities between the Department

of the Army and the Department of the Navy for the regular maintenance of the Kennebec River Federal Navigation Channel. Maintenance dredging of the Kennebec is essential to the safe passage of newly constructed Navy guided missile destroyers to the Atlantic Ocean. The Committee directs the Secretary to continue collaborating with the Department of the Navy to ensure regular maintenance dredging of the Kennebec.

Lake Sakakawea & Lake Oahe Recreation Facilities.—The Committee supports coordinated efforts by the Corps with State and local stakeholders to maintain recreational areas and related infrastructure at mainstem Missouri River reservoirs during drought conditions. But the committee is disappointed the Corps has not provided a long-term plan to restore and maintain recreational facilities near Lake Sakakawea and Lake Oahe as the Committee recommended in fiscal year 2020. The Committee directs the Corps to report within 60 days of enactment of this act with a plan that identifies funding sources to address the deferred maintenance backlog in these areas and repair boat ramps and access roads to these facilities.

Levee Safety Program.—In fiscal year 2020, Congress provided $15,000,000 to implement levee safety initiatives to meet the requirements under section 3016 of WRRDA 14. The Committee understands these funds are sufficient to complete Phase II activities. Within 90 days of enactment of this act, the Corps shall brief the Committees on the status of these activities and activities associated with section 3016 of WRRDA, including any additional funding needs identified to complete and a timeline for implementation of the next phase.

Missouri River Operations.—The Committee is aware that the Corps intends to conduct a test flow regarding releases of water from the Missouri River mainstem dams in the future. The Corps is directed to provide no later than 30 days prior to such a release a report to the Committees on Appropriations that includes 1) the rationale for conducting such a test flow; 2) the expected implications for water access along the Missouri River; and 3) steps the Corps has taken to reduce or mitigate the effects of a test flow on water access.

Mobile Bay Beneficial Use of Dredged Material.—The Committee encourages the Corps to examine beneficial uses of dredged material in Mobile Bay, Alabama.

Monitoring of Completed Navigation Projects—Fisheries.—The Committee is concerned that a reduction in or elimination of navigational lock operations on the Nation's inland waterways is having a negative impact on river ecosystems, particularly the ability of endangered, threatened, and game fish species to migrate through waterways, particularly during critical spawning periods. The Committee notes the success of preliminary research which indicates reduced lock operations on certain Corps-designated low-use waterways is directly impacting migration and that there are effective means to mitigate the impacts. The Committee continues to believe that maximizing the ability of fish to use these locks to move past the dams has the potential to restore natural and historic long-distance river migrations that may be critical to species survival.

The Committee understands this research has proven valuable and, within available funds for ongoing work, directs the Corps to continue this research at not less than the fiscal year 2022 level. The goal of the continued funding is to support the ongoing research. Of the funding recommended $4,000,000 shall be to expand the research to assist the Corps across all waterways, lock structures, lock operation methods, and fish species that will more fully inform the Corps' operations. Additionally, funding of $2,000,000 is recommended for the NICE effort by the Corps to expand, on a national basis, the ongoing research on the impact of reduced lock operations on riverine fish.

Monitoring of Completed Navigation Projects—Structural Health Monitoring.—Of the funding recommended, $4,000,000 shall be to support the structural health monitoring program to facilitate research to maximize operations, enhance efficiency, and protect asset life through catastrophic failure mitigation. The Corps is encouraged to include funding for these activities in future budget requests.

National Coastal Mapping Program.—Of the additional funds recommended in the National Coastal Mapping Program remaining item, $5,000,000 shall be for Arctic coastal mapping needs. The Committee notes the Corps has responsibility for some mapping but, in general, does not include shoreline. Before the Corps obligates funds to map shoreline in Alaska, the Assistant Secretary of the Army for Civil Works shall provide notice to the Committee. The notice shall include certification that the effort is coordinated with NOAA and compliments those efforts.

Regional Sediment Management.—The Committee recommends $4,000,000 to be used to integrate existing and emerging physical coastal processing tools that focus on sediment management and apply optimization principles to placement in order to gain greater value and benefit from dredged sediments, particularly for Civil Works business lines and missions. Additional funding of $600,000 is recommended for cooperation and coordination with the Great Lakes States to develop sediment transport models for Great Lakes tributaries that discharge to Federal navigation channels.

Response to Climate Change at Corps Projects.—Additional funding of $5,000,000 is recommended to carry out the goals of the Justice40 Initiative. The Corps is encouraged to update policies to enhance the consideration of benefit categories equally, and improve efforts to identify and consider impacts to disadvantaged, rural/urban, Tribal, and other minority communities throughout the Corps planning and decision-making processes.

Small, Remote, or Subsistence Harbors.—The Committee emphasizes the importance of ensuring that our country's small and low-use ports remain functional. The Committee urges the Corps to consider expediting scheduled maintenance at small and low-use ports that have experienced unexpected levels of deterioration since their last dredging. The Committee remains concerned that the administration's criteria for navigation maintenance disadvantage small, remote, or subsistence harbors and waterways from competing for scarce navigation maintenance funds. The Committee directs the Corps to revise the criteria used for determining which navigation maintenance projects are funded and to develop a rea-

sonable and equitable allocation under the Operation and Maintenance account. The Committee supports including criteria to evaluate economic impact that these projects provide to local and regional economies.

Soil Moisture and Snowpack Monitoring Program.—The Committee recommends $8,000,000 for the continued fielding of the Missouri River Snowpack and Soil Moisture Monitoring System. Providing these capabilities is critical to enabling the Corps to accurately forecast plains snowpack and soil moisture to improve runoff forecasts that inform management decisions on dam releases in order to protect Missouri River Basin States from the impacts of flooding and droughts.

Tangier Island—Beneficial Use.—Additional funding recommended for Baltimore Harbor and Channels (50 foot) project is for environmental coordination as well as plans and specifications to add Tangier Island as a beneficial use placement site for dredged material.

Tenkiller Ferry Lake.—The Committee is encouraged by the Army Corps' effort to use flows out of the surge tank to feed the fishery downstream of the Tenkiller Ferry Lake, and strongly encourages the Corps to complete the assessment as soon as possible.

Tuttle Creek Lake, KS.—The additional funding recommended is for Water Injection Dredging efforts.

Upper St. Anthony Falls.—The Committee is concerned the Corps is attempting to divest the entire Federal project at once without a willing non-Federal partner for the disposition study. The Corps is further reminded that the Upper St. Anthony Falls project remains an authorized Federal project and encourages the Corps to continue to operate and maintain the lock.

Water Control Manual Updates.—The Committee recommends additional funding of $6,000,000 in Other Authorized Project Purposes for water control manual updates for non-Corps owned high hazard dams where: (1) the Corps has a responsibility for flood control operations under section 7 of the Flood Control Act of 1944; (2) the dam requires coordination of water releases with one or more other high-hazard dams for flood control purposes; and (3) the dam owner is actively investigating the feasibility of applying forecast informed reservoir operations technology. Additional funding is provided for a comprehensive list of water control manuals at Corps-owned projects located in States where a Reclamation project is also located, including a prioritized list of needed updates of those manuals no later than 180 days following enactment of this act.

Water Operations Technical Support-Forecast Informed Reservoir Operations [FIRO].—The Committee is pleased with the results of FIRO Phases 1 and 2 and eagerly anticipates the expansion of the program into regions where different storm types, in addition to Atmospheric Rivers, are key to heavy rain and flooding (e.g., tropical storms/hurricanes, large thunderstorm systems), and where longer forecast lead times may be required. Additional funding is recommended to complete Phase 2, start Phase 3 efforts, and perform necessary updates to the CWMS Ensemble Tool.

Additional Funding for Ongoing Work.—The Committee cannot support a level of funding that does not fund operation and maintenance of our Nation's aging infrastructure sufficiently to ensure

continued competitiveness in a global marketplace. Federal navigation channels maintained at only a fraction of authorized dimensions and navigation locks and hydropower facilities being used well beyond their design life results in economic inefficiencies and risks infrastructure failure, which can cause substantial economic losses. The Committee recommendation includes additional funds for projects and activities to enhance the Nation's economic growth and international competitiveness.

Of the additional funds recommended in this account for other authorized project purposes, not less than $300,000 shall be for efforts to address terrestrial noxious weed control and sediment removal activities pursuant to section 503 of WRDA 2020.

Of the additional funds recommended in this account for other authorized project purposes, not less than $2,000,000 shall be for efforts to combat invasive mussels at Corps-owned reservoirs.

When allocating the additional funding recommended in this account, the Corps shall consider giving priority to the following:

—Ability to complete ongoing work maintaining authorized depths and widths of harbors and shipping channels (including small, remote, or subsistence harbors), including where contaminated sediments are present;
—Ability to address critical maintenance backlog;
—Presence of the U.S. Coast Guard;
—Extent to which the work will enhance national, regional, or local economic development;
—Extent to which the work will promote job growth or international competitiveness;
—Number of jobs created directly by the funded activity;
—Ability to obligate the funds allocated within the fiscal year;
—Ability to complete the project, separable element, project phase, or useful increment of work within the funds allocated;
—Dredging and maintenance projects that would substantially increase benefical uses of and provide supplementary benefits to tributaries and waterways for coastal resiliency projects and dredged material to ongoing island replenishment projects;
—Extent to which the work will promote recreation-based benefits, including those created by recreational boating;
—For harbor maintenance activities:
—Total tonnage handled;
—Total exports;
—Total imports;
—Dollar value of cargo handled;
—Energy infrastructure and national security needs served;
—Designation as strategic seaports;
—Lack of alternative means of freight movement;
—Savings over alternative means of freight movement; and
—Improvements to dredge disposal facilities which will result in long-term savings, including a reduction in regular maintenance costs.

REGULATORY PROGRAM

Appropriations, 2022	$212,000,000
Budget estimate, 2023	210,000,000
Committee recommendation	213,000,000

The Committee recommends $213,000,000 for the Regulatory Program. The Committee recommends funds above the budget request to address capacity needs across the Corps related to staffing shortages in Corps districts. The Corps is encouraged to budget appropriately in order to process permits in a timely fashion.

Mitigation Banking.—The Committee recognizes the impact of limited resources on the processing of mitigation bank applications. The Corps is encouraged to ensure sufficient staffing levels to efficiently and expeditiously process mitigation bank applications.

Permit Application Backlogs.—The Committee is concerned about a growing backlog in the processing of regulatory permits and the lack of adequate staffing to process existing permits. The Committee expects the Corps to appropriately staff positions within the district. The Corps is direct to provide a report within 90 days of enactment of this act on staffing levels and permit backlogs in each of the last 5 years, as well as a plan for rectifying the staffing shortages. The Corps is directed to brief the Committee on the results of report upon completion.

Shellfish Permitting.—The Committee recognizes the strain of resources on the Corps to review and certify permitting applications for Nationwide 48 permits for state specific aquaculture activities. The Corps is encouraged to work with Clean Water Act enforcing agencies to uphold a fair permitting system that protects our waters and balances the needs of our economy and communities.

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

Appropriations, 2022	$300,000,000
Budget estimate, 2023	250,000,000
Committee recommendation	450,000,000

The Committee recommends $450,000,000 for the Formerly Utilized Sites Remedial Action Program. There are currently 16 sites with record of decisions that carry an estimated cost of $2,500,000,000. Additionally, there are five other sites without record of decisions where the rough estimate is $500,000,000. When appropriate for large projects, the Corps is encouraged to use continuing contracts for more cost and time effective cleanup.

FLOOD CONTROL AND COASTAL EMERGENCIES

Appropriations, 2021	$35,000,000
Budget estimate, 2022	35,000,000
Committee recommendation	35,000,000

The Committee recommends $35,000,000 for Flood Control and Coastal Emergencies.

EXPENSES

Appropriations, 2021	$208,000,000
Budget estimate, 2022	200,000,000
Committee recommendation	215,000,000

The Committee recommends $215,000,000 for Expenses. No funding is recommended for creation of an Office of Congressional Affairs.

The Expenses appropriation is an administrative and operational account which supports the technical, administrative and staff su-

pervision functions assigned to Corps Headquarters, the Major Subordinate Commands [MSCs/division offices]; and the costs of those elements within four field operating activities providing direct support to those functions. The Expenses appropriation pays for two categories of requirements-labor and non-labor-to support the Corps.

The additional funds recommended in this account shall be used to support implementation of the Corps' Civil Works program, including hiring additional Full time equivalents. This includes developing and issuing policy guidance; managing Civil Works program; and providing national coordination of and participation in forums and events within headquarters, the division offices, and meeting other enterprise requirements and operating expenses. The Committee encourages the Corps to pursue updating the 2011 U.S. Army Manpower Analysis Agency staffing analysis based on current Civil Works needs.

OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS)

Appropriations, 2021	$5,000,000
Budget estimate, 2022	5,000,000
Committee recommendation	5,000,000

The Committee recommends $5,000,000 for the Office of the Assistant Secretary of the Army (Civil Works).

The Committee counts on a timely and accessible executive branch in the course of fulfilling its constitutional role in the appropriations process. The requesting and receiving of basic, factual information is vital to maintaining a transparent and open governing process. The Committee recognizes that some discussions internal to the executive branch are pre-decisional in nature and, therefore, not subject to disclosure. However, the access to facts, figures, and statistics that inform these decisions are not subject to the same sensitivity and are critical to the appropriations process. The administration needs to do more to ensure timely and complete responses to these inquiries.

WATER INFRASTRUCTURE FINANCE AND INNOVATION PROGRAM

Appropriations, 2020	$7,200,000
Budget estimate, 2021	10,000,000
Committee recommendation	10,000,000

The Committee recommends $10,000,000 for the Water Infrastructure Finance and Innovation Program.

GENERAL PROVISIONS—CORPS OF ENGINEERS—CIVIL

Section 101. The bill includes a provision related to reprogramming.

Section 102. The bill includes a provision related to allocation of funds.

Section 103. The bill includes a provision related to contract awards and modifications.

Section 104. The bill includes a provision related to the Fish and Wildlife Service.

Section 105. The bill includes a provision related to open lake disposal of dredged material.

Section 106. The bill includes a provision related to project eligibility for funding.

TITLE II

DEPARTMENT OF THE INTERIOR

CENTRAL UTAH PROJECT COMPLETION ACCOUNT

Appropriations, 2022	$23,000,000
Budget estimate, 2023	20,000,000
Committee recommendation	21,000,000

The Committee recommends $21,000,000 for the Central Utah Project Completion Account, which includes $5,000,000 for the Utah Reclamation Mitigation and Conservation Account for use by the Utah Reclamation Mitigation and Conservation Commission, $1,600,000 for necessary expenses of the Secretary of the Interior, and up to $1,880,000 for the Commission's administrative expenses. This allows the Department of the Interior to develop water supply facilities that will continue to sustain economic growth and an enhanced quality of life in the western States, the fastest growing region in the United States. The Committee remains committed to complete the Central Utah Project, which would enable the project to initiate repayment to the Federal Government.

BUREAU OF RECLAMATION

OVERVIEW OF RECOMMENDATION

The Committee recommends $1,928,749,000 for the Bureau of Reclamation [Reclamation]. The Committee recommendation sets priorities by supporting our Nation's water infrastructure.

INTRODUCTION

In addition to the traditional missions of bringing water and power to the West, Reclamation continues to develop programs, initiatives, and activities that will help meet new water needs and balance the multitude of competing uses of water in the West. Reclamation is the largest wholesaler of water in the country, operating 338 reservoirs with a total storage capacity of 140 million acre-feet. Reclamation projects deliver 10 trillion gallons of water to more than 31 million people each year, and provide 1 out of 5 western farmers with irrigation water for 11 million acres of farmland that produce 60 percent of the Nation's vegetables and 25 percent of its fruits and nuts. Reclamation manages, with partners, 289 recreation sites that have 90 million visits annually.

FISCAL YEAR 2023 WORK PLAN

The Committee recommends funding above the budget request for Water and Related Resources. Reclamation is directed to submit a work plan, not later than 60 days after the date of enactment of this act, to the Committee proposing its allocation of these addi-

tional funds. The work plan shall be consistent with the following general guidance:

—None of the funds may be used for any item for which the Committee has specifically denied funding;

—The additional funds are recommended for studies or projects that were either not included in the budget request or for which the budget request was inadequate;

—Funding associated with a category may be allocated to eligible studies or projects within that category; and

—Reclamation may not withhold funding from a study or project because it is inconsistent with administration policy. The Committee notes that these funds are in excess of the administration's budget request, and that administration budget metrics shall not disqualify a study or project from being funded.

CONGRESSIONALLY DIRECTED SPENDING

The Committee included congressionally directed spending, as defined in section 5(a) of rule XLIV of the Standing Rules of the Senate. The Committee funded only projects and studies that are authorized by law. In the interest of providing full disclosure of funding provided in this Title, all projects requested and funded are listed in a table accompanying this report. All of the projects funded in this report have gone through the same rigorous process and approvals as those proposed by the President.

DROUGHT RESILIENCY

The Committee remains intently focused on the need for improving drought resiliency as well as finding opportunities for agencies to combine water supply benefits with other mission priorities. The impacts of the current severe drought in the west display there is more work to be done. The Committee continues to invest in the drought resiliency programs authorized in the WIIN Act and believes a solution to these chronic droughts is a combination of additional storage, substantial investments in desalination and recycling, improved conveyance, and increased efficiencies in the uses of water both for agriculture and potable purposes. As the West has consistently been the fastest growing part of the country, it is incumbent on Reclamation to lead the way in increasing the water that is available from year to year and to incentivize more efficient use of the water that is available.

REPORTING REQUIREMENT

Reclamation shall provide a quarterly report to the Committee, which includes the total budget authority and unobligated balances by year for each program, project, or activity, including any prior year appropriations.

WATER AND RELATED RESOURCES

Appropriations, 2022	$1,747,101,000
Budget estimate, 2023	1,270,376,000
Committee recommendation	1,784,900,000

The Committee recommends $1,784,900,000 for Water and Related Resources.

INTRODUCTION

The Water and Related Resources account supports the development, management, and restoration of water and related natural resources in the 17 western States. The account includes funds for operating and maintaining existing facilities to obtain the greatest overall level of benefits, to protect public safety, and to conduct studies on ways to improve the use of water and related natural resources. Work will be done in partnership and cooperation with non-Federal entities and other Federal agencies.

BUREAU OF RECLAMATION—WATER AND RELATED RESOURCES

[In thousands of dollars]

Project	Fiscal Year 2023 Budget			Fiscal Year 2023 Senate		
	Resources Management	Facilities OM&R	Total	Resources Management	Facilities OM&R	Total
ARIZONA						
COLORADO RIVER BASIN PROJECT—CENTRAL ARIZONA PROJECT	18,335	653	18,988	18,335	653	18,988
COLORADO RIVER FRONT WORK AND LEVEE SYSTEM	2,315	.....	2,315	2,315	.....	2,315
SALT RIVER PROJECT	704	319	1,023	704	319	1,023
YUMA AREA PROJECTS	890	22,962	23,852	890	22,962	23,852
CALIFORNIA						
CACHUMA PROJECT	920	1,409	2,329	920	1,409	2,329
CENTRAL ARIZONA PROJECT						
CVP, AMERICAN RIVER DIVISION, FOLSOM DAM UNIT/MORMON ISLAND (SOD)	2,021	11,057	13,078	2,021	11,057	13,078
CVP, AUBURN-FOLSOM SOUTH UNIT	102	2,527	2,629	102	2,527	2,629
CVP, DELTA DIVISION	2,559	6,807	9,366	2,559	6,807	9,366
CVP, EAST SIDE DIVISION	1,198	3,217	4,415	1,198	3,217	4,415
CVP, ENVIRONMENTAL COMPLIANCE AND ECOSYSTEM DEVELOPMENT	49,899	.....	49,899	55,994	.....	55,994
SAN JOAQUIN VALLEY DROUGHT RELIEF	.....	.....	.....	(6,095)	.....	.....
CVP, FRIANT DIVISION	1,431	3,783	5,214	2,181	3,783	5,964
SAN JOAQUIN VALLEY WATER COLLABORATIVE ACTION PROGRAM	.....	.....	.....	(750)	.....	.....
CVP, SAN JOAQUIN RIVER RESTORATION	20,500	.....	20,500	20,500	.....	20,500
CVP, MISCELLANEOUS PROJECT PROGRAMS	13,576	371	13,947	13,576	371	13,947
CVP, REPLACEMENTS, ADDITIONS, AND EXTRAORDIONARY MAINT. PROGRAM	.....	27,481	27,481	.....	27,481	27,481
CVP, SACRAMENTO RIVER DIVISION	962	730	1,692	5,962	730	6,692
SACRAMENTO RIVER BASIN FLOOD PLAIN REACTIVATION	.....	.....	.....	(5,000)	.....	.....
CVP, SAN FELIPE DIVISION	130	71	201	130	71	201
CVP, SHASTA DIVISION	493	11,618	12,111	493	11,618	12,111
CVP, TRINITY RIVER DIVISION	11,601	5,805	17,406	11,601	5,805	17,406
CVP, WATER AND POWER OPERATIONS	1,298	16,944	18,242	1,298	16,944	18,242
CVP, WEST SAN JOAQUIN DIVISION, SAN LUIS UNIT	2,615	9,341	11,956	2,615	9,341	11,956
ORLAND PROJECT	.....	918	918	.....	918	918
SALTON SEA RESEARCH PROJECT	2,002	.....	2,002	2,002	.....	2,002
SAN GABRIEL BASIN RESTORATION FUND	.....	.....	.....	10,000	.....	10,000
SOLANO PROJECT	1,200	3,791	4,991	1,200	3,791	4,991
VENTURA RIVER PROJECT	331	44	375	1,831	44	1,875

ROBLES DIVERSION IMPROVEMENT PROJECT	.....	.....	.....	(1,500)	.....	.....
COLORADO						
ANIMAS-LA PLATA PROJECT, COLORADO RIVER STORAGE PARTICIPATING PROJECT	.....	.....	.....	.....	.....	.....
ARMEL UNIT, P-SMBP	15	479	494	15	479	494
COLLBRAN PROJECT	149	2,745	2,894	149	2,745	2,894
COLORADO-BIG THOMPSON PROJECT	160	18,188	18,348	160	18,188	18,348
FRUITGROWERS DAM PROJECT	67	192	259	67	192	259
FRYINGPAN-ARKANSAS PROJECT	76	10,387	10,463	76	10,387	10,463
FRYINGPAN-ARKANSAS PROJECT—ARKANSAS VALLEY CONDUIT	10,059	.....	10,059	10,059	.....	10,059
GRAND VALLEY PROJECT	245	155	400	245	155	400
GRAND VALLEY UNIT, CRBSCP, TITLE II	14	1,758	1,772	14	1,758	1,772
LEADVILLE/ARKANSAS RIVER RECOVERY PROJECT	.....	13,891	13,891	.....	13,891	13,891
MANCOS PROJECT	93	259	352	93	259	352
NARROWS UNIT, P-SMBP	.....	33	33	.....	33	33
PARADOX VALLEY UNIT, CRBSCP, TITLE II	37	2,970	3,007	37	2,970	3,007
PINE RIVER PROJECT	158	258	416	158	258	416
SAN LUIS VALLEY PROJECT (CLOSED BASIN DIVISION)	1,113	2,957	4,070	1,113	2,957	4,070
SAN LUIS VALLEY PROJECT (CONEJOS DIVISION)	10	21	31	3,010	21	3,031
CONEJOS COOPERATIVE PROJECT RESERVOIR	.....	.....	.....	(3,000)	.....	.....
UNCOMPAHGRE PROJECT	716	171	887	716	171	887
IDAHO						
BOISE AREA PROJECTS	3,233	2,930	6,163	3,233	2,930	6,163
COLUMBIA AND SNAKE RIVER SALMON RECOVERY PROJECT	13,329	.....	13,329	13,329	.....	13,329
LEWISTON ORCHARDS PROJECT	1,378	17	1,395	1,378	17	1,395
MINIDOKA AREA PROJECTS	2,962	5,082	8,044	2,962	5,082	8,044
PRESTON BENCH	18	33	51	18	33	51
KANSAS						
ALMENA UNIT, P-SMBP	18	525	543	18	525	543
BOSTWICK DIVISION, P-SMBP	100	1,185	1,285	100	1,185	1,285
CEDAR BLUFF UNIT, P-SMBP	14	506	520	14	506	520
GLEN ELDER UNIT, P-SMBP	17	8,238	8,255	17	8,238	8,255
KANSAS RIVER AREA, P-SMBP	.....	228	228	.....	228	228
KIRWIN UNIT, P-SMBP	28	414	442	28	414	442
WEBSTER UNIT, P-SMBP	18	3,048	3,066	18	3,048	3,066
WICHITA PROJECT (CHENEY DIVISION)	38	378	416	38	378	416
WICHITA PROJECT (EQUUS BEDS DIVISION)	2,010	.....	2,010	2,010	.....	2,010

BUREAU OF RECLAMATION—WATER AND RELATED RESOURCES—Continued

[In thousands of dollars]

Project	Fiscal Year 2023 Budget			Fiscal Year 2023 Senate		
	Resources Management	Facilities OM&R	Total	Resources Management	Facilities OM&R	Total
MONTANA						
CANYON FERRY UNIT, P-SMBP	190	8,590	8,780	190	8,590	8,780
EAST BENCH UNIT, P-SMBP	162	670	832	162	670	832
FORT PECK RESERVATION / DRY PRAIRIE RURAL WATER SYSTEM	.....	.....	.....	.....	.....	.....
HELENA VALLEY UNIT, P-SMBP	52	243	295	52	243	295
HUNGRY HORSE PROJECT	.....	761	761	.....	761	761
HUNTLEY PROJECT	38	35	73	38	35	73
LOWER MARIAS UNIT, P-SMBP	86	1,682	1,768	86	1,682	1,768
LOWER YELLOWSTONE PROJECT	1,058	23	1,081	1,058	23	1,081
MILK RIVER PROJECT	551	3,361	3,912	551	3,361	3,912
MISSOURI BASIN UNIT, P-SMBP	1,027	131	1,158	1,027	131	1,158
ROCKY BOYS / NORTH CENTRAL MT RURAL WATER SYSTEM	8,761	.....	8,761	8,761	.....	8,761
SUN RIVER PROJECT	107	437	544	107	437	544
YELLOWTAIL UNIT, P-SMBP	105	9,902	10,007	105	9,902	10,007
NEBRASKA						
AINSWORTH UNIT, P-SMBP	32	95	127	32	95	127
FRENCHMAN-CAMBRIDGE DIVN, P-SMBP	169	2,318	2,487	169	2,318	2,487
MIRAGE FLATS PROJECT	26	109	135	26	109	135
NORTH LOUP DIVISION, P-SMBP	49	169	218	49	169	218
NEVADA						
LAHONTAN BASIN PROJECT (HUMBOLT, NEWLANDS, AND WASHOE PROJECTS)	5,496	5,817	11,313	5,496	5,817	11,313
LAKE TAHOE REGIONAL WETLANDS DEVELOPMENT	115	.....	115	115	.....	115
LAKE MEAD/LAS VEGAS WASH PROGRAM	598	.....	598	598	.....	598
NEW MEXICO						
CARLSBAD PROJECT	2,582	4,429	7,011	2,582	4,429	7,011
EASTERN NEW MEXICO RURAL WATER SUPPLY PROJECT	4,626	.....	4,626	4,626	.....	4,626
MIDDLE RIO GRANDE PROJECT	19,143	13,576	32,719	19,143	13,576	32,719
RIO GRANDE PROJECT	4,835	6,177	11,012	4,835	6,177	11,012
RIO GRANDE PUEBLOS	3,011	.....	3,011	3,011	.....	3,011

TUCUMCARI PROJECT	15	5	20	15	5	20
NORTH DAKOTA						
DICKINSON UNIT, P-SMBP	.....	686	686	.....	686	686
GARRISON DIVERSION UNIT, P-SMBP (RURAL AND NON-RURAL)	14,823	19,045	33,868	14,823	19,045	33,868
HEART BUTTE UNIT, P-SMBP	127	1,277	1,404	127	1,277	1,404
OKLAHOMA						
ARBUCKLE PROJECT	28	307	335	28	307	335
McGEE CREEK PROJECT	39	922	961	39	922	961
MOUNTAIN PARK PROJECT	33	586	619	33	586	619
NORMAN PROJECT	51	472	523	51	472	523
WASHITA BASIN PROJECT	72	1,282	1,354	72	1,282	1,354
W.C. AUSTIN PROJECT	39	2,046	2,085	39	2,046	2,085
OREGON						
CROOKED RIVER PROJECT	456	451	907	3,901	451	4,352
CROOKED RIVER WATER QUALITY AND SUPPLY STUDY	.....	.....	.....	(3,445)	.....	.....
DESCHUTES PROJECT	407	231	638	407	231	638
EASTERN OREGON PROJECTS	773	261	1,034	773	261	1,034
KLAMATH PROJECT	30,522	4,320	34,842	40,522	4,320	44,842
DROUGHT RESPONSE AGENCY	.....	.....	.....	(10,000)	.....	.....
ROGUE RIVER BASIN PROJECT, TALENT DIVISION	409	1,077	1,486	409	1,077	1,486
TUALATIN PROJECT	418	466	884	418	466	884
UMATILLA PROJECT	560	3,115	3,675	560	3,115	3,675
SOUTH DAKOTA						
ANGOSTURA UNIT, P-SMBP	180	771	951	180	771	951
BELLE FOURCHE UNIT, P-SMBP	95	1,635	1,730	95	1,635	1,730
KEYHOLE UNIT, P-SMBP	282	819	1,101	282	819	1,101
LEWIS AND CLARK RURAL WATER SYSTEM	6,601	.....	6,601	18,601	.....	18,601
MID-DAKOTA RURAL WATER PROJECT	.....	9	9	.....	9	9
MNI WICONI PROJECT	.....	20,021	20,021	.....	20,021	20,021
OAHE UNIT, P-SMBP	.....	80	80	.....	80	80
RAPID VALLEY PROJECT	.....	119	119	.....	119	119
RAPID VALLEY UNIT, P-SMBP	.....	281	281	.....	281	281
SHADEHILL UNIT, P-SMBP	184	714	898	184	714	898
TEXAS						
BALMORHEA PROJECT	3	.....	3	3	.....	3

BUREAU OF RECLAMATION—WATER AND RELATED RESOURCES—Continued

[In thousands of dollars]

Project	Fiscal Year 2023 Budget			Fiscal Year 2023 Senate		
	Resources Management	Facilities OM&R	Total	Resources Management	Facilities OM&R	Total
CANADIAN RIVER PROJECT	32	101	133	32	101	133
LOWER RIO GRANDE WATER CONSERVATION PROJECT	2,010	.....	2,010	2,010	.....	2,010
NUECES RIVER PROJECT	46	1,158	1,204	46	1,158	1,204
SAN ANGELO PROJECT	36	606	642	36	606	642
UTAH						
HYRUM PROJECT	488	226	714	488	226	714
MOON LAKE PROJECT	16	134	150	16	134	150
NEWTON PROJECT	322	200	522	322	200	522
OGDEN RIVER PROJECT	509	319	828	509	319	828
PROVO RIVER PROJECT	2,869	825	3,694	2,869	825	3,694
SANPETE PROJECT	74	18	92	74	18	92
SCOFIELD PROJECT	177	198	375	177	198	375
STRAWBERRY VALLEY PROJECT	804	60	864	804	60	864
WEBER BASIN PROJECT	1,900	991	2,891	1,900	991	2,891
WEBER RIVER PROJECT	696	284	980	696	284	980
WASHINGTON						
COLUMBIA BASIN PROJECT (EPHRATA)	10,568	1,634	12,202	10,568	1,634	12,202
COLUMBIA BASIN PROJECT (GRAND COULEE)	152	8,666	8,818	152	8,666	8,818
WASHINGTON AREA PROJECTS	717	76	793	717	76	793
YAKIMA PROJECT	1,767	16,222	17,989	1,767	16,222	17,989
YAKIMA RIVER BASIN WATER ENHANCEMENT PROJECT	50,254	.....	50,254	50,254	.....	50,254
WYOMING						
BOYSEN UNIT, P-SMBP	28	2,488	2,516	28	2,488	2,516
BUFFALO BILL UNIT, P-SMBP	9	5,989	5,998	9	5,989	5,998
KENDRICK PROJECT	19	4,137	4,156	19	4,137	4,156
NORTH PLATTE PROJECT	93	2,804	2,897	93	2,804	2,897
NORTH PLATTE AREA O/M, P-SMBP	121	10,538	10,659	121	10,538	10,659
OWL CREEK UNIT, P-SMBP	4	122	126	4	122	126
RIVERTON UNIT, P-SMBP	12	771	783	12	771	783

SHOSHONE PROJECT	34	1,297	1,331	34	1,297	1,331
SUBTOTAL—PROJECTS UNDER STATES	353,850	386,283	740,133	405,640	386,283	791,923
ADDITIONAL FUNDING FOR ONGOING WORK						
RURAL WATER				40,000		40,000
FISH PASSAGE AND FISH SCREENS				8,000		8,000
SACRAMENTO RIVER FISH SCREENS				(1,734)		
WATER CONSERVATION AND DELIVERY				256,684		256,684
ENVIRONMENTAL RESTORATION AND COMPLIANCE				42,500		42,500
FACILITIES OPERATION, MAINTENANCE, AND REHABILITATION				4,000		4,000
BUREAUWIDE PROGRAMS						
AGING INFRASTRUCTURE PROGRAM		500	500		500	500
AQUATIC ECOSYSTEM RESTORATION PROGRAM	500		500	500		500
COLORADO RIVER COMPLIANCE ACTIVITIES	21,400		21,400	21,400		21,400
COLORADO RIVER BASIN SALINITY CONTROL PROJECT—TITLE I	713	19,561	20,274	713	19,561	20,274
COLORADO RIVER BASIN SALINITY CONTROL PROJECT, TITLE II—BASINWIDE	6,003		6,003	6,003		6,003
COLORADO RIVER STORAGE PROJECT (CRSP), SECTION 5	3,192	7,005	10,197	3,192	7,005	10,197
COLORADO RIVER STORAGE PROJECT (CRSP), SECTION 8	3,584		3,584	3,584		3,584
COLORADO RIVER WATER QUALITY IMPROVEMENT PROGRAM	748		748	748		748
DAM SAFETY PROGRAM						
DEPARTMENT OF THE INTERIOR DAM SAFETY PROGRAM		1,303	1,303		1,303	1,303
INITIATE SAFETY OF DAMS CORRECTIVE ACTION		182,561	182,561		182,561	182,561
SAFETY EVALUATION OF EXISTING DAMS		26,354	26,354		26,354	26,354
EMERGENCY PLANNING AND DISASTER RESPONSE PROGRAM		1,261	1,261		1,261	1,261
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM						
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM (BUREAUWIDE)	2,584		2,584	2,584		2,584
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM (UC)	7,655		7,655	7,655		7,655
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM (PLATTE RIVER)	3,451		3,451	3,451		3,451
ENVIRONMENTAL PROGRAM ADMINISTRATION	1,933		1,933	1,933		1,933
EXAMINATION OF EXISTING STRUCTURES		11,334	11,334		11,334	11,334
GENERAL PLANNING ACTIVITIES	2,388		2,388	2,388		2,388
LAND RESOURCES MANAGEMENT	18,074		18,074	18,074		18,074
LOWER COLORADO RIVER OPERATIONS PROGRAM	46,804		46,804	46,804		46,804
MISCELLANEOUS FLOOD CONTROL OPERATIONS		958	958		958	958
NATIVE AMERICAN AFFAIRS PROGRAM	20,042		20,042	20,042		20,042
NEGOTIATION AND ADMINISTRATION OF WATER MARKETING	2,345		2,345	2,345		2,345
OPERATION AND PROGRAM MANAGEMENT	839	5,354	6,193	839	5,354	6,193
POWER PROGRAM SERVICES	4,700	312	5,012	4,700	312	5,012

BUREAU OF RECLAMATION—WATER AND RELATED RESOURCES—Continued

[In thousands of dollars]

Project	Fiscal Year 2023 Budget			Fiscal Year 2023 Senate		
	Resources Management	Facilities OM&R	Total	Resources Management	Facilities OM&R	Total
PUBLIC ACCESS AND SAFETY PROGRAM	605	1,115	1,720	605	1,115	1,720
RECREATION AND FISH AND WILDLIFE PROGRAM ADMINISTRATION	5,176	.....	5,176	5,176	.....	5,176
RECLAMATION LAW ADMINISTRATION	1,119	.....	1,119	1,119	.....	1,119
RESEARCH AND DEVELOPMENT						
DESALINATION AND WATER PURIFICATION PROGRAM	4,053	1,666	5,719	16,053	1,666	17,719
SCIENCE AND TECHNOLOGY PROGRAM	19,547	.....	19,547	24,047	.....	24,047
AMERICAN RIVER BASIN HYDROLOGIC OBSERVATORY WIRELESS SENSOR NETWORK PROJECT, CA	.....	.....	.....	(875)	.....	.....
SITE SECURITY ACTIVITIES	.....	27,350	27,350	.....	27,350	27,350
UPPER COLORADO RIVER OPERATIONS PROGRAM	3,708	.....	3,708	3,708	.....	3,708
UNITED STATES/MEXICO BORDER ISSUES—TECHNICAL SUPPORT	81	.....	81	81	.....	81
WATERSMART PROGRAM						
WATERSMART GRANTS	13,690	.....	13,690	55,000	.....	55,000
WATER CONSERVATION FIELD SERVICES PROGRAM	3,389	.....	3,389	3,389	.....	3,389
COOPERATIVE WATERSHED MANAGEMENT	2,254	.....	2,254	5,000	.....	5,000
BASIN STUDIES	15,017	.....	15,017	15,017	.....	15,017
DROUGHT RESPONSE AND COMPREHENSIVE DROUGHT PLANS	24,009	.....	24,009	24,009	.....	24,009
TITLE XVI WATER RECLAMATION AND REUSE PROGRAM	4,006	.....	4,006	55,000	.....	55,000
* TOTAL—BUREAUWIDE PROGRAMS	243,609	286,634	530,243	706,343	286,634	992,977
* TOTAL APPROPRIATION REQUEST—WRR	597,459	672,917	1,270,376	1,111,983	672,917	1,784,900

Anadromous Fish Screen Program.—The Committee appreciates Reclamation's efforts to devote additional resources to completing work on the last two remaining priority unscreened diversions on the Sacramento River, which have been specifically identified as priorities in the California Natural Resources Agency Sacramento Valley Salmon Resiliency Strategy.

Aging Infrastructure Program.—The Committee does not support allowing increases or decreases in transfer amounts at this time. The Committee notes the document provided in response to fiscal year 2022 direction was inadequate, provided insufficient detail, and does not instill confidence in the administration of this new program. Reclamation shall not obligate any funds for this purpose until adequate detail has been provided to the Committee.

Aquatic Ecosystem Restoration Program.—The Committee has yet to receive information detailing the plan to implement this program and the criteria for evaluating eligible projects. Consequently, Reclamation is directed to report to the Committee in sufficient detail prior to the obligation of any funds for this purpose.

Aquifer Recharge.—Reclamation is directed to work closely with project beneficiaries to identify and resolve any barriers to aquifer recharge projects when appropriate while utilizing full authority to prioritize funds for ongoing projects through completion. Of the funds recommended in this account above the budget request, $25,000,000 shall be for Aquifer Storage and Recovery projects focused on ensuring sustainable water supply and protecting water quality of aquifers in the Great Plains Region with shared or multiuse aquifers for municipal, agricultural irrigation, industrial, recreation and domestic users.

CALFED Water Storage Feasibility Studies.—The Committee strongly encourages Reclamation to expeditiously complete financial assistance projects requested by non-Federal sponsors of the CALFED water storage projects. The Committee finds it unacceptable that these agreements have been under study for over 15 years.

Columbia Basin Project.—The Committee is aware the Subarea groundwater is being withdrawn at a rate beyond the aquifer's capacity to recharge. The Committee supports Reclamation's partnership in the Odessa Groundwater Replacement Program to provide farmlands in Central and Eastern Washington with surface water supply through operational changes in the storage and delivery system and urges Reclamation to move forward to implement the program.

Drought Contingency Plans.—The Committee commends Reclamation, the Department of the Interior, and the seven Colorado River Basin States for completing drought contingency plans to conserve water and reduce risks from ongoing drought for the Upper and Lower Colorado River basins. The completion of these plans marks a major milestone in protecting a critical water source in the western United States. The Committee encourages Reclamation to provide sufficient funding for activities that support these plans.

Friant-Kern Canal.—The Committee encourages the Secretary to include funding in future budget submissions for construction activities related to projects found to be feasible by the Secretary and

which are ready to initiate repairs. Reclamation canals where operational conveyance capacity has been seriously impaired by factors such as age or land subsidence, especially those that would imminently jeopardize water delivery obligations should be prioritized.

Klamath Basin Project.—The Committee encourages Reclamation to continue to collaborate on agreements with State agencies to support groundwater monitoring efforts in the Klamath Basin.

Research and Development: Desalination and Water Purification Program.—Of the funding recommended for this program, $12,000,000 shall be for desalination projects as authorized in section 4009(a) of Public Law 114–322.

Research and Development: Science & Technology Program.—Better snow modeling and estimates of snow water may improve water resource decision-making, specifically for water allocations and flood control. Within the Science and Technology Program, $3,000,000 shall be to support Reclamation's Snow Water Supply Forecast Program, of which at least $1,500,000 shall be to implement this research at projects. An additional $1,500,000 shall be to support the U.S. Department of Agriculture and NOAA efforts to improve real-time and derived snow water information such that it can be immediately used for water resources decision-making.

Rural Water Projects.—Voluntary funding in excess of legally required cost shares for rural water projects is acceptable but should not be used by Reclamation as a criterion for allocating additional funding recommended by the Committee or for budgeting in future years.

Rural Water Project—Dry-Redwater, Montana.—The Committee strongly encourages Reclamation to engage with the Dry-Redwater Regional Water Authority to complete the feasibility study for the project authorized in PL 116–260.

Salton Sea.—The Committee supports the Memorandum of Understanding signed between the Department of the Interior and the California Natural Resources Agency to support management activities at the Salton Sea. The Committee encourages Reclamation to partner with Federal, State, and local agencies and coordinate use of all existing authorities and funding sources to support the State of California's Salton Sea Management Program and reduce the likelihood of severe health and environmental impacts.

San Joaquin River Restoration.—Permanent appropriations, available for the program in fiscal year 2023, should not supplant continued annual appropriations, and the Committee encourages Reclamation to include adequate funding in future budget submissions.

Scoggins Dam, Tualatin Project, Oregon.—The Committee is pleased to see the inclusion of Scoggins Dam in the budget requests. The Committee remains concerned about the high risk associated with Scoggins Dam, and urges Reclamation to expediently complete the safety of dam modification report.

St. Mary's Diversion Dam and Conveyance Works.—A stable water supply is critical to regional economies and communities. Therefore the Committee urges Reclamation to continue working with local stakeholders to complete its ability to pay study for the rehabilitation of the St. Mary's Diversion Dam. Further, the Committee appreciates Reclamation's work to develop a Milk River

Project model, and encourages Reclamation to complete this work as expeditiously as possible.

WaterSMART Program.—The Committee encourages Reclamation to prioritize eligible water conservation projects that will provide water supplies to meet the needs of threatened and endangered species.

WaterSMART Program: Open Evapotranspiration System.—The Committee is intrigued by the evapotranspiration in the Central Valley and California Delta to help measure how much water is consumed by crops and other plants. Reclamation is encouraged to utilize the Open Evapotranspiration system designed to provide real-time and historical evapotranspiration information, primarily on irrigated crop lands. Reclamation is directed to provide to the Committee not later than 90 days after enactment of this act a briefing on the potential application of this system to Reclamation missions.

WaterSMART Program: Title XVI Water Reclamation & Reuse Program.—Of the funding recommended for this program, $20,000,000 shall be for water recycling and reuse projects as authorized in section 4009(c) of the WIIN Act.

Yakima River Basin Integrated Water Resource Management Plan.—The Committee supports the Yakima River Basin Integrated Water Resource Management Plan. This innovative water management plan represents years of collaboration in the Yakima River Basin among stakeholders including Reclamation, the State of Washington, the Yakama Nation, irrigators and farmers, conservation organizations, recreationists, and local governments to address water supply needs for agriculture, fish and wildlife, and municipal use. The Committee encourages Reclamation to budget appropriately for this work in order to move forward on implementing authorized components of the plan.

Additional Funding for Water and Related Resources Work.—The Committee recommendation includes funds in addition to the budget request for Water and Related Resources studies, projects, and activities. Priority in allocating these funds shall be given to advance and complete ongoing work, including preconstruction activities, and where environmental compliance has been completed; improve water supply reliability; improve water deliveries; enhance national, regional, or local economic development; promote job growth; advance Tribal and non-Tribal water settlement studies and activities; or address critical backlog maintenance and rehabilitation activities. Reclamation is encouraged to allocate additional funding for aquifer recharging efforts to address the ongoing backlog of related projects. Reclamation is reminded that activities authorized under Indian Water Rights Settlements are eligible to compete for the additional funding under "Water Conservation and Delivery". Reclamation shall allocate additional funding provided in this account consistent with the following direction:

—Of the additional funding recommended under the heading "Water Conservation and Delivery", $134,000,000 shall be for water storage projects as authorized in section 4007 of the WIIN Act;

—Of the additional funding recommended under the heading "Water Conservation and Delivery," $40,000,000 shall be for

implementing the Drought Contingency Plan in the Lower Colorado River Basin to create or conserve recurring Colorado River water that contributes to supplies in Lake Mead and other Colorado River water reservoirs in the Lower Colorado Basin or projects to improve the long-term efficiency of operations in the Lower Colorado River Basin, consistent with the Secretary's obligations under the Colorado River Drought Contingency Plan Authorization Act of 2019 (Public Law 116–14) and related agreements. These water conservation activities may include well construction and irrigation-related structural or other measures; programs and projects that result in conservation of surface water or groundwater; or improve water system efficiency, resiliency, reliability, delivery, and conveyance, including canal system improvements. None of these funds shall be used for the operation of the Yuma Desalting Plant and nothing in this section shall be construed as limiting existing or future opportunities to augment the water supplies of the Colorado River.

—Of the additional funding recommended under the heading "Water Conservation and Delivery," not less than $22,000,000, shall be for construction activities related to projects found to be feasible by the Secretary and which are ready to initiate for the repair of critical Reclamation canals where operational conveyance capacity has been seriously impaired by factors such as age or land subsidence, especially those that would imminently jeopardize Reclamation's ability to meet water delivery obligations;

—Of the additional funding recommended under the heading "Environmental Restoration or Compliance", not less than $20,000,000 shall be for activities authorized under sections 4001 and 4010 of the WIIN Act or as set forth in Federal-State plans for restoring threatened and endangered fish species affected by the operation of Reclamation's water projects.

CENTRAL VALLEY PROJECT RESTORATION FUND

GROSS APPROPRIATION

Appropriations, 2022	$56,499,000
Budget estimate, 2023	45,770,000
Committee recommendation	45,770,000

The Committee recommends funding for the Central Valley Project Restoration Fund, that is fully offset by collections, resulting in a net appropriation of $0.

The Central Valley Project Restoration Fund was authorized in the Central Valley Project Improvement Act, title 34 of Public Law 102–575. This fund uses revenues from payments by project beneficiaries and donations for habitat restoration, improvement and acquisition, and other fish and wildlife restoration activities in the Central Valley project area of California. Payments from project beneficiaries include several required by the act (Friant Division surcharges, higher charges on water transferred to non-Central Valley Project users, and tiered water prices) and, to the extent required in appropriations acts, additional annual mitigation and restoration payments.

CALIFORNIA BAY-DELTA RESTORATION

Appropriations, 2022	$33,000,000
Budget estimate, 2023	33,000,000
Committee recommendation	33,000,000

The Committee recommends $33,000,000 for California Bay-Delta Restoration, the same as the budget request.

This account funds activities that are consistent with the CALFED Bay-Delta Program, a collaborative effort involving 18 State and Federal agencies and representatives of California's urban, agricultural, and environmental communities. The goals of the program are to improve fish and wildlife habitat, water supply reliability, and water quality in the San Francisco Bay-San Joaquin River Delta, the principle hub of California's water distribution system.

POLICY AND ADMINISTRATION

Appropriations, 2022	$64,400,000
Budget estimate, 2023	65,079,000
Committee recommendation	65,079,000

The Committee recommends $65,079,000 for Policy and Administration, the same as the budget request.

This account funds the executive direction and management of all Reclamation activities, as performed by the Commissioner's offices in Washington, DC; Denver, Colorado; and five regional offices. The Denver office and regional offices charge individual projects or activities for direct beneficial services and related administrative and technical costs. These charges are covered under other appropriations.

GENERAL PROVISIONS—DEPARTMENT OF THE INTERIOR

Section 201. The bill includes a provision regarding reprogramming.

Section 202. The bill includes a provision regarding the San Luis Unit and Kesterson Reservoir.

Section 203. The bill includes a provision regarding the Secure Water Act.

Section 204. The bill includes a provision regarding CALFED Bay-Delta.

Section 205. The bill includes a provision regarding the Omnibus Public Land Management Act of 2009.

Section 206. The bill includes a provision regarding the Reclamation States Emergency Drought Relief Act of 1991.

Section 207. The bill includes a provision regarding the Cooperative Watershed Management Act.

TITLE III

DEPARTMENT OF ENERGY

OVERVIEW OF RECOMMENDATION

The Committee recommendation sets priorities by supporting the Office of Science and the Advanced Research Projects Agency-Energy [ARPA–E], leading the world in scientific computing, addressing the Federal Government's responsibility for environmental cleanup and disposal of used nuclear fuel, nonproliferation, keeping large construction projects on time and on budget, effectively maintaining our nuclear weapons stockpile, and supporting our nuclear Navy.

INTRODUCTION

The mission of the Department of Energy [Department] is to ensure America's security and prosperity by addressing its energy, environmental, and nuclear challenges through transformative science and technology solutions. To accomplish this mission, the Secretary of Energy [Secretary] relies on a world-class network of national laboratories, private industry, universities, States, and Federal agencies, which allows our brightest minds to solve our Nation's most important challenges.

The Committee's recommendation for the Department includes funding in both defense and non-defense budget categories. Defense funding is recommended for atomic energy defense activities, including the National Nuclear Security Administration, which manages our Nation's stockpile of nuclear weapons, prevents proliferation of dangerous nuclear materials, and supports the Navy's nuclear fleet; defense environmental cleanup to remediate the former nuclear weapons complex; and safeguards and security for Idaho National Laboratory. Non-defense funding is recommended for the Department's energy research and development programs (including nuclear, fossil, and renewable energy, energy efficiency, grid modernization and resiliency, and the Office of Science), power marketing administrations, the Federal Energy Regulatory Commission, and administrative expenses.

REPROGRAMMING GUIDELINES

The Committee's recommendation includes control points to ensure the Secretary spends taxpayer funds in accordance with congressional direction. The Committee's recommendation also includes reprogramming guidelines to allow the Secretary to request permission from the Committee for certain expenditures, as defined below, which would not otherwise be permissible. The Secretary's execution of appropriated funds shall be fully consistent with the direction provided under this heading and in section 301 of the bill,

unless the Committee includes separate guidelines for specific actions in the bill or report.

Prior to obligating any funds for an action defined below as a reprogramming, the Secretary shall notify and obtain approval of the Committees on Appropriations of both Houses of Congress. The Secretary shall submit a detailed reprogramming request in accordance with section 301 of the bill, which shall, at a minimum, justify the deviation from prior congressional direction and describe the proposed funding adjustments with specificity. The Secretary shall not, pending approval from the Committee, obligate any funds for the action described in the reprogramming proposal.

The Secretary is also directed to inform the Committees on Appropriations of both Houses of Congress promptly and fully when a change in program execution and funding is required during the fiscal year.

Definition.—A reprogramming includes:

—the reallocation of funds from one activity to another within an appropriation;

—any significant departure from a program, project, activity, or organization described in the agency's budget justification as presented to and approved by Congress;

—for construction projects, the reallocation of funds from one construction project identified in the agency's budget justification to another project or a significant change in the scope of an approved project;

—adoption of any reorganization proposal which includes moving prior appropriations between appropriations accounts; and

—any reallocation of new or prior year budget authority, or prior year deobligations.

FINANCIAL REPORTING AND MANAGEMENT

Mortgaging Future-Year Awards.—The Committee remains concerned about the Department's practice of making awards dependent on funding from future years' appropriations. The fiscal year 2022 Act directed the Department to provide a briefing on how it can better track and provide information about the accounting of future-year awards by control point. The Committee is still awaiting this briefing and directs the Department to provide it immediately.

Competitive Procedures.—The Department is directed, in alignment with section 989 of the Energy Policy Act of 2005, to use a competitive, merit-based review process in carrying out research, development, demonstration, and deployment activities, to the maximum extent practicable. Further, the Department is directed to notify the Committee at least 30 days prior to any non-competitive research, development, demonstration, or deployment award.

Cost Share Waivers.—Section 988 of the Energy Policy Act of 2005 provides authority for the Secretary to waive cost share requirements under some circumstances. The Department is directed to notify the Committee at least 15 days prior to waiving cost share requirements for any research, development, demonstration, or deployment award.

Commonly Recycled Paper.—The Department shall not expend funds for projects that knowingly use as a feedstock commonly re-

cycled paper that is segregated from municipal solid waste or collected as part of a collection system that comingles commonly recycled paper with other solid waste at any point from the time of collection through materials recovery.

WORKFORCE DEVELOPMENT

Workforce Development.—The Committee recognizes the need to ensure that our Nation has a ready, capable workforce both for today and the next generation to meet changing energy demands and safeguard our National nuclear security. The Department has a long history in and unique opportunity of training and supporting the science, technology, engineering, and mathematics workforce. The fiscal year 2020 Act directed the Department to provide a report that includes an inventory of workforce development and readiness programs supported throughout the Department. The inventory was required to include current programs, past programs over the past 10 years, and recommendations for the Department to improve or expand its workforce development efforts. The report was required to include specific recommendations addressing workforce readiness to meet the Department's nuclear security missions. The Committee is still awaiting this report and directs the Department to provide the report immediately.

The Department is encouraged to prioritize training and workforce development programs that assist and support workers in trades and activities required for the continued growth of the U.S. energy efficiency and renewable energy sectors, including training programs focused on building retrofit, the construction industry, and the electric vehicle industry. The Department is encouraged to continue to work with 2-year, community and technical colleges, labor, and nongovernmental and industry consortia to pursue job training programs, including programs focused on displaced fossil fuel workers, that lead to an industry-recognized credential in the renewable energy and energy efficiency workforce. The Committee recognizes the Department's collaborations with the Department of Defense to address national security priorities including climate change and electric infrastructure. The Committee recognizes the Department's individual education and workforce development programs relating to the intersection of national security and energy but encourages interdepartmental coordination on the creation or modification of these programs.

The Committee identifies the importance of student research participant programs in building a strong STEM workforce pipeline across DOE disciplines. The Department is directed to provide to the Committee not later than 90 days after enactment of this act a report on the resources required and opportunities to triple the number of student research participant placements within its current participant programs to support the cross-cutting, Department-wide initiatives, such as cybersecurity, artificial intelligence, and quantum information science, and basic and applied research programs. The report shall include information on how the Department's current programs and research investments can be further leveraged to support expanding undergraduate, graduate, doctoral, and post-doc research participant placements to build a strong STEM workforce pipeline

CROSSCUTTING INITIATIVES

Grid Modernization.—The Department is directed to continue the ongoing work among the national laboratories, industry, and universities to improve grid reliability and resiliency through the strategic goals of the Grid Modernization Initiative [GMI]. The Committee recognizes the accomplishments of over 200 partners from industry, academia, and State Governments in these efforts. The Department shall brief the Committee not later than 90 days after enactment of this act on the revised GMI strategy, plans to reflect new decarbonization targets in strategy enhancements, the funding profiles, portfolio of funding opportunities, programmatic investments for the Initiative, and the roles and responsibilities of each participating program office. The Committee recognizes the growing importance of training and workforce development to support grid modernization research and development, and the Committee directs the Department to develop a plan for a pipeline of students, graduates, and professors to sustain a robust grid modernization research, design, and operations capability over the long-term. Further, the Committee recognizes the value of a diverse range of clean distributed energy resources, the Committee encourages the Department to evaluate opportunities to deploy multi-resource microgrids that incorporate dispatchable, fuel-flexible, renewable-fuel-compatible, distributed generation technologies, including but not limited to linear generator technology, paired with variable output renewable resources and battery storage technology, in order to simultaneously achieve substantial carbon and criteria emissions reductions, ensure multi-day resilience, and improve energy security and independence.

Carbon Dioxide Removal.—The recommendation provides not less than $180,000,000 for research, development, and demonstration of carbon dioxide removal technologies, including not less than $26,000,000 from the Office of Energy Efficiency and Renewable Energy [EERE], not less than $75,000,000 from Office of Fossil Energy and Carbon Management [FECM], and not less than $90,000,000 from the Office of Science.

The Department is encouraged to carry out activities under the Carbon Dioxide Removal Research, Development, and Demonstration Program authorized in Section 5001, Division Z of Public Law 116–260. In carrying out the initiative, the Department is directed to coordinate all carbon dioxide removal activities across FECM, EERE, the Office of Science, and any other relevant program office or Agency, including the Environmental Protection Agency and Department of Agriculture. Further, the Committee also encourages the development and improvement of accounting frameworks and tools to accurately measure carbon removal and sequestration methods and technologies.

The Committee supports the Department's efforts to carry out the Carbon Dioxide Removal Task Force. Further, the Department is directed to support research, development, and demonstration activities to advance the development and commercialization of carbon dioxide removal technologies on a significant scale. The Committee supports direct air capture prize competitions and the direct air capture test center.

The fiscal year 2020 Act directed the Department to develop a carbon removal implementation plan coordinated across FECM, EERE, and the Office of Science. The Committee is still awaiting a fiscal year 2020 Act report. The Department is directed to provide this report immediately.

Equity and Justice.—The Committee notes the Department's continuing efforts and progress in implementing the Justice40 Initiative, the energy justice initiative, and Executive Order 14008.

Critical Minerals.—The Committee supports the Department's coordination of critical minerals activities across the Department through the Critical Minerals Initiative. The recommendation provides not less than $266,000,000 for research, development, demonstration, and commercialization activities on the development of alternatives to, recycling of, and efficient production and use of critical minerals, including not less than $112,000,000 from EERE, not less than $23,000,000 from FECM, not less than $61,500,000 from Nuclear Energy, and not less than $25,000,000 from the Office of Science. The Department is encouraged to carry out these activities pursuant to sections 7001 and 7002 of the Energy Act of 2020.

Industrial Decarbonization.—Within the available funds, the Committee recommends not less than $830,000,000 for the Advanced Manufacturing Office to establish the Industrial Emissions Reduction Technology Development Program authorized in Section 6003 of Public Law 116–206 for clean industrial research, development, and demonstrations that are both sector-specific and technology-inclusive. The program shall coordinate with EERE, FECM, and the Office of Science. The funds provided are for the development of a suite of technologies to strengthen the competitiveness of America's industrial sector, with an emphasis on heavy industrial sectors, including iron and steel, cement and concrete, and chemicals. These technologies should include a range of renewable thermal technologies, such as biomass, biogas (including landfill gas), renewable natural gas (or biomethane), geothermal, beneficial electrification, green hydrogen and solar thermal. Further, the Committee encourages the Advanced Manufacturing Office to provide a status update on its industrial decarbonization roadmaps and outline the main recommendations for each and coordinate with relevant program offices, including FECM, Office of Nuclear Energy [NE], and Office of Science. Within available funds, the Committee recommends not less than $25,000,000 for clean heat alternatives for industrial processes.

Energy Storage.—The Committee supports the Department's Energy Storage Grand Challenge [ESGC] and Long-Duration Storage Shot initiatives, which includes cost-shared demonstrations of energy storage technologies. The ESGC builds on the Department's prior research and development efforts in storage and will align Energy Storage research and development efforts to focus on technical, regulatory, and market issues necessary to achieve the technology goals. The Department is directed to continue to provide the Committee on the ESGC and make publically available a crosscutting research and development road-map through 2030 to illustrate the ESGC's goals. This road-map shall be focused on reducing costs and improving the performance of a diverse set of grid-scale

storage technologies to meet industry needs, improve reliability and environmental performance of the electricity grid, and reduce greenhouse gas emissions.

Further, Department is directed to carry out these activities in accordance with sections 3201 and 3202 of the Energy Act of 2020. Further, the Committee is aware of the Departments efforts to expand the capabilities of the United States in advanced battery manufacturing, including for long-duration grid-scale energy storage and electric vehicles. As the Department continues its efforts to scale up a domestic advanced battery supply chain, including battery manufacturing demonstration projects, the Committee encourages the Department to seek a broad spectrum of battery chemistries not wholly exclusive to lithium-ion based battery technology.

The recommendation provides not less than $650,000,000 for energy storage, including not less than $400,000,000 from EERE, not less than $95,000,000 from the Office of Electricity [OE], not less than $5,000,000 from FECM, not less than $50,000,000 from NE, and not less than $83,000,000 from the Office of Science.

Alternative Modes of Transportation.—The Committee notes the Departments ongoing efforts to develop technologies and low carbon fuels that will reduce emission in shipping, aviation, agricultural, and long distance transportation.

The recommendation provides not less than $400,000,000 to further the research, development, testing, and demonstration of innovative technologies and solutions for low- or no-emission alternative fuels for ongoing efforts to develop technologies and low carbon fuels that will reduce emission in shipping, aviation, agricultural, and long distance transportation. This funding level includes not less than $300,000,000 from the Office of EERE, not less than $50,000,000 from the Office of FECM, not less than $50,000,000 from the OE, and not less than $50,000,000 from the Office of Science.

Further, there are technologies that will reduce emissions in existing locomotive fleets, such as different blends of renewable diesel and biodiesel, as well as to accelerate the commercial viability of innovative technologies and alternatives to traditional diesel fuel, including batteries and hydrogen fuel cells. The Committee recognizes that hastening the availability of low- and no-carbon alternatives to diesel fuel for locomotives will be essential to addressing climate change while also meeting our Nation's projected 50 percent growth in freight transportation demand by 2050. Further, the Committee notes that the decarbonization of the rail industry will be essential to achieving a net-zero emissions economy as rail will continue to play a vital role in such a broad cross-section of industrial economic sectors well into the future. The recommendation provides not less than $30,000,000 to further the research, development, testing, and demonstration of innovative technologies and solutions related to low- or no-emission alternative fuels for non-road transportation modes, including locomotives, engine improvements, and motive power technologies. The Department is encouraged to perform this research in coordination with railroads, rail manufacturers and suppliers, the Department of Transportation, and the

Environmental Protection Agency, and to ensure that any research will support the ongoing efforts of those entities.

Further, the Committee encourages the Department to accelerate its work on sustainable aviation fuels, with a focus getting feedstocks and biorefining processes for net-zero emission fuels into demonstration as it works to meet the goals of the Sustainable Aviation Fuel Grand Challenge. The Committee encourages the Department to develop a clear framework for evaluating the emissions reduction potential of different sustainable aviation fuel pathways and to prioritize research and development of fuels with the greatest potential to reduce GHG emissions while avoiding unintended consequences on forests and food supply chains. The Department is encouraged to work with other Federal agencies and the National Labs to coordinate efforts to advance sustainable aviation fuels.

Hydrogen.—The Committee supports the Department's continued coordination on hydrogen energy and fuel cell technologies in order to maximize the effectiveness of investments in hydrogen-related activities. This coordination shall include EERE, FECM, NE, OE, the Office of Science, and the Advanced Research Projects Agency—Energy.

The recommendation provides not less than $316,000,000 for the Hydrogen crosscut, including not less than $163,000,000 from EERE, not less than $113,000,000 from FECM, not less than $23,000,000 from NE, and not less than $17,000,000 from the Office of Science.

The recommendation provides not less than $15,000,000 for technologies to advance hydrogen use for heavy-duty transportation, industrial, and hard-to-electrify transportation applications including trains, maritime shipping, and aviation.

Further, the Department is encouraged to engage on codes and standards for fast-developing fuel cell and hydrogen markets such as heavy-duty trucks, aviation, maritime, locomotives, transportation of hydrogen by rail, and other areas as needed.

Hot Cells Report.—The Department is directed to submit to the Committee not later than 180 days after enactment of this act a report on the funding levels required for operations and maintenance of Oak Ridge National Laboratory nuclear facilities. The report shall be coordinated between the Office of Science and Office of Nuclear Energy and should include an accounting of how funds have been spent for the previous three fiscal years and how funds will be spent for the fiscal year 2023. The report shall also include information for the next four fiscal years on the funding levels required for operations at each facility and funding levels required for multi-year infrastructure improvements. The report shall provide a breakdown of users, operations time, and funding allocated to activities related to the Office of Science or to the Office of Nuclear Energy. The Committee is disappointed in the lack of progress on this issue and lack of coordination between the Office of Science and Office of Nuclear Energy. The Department may not obligate more than 75 percent of amounts provided to Nuclear Energy until the Department submits the required report.

ENERGY PROGRAMS

DEFENSE PRODUCTION ACT DOMESTIC CLEAN ENERGY ACCELERATOR

Appropriations, 2022	.....
Budget estimate, 2023	.....
Committee recommendation	$500,000,000

The Defense Production Act Domestic Clean Energy Accelerator account is included to provide support for activities using the Defense Production Act at the Department of Energy to accelerate domestic manufacturing of five key clean energy technologies.

The Committee strongly supports the need for ensuring a robust, resilient, and sustainable domestic industrial energy supply chain base to meet the requirements of the clean energy economy as an imperative to strengthening national security, reducing emissions, and creating high quality jobs. Additionally, ensuring a domestic supply of clean energy components to modernize and harden the electrical grid is critical.

The Department is directed to provide to the Committee not later than 30 days after enactment of this act and prior to the allocation or obligation of funds an execution and spending plan for these activities. Further, the Department shall not execute the spending plan or allocate or obligate these funds prior to approval by the Committee.

ENERGY EFFICIENCY AND RENEWABLE ENERGY

Appropriations, 2022	$3,200,000,000
Budget estimate, 2023	4,018,000,000
Committee recommendation	3,799,000,000

The Committee recommends $3,799,000,000 for Energy Efficiency and Renewable Energy. Within available funds, the Committee recommends $245,000,000 for program direction.

The Committee recommends up to $20,000,000 for the Technology-to-Market and Communities subprogram, formerly known as the Energy Transitions Initiative, to address high energy costs, reliability, and inadequate infrastructure challenges faced by island and remote communities. Within available funds, the Committee recommends no less than $5,000,000 to support stakeholder engagement and capacity building through the regional project partner organizations in the Energy Transitions Initiative Partnership Project.

The Committee supports the budget request for the Communities to Clean Energy Program.

Workforce Development.—The Committee believes there are significant clean energy challenges related to the inclusion of students from underserved institutions in the technology development programs within the Department's portfolio of manufacturing, solar, transportation and grid/energy storage. Clean energy programs can provide a much more inclusive talent pipeline. Accordingly, the Committee recommends $5,000,000 to support an expansion of these efforts through a university which has existing partnerships with several Historically Black Colleges and Universities and Minority Serving Institutions, and participants in several Departmental applied energy research programs.

Further, the development of a skilled workforce is critical to the successful transition to a clean energy economy and deployment and long-term sustainability of energy efficient and renewable energy technologies. The Committee encourages EERE to support training and workforce development programs that assist and support workers in trades and activities required for the continued growth of the U.S. energy efficiency and clean energy sectors, with an emphasis on training programs focused on building retrofit and construction industries. Furthermore, the Committee encourages the Department to continue to work with 2-year, public community, technical colleges, and non-governmental and industry consortia for job training programs, including programs focused on displaced fossil fuel workers, that lead to an industry-recognized credential in the energy workforce.

The Department is encouraged to update and publish on its website the list of credentials that are recognized by the Department through its Better Buildings Workforce Guidelines and additional credentials that are relevant to designing, building, and operating building energy systems

University Research Consortium on Resilience.—In fiscal year 2021 and fiscal year 2022, the Committee directed $20,000,000 in total for a competitive solicitation which the Department expects to release in Fall 2022. The Committee directs the Department to release the funding opportunity and award funds expeditiously.

SUSTAINABLE TRANSPORTATION

Within available funds, the Committee recommends up to $50,000,000 with a 50 percent industry cost-share to continue the SuperTruck III program and further address the energy efficiency, CO_2 reduction potential and freight efficiency of heavy and medium duty long and regional haul vehicles.

The Committee supports the Department's efforts in establishing the Integrated Heavy-Duty ZEV Fueling Corridor Initiative.

Vehicle Technologies.—The Committee recommends $520,000,000 for Vehicle Technologies. The Committee encourages the Department to prioritize projects in States where the transportation sector is responsible for a higher percentage of the State's total energy consumption and is the largest source of greenhouse gases.

Within available funds, the Committee recommends for a solicitation to further develop and demonstrate advanced wireless charging technologies, including charging coils, that reduce cost and improve performance of wireless power transfer and to demonstrate opportunity wireless vehicle charging in northern climates, in areas with high ratio of renewable energy deployment.

Battery and Electrification Technologies.—The Committee recommends $300,000,000 for Battery and Electrification Technologies. The Committee recognizes the increasing domestic manufacturing opportunities for electric battery production for vehicles. The Committee also encourages the Department to work to expand domestic manufacturing opportunities for electric vehicle batteries and to further address consumer barriers to adoption, including work with academic institutions that have demonstrated strong connections and support for regional energy storage industries.

Within available funds, the Committee recommends not less than $10,000,000 be made available to advance the development and demonstration of technologies for electric aircraft for the cargo and logistics industry with the dual purpose of supporting electric delivery trucks.

The Committee directs the Department to continue to support the Clean Cities alternative fuels deployment program focused on vehicles that can deliver lower greenhouse gas emissions and meet customer needs, which can include vehicles powered by biofuels, electricity, hydrogen, natural gas, renewable natural gas, and propane. Within available funds, the recommendation provides up to $150,000,000 for deployment through the Clean Cities program, including not less than $50,000,000 for competitive grants, to support alternative fuel, infrastructure, new mobility, and vehicle deployment activities. When issuing competitive grants in support of these activities, the Department is encouraged to include some awards that range from $500,000 to $1,000,000 each and encourage at least one Clean Cities coalition partner. The Committee encourages the Department to ensure balance in the award of funds to achieve varied aims in fostering broader adoption of clean vehicles and installation of supporting infrastructure. The Committee further encourages the Department to prioritize projects that can contribute the most greenhouse gases reduction. The Committee encourages the Department to work with the Department of Transportation and industry on coordinating efforts to deploy electric vehicle [EV] charging infrastructure. The Committee encourages the Department to explore ways in which the Clean Cities Program can leverage funding to provide greater support for electrification efforts, including in underserved communities, recognizing the strong emissions reduction and public health benefits delivered by electrification.

The Committee recommends no less than $20,000,000 to reduce the emissions and continue improving the energy efficiency of commercial non-road vehicles, including up to $5,000,000 for fluid power systems.

The Committee recommends up to $5,000,000 for research on direct injection, engine technology, and the use of dimethyl ether as fuel, and encourages continued research and development as appropriate in advanced combustion and vehicle engine technology efficiency in propane engines used for light and medium-duty applications.

The Committee recommends up to $10,000,000 to address technical barriers to the increased use of natural gas vehicles, with a focus on those utilizing non-fossil based, renewable natural gas. Technical barriers include demonstrations of advanced natural gas vehicles and fueling infrastructure, medium and heavy duty on-road natural gas engine research and development, energy efficiency improvements, emission reduction technologies, fueling infrastructure optimization, and renewable gas production research and development.

The Committee recognizes novel engine designs can achieve significant efficiency improvements and recommends within available funds up to $10,000,000 to support research and development of

two-stroke opposed-piston engines, to be conducted by industry-led teams.

The Committee encourages the Department in its position in the Joint Office of Energy and Transportation to increase deployment and accessibility of electric vehicle charging infrastructure in underserved or disadvantaged communities through grants, technical assistance, and community engagement and to address "soft costs" of installing EV charging infrastructure, such as permitting and interconnection challenges, to accelerate deployment. The Department is encouraged to develop and submit a roadmap to the Committee on Appropriations of both Houses of Congress to provide voluntary technical assistance to municipalities aimed at reducing the time and costs for permitting, inspecting, and interconnecting publicly available EV supply equipment through standardized requirements, online application systems, recognition programs, and technical assistance.

The Committee encourages the Vehicle Technologies Office to prioritize recycling funding awards for projects that demonstrate recycling of all battery components, including casings and enclosures made from plastics and polymer composites.

Bioenergy Technologies.—The Committee recommends $288,500,000 for Bioenergy Technologies.

Within available funds, the Committee supports research to develop the foundation for scalable techniques to use carbon dioxide produced in various plants, such as in biorefineries, to produce higher value fuels, chemicals, or materials.

Within available funds, the Committee recommends up to $5,000,000 for continued support of the development and testing of new domestic manufactured low-emission, high-efficiency, residential wood heaters that supply easily accessed and affordable renewable energy and have the potential to reduce the national costs associated with thermal energy. Further, the Committee recommends $3,000,000 for research at commercially-relevant processing scales into affordable wood chip fractionation technologies and other processing improvements relevant to thermal deoxygenation biorefineries in order to enable economic production of cellulose nanomaterials and economic upgrading of hemicelluloses and lignin. High-value coproducts made from nanocellulose, hemicelluloses, and lignin can improve the cost structure for biorefineries producing transportation fuels and thereby help the industry meet the Department's $3 per gasoline gallon equivalent near-term price target and move quickly towards $2 per gasoline gallon equivalent.

The Committee directs the Department to sustain the investment in the development of algal biofuels. Within available funds, the Committee recommends up to $40,000,000 for advanced algal systems to sustain the investment in development of algal biofuels.

The Committee further recommends not less than $100,000,000 for Conversion Technologies. Within available funds, the Committee recommends up to $30,000,000 for the Agile BioFoundry and other related early stage research and development efforts to scale up conversion technologies.

Further, within available funds for Conversion Technologies, the Committee recommends $5,000,000 to demonstrate the use of and improve the efficiency of community-scale digesters with priority

given for projects in States and Tribal areas that have adopted statutory requirements for the diversion of a high percentage of food material from municipal waste streams.

Hydrogen and Fuel Cell Technologies.—The Committee recommends $180,000,000 for Hydrogen and Fuel Cell Technologies to maintain a diverse program which focuses on early-, mid-, and late-stage research and development and technology acceleration including market transformation. The Committee encourages regular consultation with industry to avoid duplication of private-sector activities and ensure retention of fuel cell technology and systems development in the United States.

The Committee recommends not less than $100,000,000 for H2@Scale activities to support the development of hydrogen as a clean energy resource for hard-to-electrify transportation applications and to help build out the infrastructure needed to transport and store hydrogen. The Committee encourages the Department to focus on ways to reduce the economic and environmental impacts of transporting hydrogen.

The Committee recommends no less than $20,000,000 for Hydrogen Research and Development. The Department is directed to continue efforts aimed at reducing the cost of hydrogen production, storage, and distribution including novel onboard hydrogen tank systems, trailer delivery systems, and development of systems and equipment for hydrogen pipelines.

The Committee recommends up to $30,000,000 for Safety, Codes, and Standards to maintain a robust program and engage with State and local agencies to support their technical needs relative to hydrogen infrastructure and safety.

The Committee encourages the Secretary to work with the Secretary of Transportation and industry on coordinating efforts to deploy hydrogen fueling infrastructure.

RENEWABLE ENERGY

Solar Energy.—The Committee recommends $310,000,000 for Solar Energy.

Within available funds, the Committee recommends not less than $60,000,000 for Concentrating Solar Power research, development, and demonstration to reduce overall system costs, better integrate subsystem components, develop higher-temperature receivers, and improve the design of solar collection and thermal energy storage.

The Committee recommends not less than $40,000,000 for Balance of System Soft Costs efforts focused on reducing the time and costs for permitting, inspecting, and interconnecting distributed solar and storage projects installed behind the customer's meter through standardized requirements, online application systems, and grant awards to localities which voluntarily adopt the Solar Automated Permit Processing platform. Within available funds, $5,000,000 is for the National Community Solar Partnership program.

Within available funds, the Committee recommends $25,000,000 for perovskites.

The Committee encourages the Department to continue supporting the regional demonstration sites under the Solar Energy Technologies Office.

The Committee encourages the Department to continue work to improve co-siting of solar photovoltaics with ecosystem restoration activities and to reduce the environmental impact of solar photovoltaics.

The Committee also encourages the Department to develop programs that support a skilled, robust, and diverse solar energy workforce, including indirect solar workers in jobs related to financing and permitting.

Wind Energy.—The Committee recommends $210,000,000 for Wind Energy.

The Department is directed to give priority to stewarding the assets and optimizing the operations of the Department-owned wind energy research and development facilities. The Committee recommends the Department continue to prioritize mission readiness and optimization of the operations of the National Wind Technology Center, and recommends not less than $5,000,000 for research and operations of the Integrated Energy System at Scale, a large-scale research platform using high-performance computing, modeling and simulation, including improved models that can be used to understand atmospheric and wind power plant flow physics, and reliability and grid integration efforts.

The Committee recommends not less than $25,000,000 for Systems Integration.

Within available funds, up to $5,000,000 is recommended to support university-led research projects related to resource characterization, site planning, aquaculture assessments, community outreach, and planning for long-term environmental monitoring for applications of floating offshore wind and marine energy technologies to support sustainable, scalable aquaculture production.

The Committee recommends up to $3,000,000 for Centers of Excellence focused on offshore wind energy engineering, infrastructure, supply chain, transmission, and other pertinent issues required to support offshore wind in the United States.

The Committee encourages the Department to prioritize distributed wind technologies that reduce costs and improve performance and to collaborate with industry to invest in the development and demonstration of technologies and practices that advance distributed wind. Within available funds, the Committee recommends $15,000,000 for distributed wind.

The Committee encourages the Department to continue to support research and development related to siting and environmental permitting issues, which if not properly addressed may lead to unnecessary delays in achieving the national goal to deploy 30 gigawatts of offshore wind generation by 2030. In considering research and development funding related to siting and environmental permitting issues, the Department shall prioritize the development of technologies and capabilities related to minimizing impacts to coastal communities, Federal radar missions, and living marine resources.

The Committee encourages the Department to continue focusing efforts with non-profit and academic partners to conduct coastal atmospheric boundary layer characterization that will help optimize and inform efforts of the Department of Interior's Bureau of Ocean

Energy Management and assist the growing domestic coast wind energy industry.

Water Power.—The Committee recommends $196,000,000 for Water Power.

The Secretary is encouraged to utilize existing authorities to waive cost share for water power technologies research, development, demonstration, and deployment activities.

The Committee recommends $69,000,000 for hydropower and pumped storage activities, including up to $10,000,000 for demonstration of a modular pumped storage project. The Committee recommends provides up to $35,000,000 to expand the HydroWIRES program to enhance the flexibility of America's hydropower and pumped storage hydropower resources, including support for research, development, and demonstration to advance pumped storage hydropower projects. The Department is encouraged to continue efforts that support and demonstrate increased grid reliability and integration of other renewable energy resources, including applications to optimally integrate small hydropower with advancements in battery storage and other grid services.

The Committee recommends up to $15,000,000 for hydropower innovation, testing, and initiatives, including industry-led competitive solicitations for advances turbine demonstrations, improvement of environmental performance, standardized or modular project deployment applications, and advanced manufacturing and supply chain innovations. The Committee recommends $10,000,000 to continue research, development, demonstration, and deployment efforts of innovative technologies for fish passage and invasive fish species removal at hydropower facilities. The Committee recommends up to $5,000,000 for innovative analytics to optimize hydropower applications such as machine learning-based hydrologic forecasts and operations optimization technology advancement.

The Committee recommends up to $142,000,000 for marine energy. The Committee recommendation includes not less than $60,000,000 for industry-led competitive solicitations to increase energy capture, improve reliability, and to assess and monitor environmental effects of marine energy systems and components at a variety of scales, including full scale prototypes. The Committee recognizes the importance of consistent and timely funding opportunities to optimize the impacts of university-led foundational research and to develop the skilled workforce needed to accelerate development of the marine energy sector.

The Committee recommends $24,000,000 for the Powering the Blue Economy initiative and directs the Department to continue leveraging existing core capabilities at national laboratories to execute this work, in partnership with universities and industry. The Committee is invested in the Department's Powering the Blue Economy efforts, and encourages the Department to continue focusing on cross-cutting initiatives within EERE and with other Federal partners that integrate marine energy harvesting, energy storage, and continuous, wide area monitoring. The Committee recommends up to $24,000,000 for foundational research activities led by the National Marine Energy Centers and affiliated universities and research institutions. Within available funds, the Committee recommends up to $20,000,000 to address infrastructure needs at

marine energy technology testing sites, including general plant projects and planning activities for the staged development of an ocean current test facility and upgrades to facilities that provide cost effective open water access for prototype testing. The Committee recommends not less than $5,000,000 for the Department's Marine and Coastal Research Laboratory. The Committee recommends $22,000,000 to complete construction of the grid connected wave energy test facility and recommends up to $8,000,000 for continuation of the Testing Expertise and Access for Marine Energy Research initiative. Within available funds, the Committee recommends not less than $5,000,000 to continue operations at the Atlantic Marine Energy Center to accelerate the transition of wave and tidal energy technologies to market.

The Committee recommends up to $10,000,000 for purposes of section 242 and section 243 of the Energy Policy Act of 2005.

The Committee directs the Department to coordinate with the U.S. Navy and other Federal agencies on marine energy technology development for national security and other applications.

The Committee recognizes the challenges of decarbonizing remote communities and the maritime sector. The Water Power Technology Office, in coordination with other relevant Energy Efficiency and Renewable Energy offices, is encouraged to continue to focus on activities addressing the integration of clean energy systems for remote communities and port electrification, including the demonstration of marine, distributed wind, solar, energy storage, improved microgrids, and local production of zero-carbon fuels.

Geothermal Technologies.—The Committee recommends $125,000,000 for Geothermal Technologies for research, development, and demonstration, including implementation of the recommendations outlined in the GeoVision study and authorized in the Energy Act of 2020 (Public Law 116–206).

The Committee recommends up to $75,000,000 for enhanced geothermal system demonstrations and next-generation geothermal demonstration projects in diverse geographic areas, including at least one demonstration project in an area with no obvious surface expression, to develop deep, direct use of geothermal technologies to distribute geothermal heat through an integrated energy system or district heating system. Awards for geothermal exploration activities, including test drilling, shall recognize the diversity of geologic terrains, resource depths, and exploration costs across the United States.

Renewable Energy Grid Integration.—The Committee recommends $57,730,000 for activities to facilitate the integration of grid activities among renewable energy technologies and to include integrated system analysis, technical assistance, and innovative municipal or community-driven initiatives to increase the use and integration of renewable energy in the United States. Within available funds, the Committee recommends $10,000,000 for development and demonstration of an "energyshed" management system that addresses a discrete geographic area in which renewable sources currently provide a large portion of electric energy needs, where grid capacity constraints result in curtailment of renewable generation, and with interactive smart meters. The "energyshed" design should achieve a high level of integration, resilience, and re-

liability among all energy uses, including both on-demand and long-time energy scales, transmission, and distribution of electricity.

ENERGY EFFICIENCY

Advanced Manufacturing.—The Committee recommends $505,000,000 for Advanced Manufacturing. The Committee recommends $25,000,000 for the Manufacturing Demonstration Facility [MDF] and the Carbon Fiber Technology Facility. Within available funds for MDF, $5,000,000 is recommended for the development of processes for materials solutions.

Within available funds for the Industrial Technical Assistance program, the Committee recommends $13,000,000 to provide ongoing support for the Combined Heat and Power [CHP] Technical Assistance Partnerships [TAPs] and related CHP Technical Partnership activities at the Department, including $5,000,000 for the TAPs and $8,000,000 for related CHP activities. The Committee also encourages the Department to prioritize research, development, and demonstration of district energy systems and work to accelerate greater deployment of district energy systems in communities, campuses, industries, and cities nationwide by supporting adaptive regional and local technology, and market opportunities. The Committee further directs the Department to collaborate with industry on the potential energy efficiency and energy security gains to be realized with district energy systems.

The Committee supports additive manufacturing technologies for wind energy applications. Within available funds, $5,000,000 is recommended for work on additive manufacturing of large wind blades.

The Committee recognizes the important role large-area additive manufacturing can play in helping to advance the deployment of building, transportation, and clean energy technologies. The Committee directs the Department to further foster the partnership between the national laboratories, universities, and industry to use bio-based thermoplastics composites, such as micro- and nanocellulosic materials, and large-area 3–D printing to overcome challenges to the cost and deployment of building, transportation, and energy technologies. In addition, the Committee recommends up to $20,000,000 to continue the development of additive manufacturing involving nanocellulosic feedstock materials made from forest products. This work will be conducted in partnership with the MDF in order to leverage expertise and capabilities for large scale additive manufacturing. Within available funds, the Committee recommends up to $5,000,000 for development of thermoplastic resin systems research.

The Committee recommends up to $5,000,000 for university-led research and development of catalytic processes to transform low value feedstocks into carbon-neutral liquid fuels and chemical products.

The Committee notes that drying processes consume approximately 10 percent of the process energy used in the manufacturing sector and directs that within available funds, up to $10,000,000 is recommended to be used to issue a competitive solicitation for uni-

versity and industry-led teams to improve the efficiency of industrial drying processes.

The Committee recognizes the growing need for the use of more sustainable chemistry in consumer and commercial products, which can create significant value as an economic opportunity for U.S. manufacturing. The Committee recommends $10,000,000 to support sustainable chemistry research and development. The fiscal year 2021 Act directed the Department to provide a report exploring how incorporating sustainable chemistry in consumer and commercial manufacturing processes fits within its research and development portfolio and can benefit these processes. The Committee is still awaiting this report and directs the Department to provide the report immediately.

Polyethylene Plastics.—The Committee recommends up to $5,000,000 for university-led research in order to increase recycling rates for polyethylene plastics and develop conversion of waste polyethylene to more recyclable and biodegradable plastics.

The Committee recommends $5,000,000 to continue to develop and industrialize low-cost polymer infiltration processes for the fabrication of ceramic matrix composites for high-temperature components, giving priority to silicon carbide components.

The Committee recommends not less than $5,000,000 to apply the Office of Science's leadership computing facility expertise in machine learning to increase efficiencies in large scale, high rate, aerostructures manufacturing. The Department is encouraged to leverage best practices from large-scale, high-rate commercial composite aerostructure manufacturing.

The Committee notes the Department's efforts to expand the capabilities of the United States in advanced battery manufacturing for long-duration grid-scale energy storage. As the Department continues its efforts to scale up a domestic advanced battery supply chain, including battery manufacturing demonstration projects, the Committee encourages the Department to seek a broad spectrum of battery chemistries not wholly exclusive to lithium-ion based battery technology and encourages the Department to craft- grant solicitations widely enough to include all compelling emerging technologies such as multi-day storage [MDS] chemistries such as iron-air batteries or other new configurations.

The Committee continues to support the Clean Energy Manufacturing Innovation [CEMI] Institutes. The Committee is aware of the existing six CEMI Institutes' capabilities and efforts in advancing clean-energy solutions that will help reduce pollution, greenhouse gas emissions, and dependence on oil while launching new businesses and creating high-wage, highly-skilled clean energy jobs. The fiscal year 2022 Act directed the Department to provide a briefing on the potential benefits and considerations of renewing or extending existing CEMI agreements, including extensions of not less than 5 years. The Committee is still awaiting this briefing and directs the Department to provide it immediately after enactment of this act.

In collaboration with the Office of Nuclear Energy, Wind Energy Technology Office, and the Water Power Technology Office, the Department is directed to provide a briefing to the Committees on Appropriations of both Houses of Congress within 180 days of enact-

ment of this act on the potential for developing and commercializing novel manufacturing processes and methods capable of producing large metallic near net shape components. Novel processes and methods include the leveraging of additive manufacturing. Large near net shape components include those traditionally fabricated using large castings and forgings, such as rotor hubs, nacelle bedplates, vessels and shells, turbine runners, wicket gates, and generator components. The briefing shall include a summary of research, development, demonstration, and commercialization needs to further examine and validate the technical and economic viability of producing large metallic near net shape components in the United States.

The Committee encourages the Department to prioritize research and development focused on processing and production of critical minerals and rare earth elements co-located with the extraction of copper porphyry deposits and other hardrock mineral deposits.

BUILDING TECHNOLOGIES

The Committee recommends $364,770,000 for Building Technologies.

Across all of these efforts, where appropriate, the Buildings Technologies Office is encouraged to collaborate with OE and CESER, especially including efforts pertaining to improved building-to-grid interactions and integration of energy storage and renewable energy. Within available funds for Emerging Technologies, the Committee encourages the Department to make funding available for Heating, Ventilation, and Air Conditioning [HVAC] and Refrigeration Research, Development and deployment, including heat pumps, heat pump water heaters and boilers. The Department shall focus its efforts to address whole building energy performance and cost issues to inform efforts to advance beneficial electrification and greenhouse gas mitigation without compromising building energy performance. The Committee encourages the Department to develop strategies and activities to increase adoption of energy-saving and emissions-saving technologies for low-income households, multi-family buildings, and minority communities.

Equipment and Building Standards.—The Committee recommends not less than $60,000,000 for Equipment and Buildings Standards.

The Committee recommends up to $30,000,000 for the Building Energy Codes Program to increase training, including certifications, and provide technical assistance to States, local Governments, regional collaboratives, workforce development providers, homebuilders, office builders, architects and engineers, and other organizations that develop, adopt, or assist with the adoption or compliance with model building energy codes and standards to improve energy efficiency and resilience.

The Committee supports continued research to quantify the resilience impacts of energy codes for buildings, occupants, and communities. Recognizing that the pandemic has presented challenges to permit processing for building departments reliant on paper-based systems, the Committee encourages the development of cloud-based software that can facilitate permit processing for projects that con-

serve energy or promote resilience as well as efforts to help departments modernize systems.

The Committee directs EERE to carry out the Grid-interactive Efficient Buildings [GEB] program to ensure that a high level of energy efficiency is a core element of the program and a baseline characteristic for GEBs, which are also connected, smart, and flexible. EERE shall engage with the public and private sectors, including the building and manufacturing industries and State and local Governments, to share information on GEB technologies, costs, and benefits, and to provide information to position American companies to lead in this area. In addition, EERE is reminded to follow the National Technology Transfer and Advancement Act and related guidance in testing and applying relevant existing and emerging standards developed by non-governmental organizations.

Within available funds, the Committee recommends no less than $50,000,000 for the Residential Building Integration program. This work can include partnerships with cities, States, affordable housing entities, utilities, manufacturers, and others to spur innovative approaches and drive investment in home energy upgrades. The Committee recommends this increase to advance building upgrades and weatherization of homes, as well as to advance work in grid-integrated efficient buildings and inclusion of smart grid systems, demand flexibility and new initiatives in workforce training to ensure the technology and research findings reach practitioners. The Committee encourages funding to be concentrated on industry teams to facilitate research, demonstrate and test new systems, and facilitate widespread deployment and dissemination of information and best practices through direct engagement with builders, the construction trades, equipment manufacturers, smart grid technology and systems suppliers, integrators, and State and local Governments and other market transformation activities. Further, the Committee recommends funding to facilitate deep whole-house energy efficiency retrofits, particularly those using innovations from the Advanced Building Construction Initiative, such as demonstrations, outreach, engagement, and training to private sector contractors, including continuing efforts to advance smart home technology. The Committee supports continued efforts to address property rating and valuation in commercial and residential buildings as a way to improve transparency of energy utilization in buildings for persons and companies buying or leading property.

Significant research and development gaps remain to transition lower-carbon and zero-carbon fuels in buildings. The Department is encouraged to continue exploring research and development that can advance systems and appliances, driven by delivered fuels including renewable fuels and hydrogen, to meet consumer demands for high efficiency and environmentally friendly products in residential and commercial building applications, including heat pumps with power generation and water heating, increased utilization of renewable fuels and hydrogen, appliance venting, hybrid fuel-fired and electrically-driven systems, distributed carbon capture, mitigation of behind-the-meter methane emissions, and on-site (micro) combined heat and power to include cooling and integration with renewables.

Within available funds, the Committee recommends no less than $60,000,000 for the Commercial Building Integration program for core research and development of more cost-effective integration techniques and technologies that could help the transition toward deep retrofits. In addition, the Committee encourages the Department to increase engagement with private sector stakeholders to develop market-transforming policies and investments in commercial building retrofits.

The Committee recommends up to $20,000,000 to develop programs to support a skilled, robust, diverse, and nationally representative building energy efficiency and building energy retrofit workforce. The Department is encouraged to work with 2-year community and technical colleges, labor, and nongovernmental and industry consortia to advance job training programs and to collaborate with the Department of Education, the Department of Labor, and the residential and commercial efficiency building industry to ensure support is reaching small energy efficiency businesses that have had difficult accessing Federal workforce support.

The Committee recommends up to $5,000,000 for novel earlier-stage research, development, and demonstration of technologies to advance energy efficient, high-rise Cross-Laminated Timber [CLT] building systems. The Committee encourages the Department to support university research, in partnership with national labs, for developing, building, and evaluating CLT wall systems for embodied energy content, operating energy efficiency, wall moisture profiles, structural connector durability, and health monitoring sensors.

STATE AND COMMUNITY ENERGY PROGRAMS

The Committee recommends $458,000,000 for State and Community Energy Programs.

Within this amount, $313,000,000 is recommended for the Weatherization Assistance Program [WAP], $10,000,000 for Training and Technical Assistance, and $30,000,000 for the Weatherization Readiness Fund.

The Committee notes that the Department is working to update the Weatherization Assistance Program and encourages the Department to update the calculation of the Savings-to-Investment Ratio [SIR] to reflect total whole home savings and to account for the total value measures that keep homes prepared for future climate conditions. The Committee also encourages the Department to continue its work enabling States to create priority lists of measures to reduce energy audit time and increase the rate of production.

The Committee recommends $65,000,000 for State Energy Program [SEP] grants. The Committee encourages the Department to work with all relevant stakeholders to identify efficiencies for delivering weatherization services and examine options to streamline policies and procedures when other funding sources are utilized in conjunction with funds from the Department. The Committee encourages the Department to prioritize initiatives that promote green, healthy, and climate resilient schools, libraries, and other public buildings.

The Committee supports WAP's continued participation in the interagency working group on Healthy Homes and Energy with the Department of Housing and Urban Development. The Department is encouraged to further coordinate with the Office of Lead Hazard Control and Healthy Homes on energy-related housing projects. The Committee encourages the Department to begin tracking the occurrence of window replacements, which supports the reduction of lead-based paint hazards in homes.

The Committee recognizes the importance of providing Federal funds under the Weatherization and Intergovernmental Program to States and Tribes in a timely manner to avoid any undue delay of services to eligible low-income households, and to encourage local high-impact energy efficiency and renewable energy initiatives and energy emergency preparedness. Therefore, the Department is encouraged to ensure application guidance is released to States, Tribes and other direct grantees not later than 60 days after enactment of this act. The Department is also encouraged to obligate formula grant funds recommended for WAP and SEP to States, Tribes, and other direct grantees not later than each State's agree upon program year start date. The Committee is concerned with the reduction of mission-critical staff at the Office of Weatherization and Intergovernmental Programs and directs the office to achieve staffing levels that will allow it to provide robust training, technical assistance, and oversight for WAP and SEP.

Within available funds, the Committee recommends that $1,000,000 be made available to WAP grant recipients that have previously worked with the Department via the Weatherization Innovation Pilot Program, for the purpose of developing and implementing State and regional programs to treat harmful substances, including vermiculite.

MANUFACTURING AND ENERGY SUPPLY CHAINS

The Committee recommends $25,000,000 for the Office of Manufacturing and Energy Supply Chains. Within available funds, the Committee recommends up to $20,000,000 for the Industrial Assessment Center [IAC] program. The Committee further directs the Department to apply the additional funding to support regions that are currently designated as underserved through the IAC program. Within the funds provided for the Industrial Assessment Centers, the Committee recommends up to $8,000,000 for applied technical assistance and the purchase and pilot testing of innovative technology. This equipment and technical assistance shall be provided to municipal or industrial entities that face significant water treatment challenges and for which piloting such technology would be of significant benefit.

The Committee recognizes the potential for energy savings and enhanced water treatment in municipal, industrial, and agricultural wastewater treatment systems. The Committee encourages the Department to expand technical assistance provided by the Industrial Assessment Centers with the training and tools necessary to provide technical assistance on energy savings to these facilities.

FEDERAL ENERGY MANAGEMENT PROGRAM

The Committee recommends $60,000,000 for the Federal Energy Management Program. The Committee recommends not less than $20,000,000 for the Department to continue its work through the Assisting Federal Facilities with Energy Conservation Technologies [AFFECT] program. The Committee also recommends $2,000,000 for workforce development and the Performance Based Contract National Resource Initiative.

The Committee directs the Department to continue requiring all AFFECT grant funding to be leveraged through private sector investment in Federal infrastructure to ensure maximum overall investment in resiliency, efficiency, emissions reductions, and security. The Department will direct funding to projects that attracted at least 10 dollars for each Federal dollar invested and that utilize public-private partnerships like Energy Savings Performance Contracts and Utility Energy Service Contracts.

CORPORATE SUPPORT

Strategic Programs.—The Committee recommends $25,400,000 for Strategic Programs.

Facilities and Infrastructure.—The Committee recommends $60,000,000 for the Energy Materials and Processing at Scale research capability at the National Renewable Energy Laboratory.

CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE

Appropriations, 2022	$185,804,000
Budget estimate, 2023	202,143,000
Committee recommendation	202,143,000

The Committee recommends $202,143,000 for the Office of Cybersecurity, Energy Security, and Emergency Response [CESER]. Within available funds, the Committee recommends $25,143,000 for program direction.

Additional direction related to Department-wide crosscutting initiatives is provided under the heading Crosscutting Initiatives in the front matter of the Department of Energy.

The Committee remains concerned about the longstanding lack of clarity on the Department's cyber research and development responsibilities and directs CESER to coordinate with the Office of Electricity and relevant applied energy offices in clearly defining these program activities. The Department is directed to provide the Committee quarterly updates on the issues outlined above. Finally, the Department is directed to include an itemization of funding levels below the control point in future budget submissions.

Recent cyberattacks underscore the importance of preparing a highly trained cybersecurity workforce in the United States. Challenges with cybersecurity require a community of industry, educators, and innovators working together. Collaboration increases relevance for all institutions by keeping pace with the malicious threat. The Department is encouraged to develop cybersecurity consortiums of public-private-partnerships between universities, local and State government, and private industry to develop a community of relevance in cybersecurity workforce development for the energy sector.

Risk Management Technology and Tools.—Within available funds for Risk Management Technology and Tools, the Committee recommends $5,000,000 for Consequence-driven Cyber-informed Engineering.

The recommendation provides not less than $5,000,000 to conduct a demonstration program of innovative technologies, such as technologies for monitoring vegetation management, to improve grid resiliency from wildfires.

The Committee is encouraged to coordinate with Office of Electricity on university-based research and development of scalable cyber-physical platforms for resilient and secure electric power systems that are flexible, modular, self-healing, and autonomous.

The Committee supports extension of cyber-risk information sharing tools to close remaining vulnerabilities in the distribution and transmission system. The Committee encourages the Department to continue existing work within ongoing programs and to invest in research addressing power system vulnerabilities in supply chain and life cycle management for critical power system components and advanced adaptive defensive methods for grid control systems.

The recommendation provides up to $2,500,000 for regional-scale high-performance computer simulations of earthquake analysis of the energy system.

Response and Restoration.—The Committee places a high priority on ensuring the protection of the electric grid against cyberattacks and extreme weather events. The Response and Restoration program coordinates a national effort to secure the U.S. energy infrastructure against all hazards, reduce impacts from disruptive events, and assist industry with restoration efforts. The program delivers a range of capabilities including energy sector emergency response and recovery, including emergency response of a cyber nature; near-real-time situational awareness and information sharing about the status of the energy systems to improve risk management; and analysis of evolving threats and hazards to energy infrastructure.

The Committee recommends up to $5,000,000 to begin planning for a regional pilot that will foster partnerships between national laboratories, universities, electricity sector utilities, and State and local government entities to identify and mitigate the prevalent and constantly evolving national security threats to regional infrastructure.

Information Sharing, Partnerships, and Exercises.—The Information Sharing, Partnerships, and Exercises program supports energy sector security and resilience through coordination with government and industry partners. This program provides technical assistance that incorporates exercises to strengthen Federal, regional, State, Tribal, and territorial abilities to work together to prepare for and mitigate the effects of an energy sector emergency and focuses on training the next generation workforce on energy sector risks.

The recommendation provides not less than $2,000,000 to expand collective defense and community-wide visibility programs designed for operational technology and industrial control system networks.

The Committee is supportive of Departmental initiatives focused on cybersecurity risk information-sharing and secure data anonymization and analysis for both operational and information technology components of equipment commonly utilized in both the bulk power system and distribution systems. The Department is encouraged to prioritize enrolling under-resourced electric utilities in such programs, particularly rural electric cooperatives and municipally-owned entities.

ELECTRICITY

Appropriations, 2021	$277,000,000
Budget estimate, 2022	302,907,000
Committee recommendation	362,000,000

The Committee recommends $362,000,000 for the Office of Electricity. Within available funds, the Committee recommends $21,000,000 for program direction.

The Department is directed to include an itemization of funding levels below the control point in future budget submissions. Given concerns about the longstanding lack of clarity on the Department's cyber research and development responsibilities, the Office of Electricity is directed to coordinate with the Office of Cybersecurity, Energy Security, and Emergency Response [CESER] and relevant applied energy offices in clearly defining these program activities. The Department is directed to provide the Committee quarterly updates on these topics.

Additional direction related to Department-wide crosscutting initiatives is provided under the heading Crosscutting Initiatives in the front matter of the Department of Energy.

The Committee directs the Department to complete a study, within 180 days following passage of this act, related to the ability of the electric system to meet the demand of new electric vehicle charging infrastructure. The study would anticipate the growth in the use of electric vehicles to help meet our climate goals, and would assess how much additional electric generation, transmission, and distribution capacity will need to be added to the electric system to meet demand. Further, the Department is encouraged to develop a plan on how the Department can assist the electric system in meeting the anticipated increase in demand, and then provide Congress with recommendations on how the study can be supported legislatively. For the study and plan, the Office of Electricity is directed to coordinate with the Grid Deployment Office, the Vehicle Technologies Office, and the Joint Office of Energy and Transportation.

The Department is encouraged to provide assistance to aid electric cooperatives and municipal power utilities to deploy energy storage and micro grid technologies.

GRID CONTROLS AND COMMUNICATIONS

Energy Delivery Grid Operations Technology.—The Department is encouraged to work with National Labs and relevant stakeholders to help identify viable future grid realization pathways to a large-scale transmission system buildout that would accomplish clean energy goals. The Committee notes that stakeholder engagement will help define new scenarios for analysis to reach grid

decarbonization goals cost-effectively and under new high-stress conditions.

Within available funds, the Committee recommends $10,000,000 for the DarkNet project to explore opportunities for getting the Nation's critical infrastructure off the Internet and shielding the Nation's electricity infrastructure from disruptive cyber penetration, including expansion of the communications network architecture and development of cutting-edge networking technologies.

Resilient Distribution Systems.—The Committee encourages the Office of Electricity to focus on identifying and addressing technical and regulatory barriers impeding grid integration of distributed energy systems to reduce energy costs and improve the resiliency and reliability of the electric grid.

Within available funds, the Committee directs the Department to continue efforts to support the integration of sensors into the Nation's electric distribution systems, fundamental research and field validation of microgrid controllers and systems, and transactive energy concepts, including studies and evaluations of energy usage behavior in response to price signals. The Committee places a high priority on addressing the challenges facing the electric power grid by advancing the deployment of innovative technologies, tools, and techniques to modernize and increase the resiliency of the distribution portion of the electricity delivery system. The Committee encourages the Department to work with national labs and industry to advance best practices to technology deployment and adoption across the country. In addition to emerging fuel technologies for distributed grids, the Committee encourages that fuels, such as propane and other diesel alternatives, be evaluated.

The recommendation provides not less than $15,000,000 for a demonstration project with the Department's Grid Sensors and Sensor Analytics program. The demonstration activities may focus on utilizing data from distribution utilities that have deployed advanced metering infrastructure.

Within available funds, the Committee recommends $10,000,000 for the second of a 3 year coordinated research, development, deployment, and training related to advanced microgrid-enabling technologies, with a focus on underserved and Indigenous communities in remote and islanded areas. The Committee directs the Department to partner with organizations with specialized experience addressing local energy challenges, including community-based organizations and institutions of higher education, with a priority for minority-serving institutions.

Cyber Resilient & Secure Utility Communications Networks.—Within available funds, the Committee recommends up to $5,000,000 for university-based research and development of scalable cyber-physical platforms for hyper-resilient and secure electric power systems that are flexible, modular, self-healing, and autonomous. This activity should be conducted in coordination with [CESER].

The Committee recognizes that high priority should continue to be placed on addressing challenges that could compromise the electric power grid by developing the innovative technologies, tools, and techniques to modernize the distribution portion of the electricity delivery system. Furthermore, the Committee recommends up to

$5,000,000 to the Office of Electricity to partner with utility-led facilities to evaluate and commission new distribution communications and control technologies for a secure smart grid.

GRID HARDWARE, COMPONENTS, AND SYSTEMS

Energy Storage.—The Committee urges the Department to continue furthering coordination between the Office of Electricity, the Office of Science, the Office of Energy Efficiency and Renewable Energy, and other Department offices to achieve commercially viable grid-scale battery storage.

The recommendation provides not less than $40,000,000 for a competitive pilot demonstration grant program, as authorized in section 3201 of the Energy Act of 2020, for energy storage projects that are wholly U.S.-made, sourced, and supplied. The Department is directed to include large scale commercial development and deployment of long cycle life and their components.

Transformer Resilience and Advanced Components.—The Committee encourages research to reduce costs associated with high voltage direct current converter stations. The Committee recognizes the Department's role in the development of a standardized power electronic converter applied across a range of grid applications, coupled with the need to reduce transmission costs and improve reliability through advanced technological research. The Committee emphasizes the security and economic imperative of fostering and maintaining a robust domestic supply chain of transformers and components, including the largest capacity transformers.

The Committee directs the Department to continue to support research and development for advanced components and grid materials for low-cost power flow control devices, including both solid-state and hybrid concepts that use power electronics to control electromagnetic devices and enable improved controllability, flexibility, and resiliency. Because there are limited viable alternatives to Sulfur Hexafluoride [SF6] in power generation and transmission equipment above 72kV, the Department is encouraged to support research and development to advance safe and effective capture and reuse technologies for the use of SF6 in components like circuit breakers. Below 72kV power generation and distribution equipment is fully capable of being designed and manufactured without SF6. Therefore, the Department is directed to support research and development to advance safe and effective alternatives to SF6, including in circuit breakers, reclosers, sectionalizers, load break switches, switchgear and gas insulated lines.

The Department is directed to provide to the Committee not later than 180 days after enactment of this act a study regarding the environmental, economic, and clean energy deployment benefits of establishing an energy conservation standard for overhead electricity conductors that move electricity at voltages equal to or greater than 69 kV on the electric grid from sources of generation or storage into the distribution system for final delivery. For the purposes of the study, the standard should be based on the electrical resistance of such conductors as measured at 20 degrees Celsius. The study shall examine whether establishing such a standard will (1) reduce line losses and their associated emissions; (2) expedite the deployment of additional transmission capacity to clear inter-

connection queues and accommodate additional renewable capacity on the electric grid; (3) reduce transmission line sagging in wildfire-prone regions; (4) reduce permitting timelines for adding new transmission capacity to the electric grid; and (5) any additional matters the Department deems appropriate. The Office of Electricity shall coordinate with the Grid Deployment Office, the Office of Energy Efficiency and Renewable Energy, and the Federal Energy Regulatory Commission on the study.

The Committee remains concerned about the escalating cost of rebuilding utility infrastructure in regions where it is subject to the effects of extreme weather and climate change and considers the most appropriate strategy to be rebuilding federally funded utility infrastructure only to specifications that can withstand foreseeable environmental outcomes.

GRID DEPLOYMENT

Grid Technical Assistance.—The Committee encourages the Department to collaborate and provide technical assistance to interested States to ensure State energy officials and State regulatory officials have access to grid, economic, and emissions modeling related to multi-State wholesale market design. In addition, States should be provided market governance, planning and policy, and regulatory development assistance related to the formation, expansion, or improvement of energy markets within grid regions.

Grid Planning and Development.—The Committee encourages the Department to deploy transmission facilities and related technologies by enhancing the reliability and resilience of the bulk power system, including High voltage direct current [HVDC] transmission networks and interregional connections, and integrating power-generating resources into the electric grid. Further, the Department is encouraged to develop opportunities for connecting areas of high energy resources to areas of high energy demand, including offshore transmission, and for linking together transmission planning regions and other activities that would ensure deployment of bulk power across a national electric grid.

Wholesale Electricity Market Technical Assistance Grants.—Within available funds, the Department is directed to provide technical and financial assistance to States and regions to develop market governance, planning and policy, and regulatory development assistance related to the formation, expansion, or improvement of grid regions to ensure a clean, reliable, resilient, and equitable grid. Further, the Department is encouraged to investigate market improvements, specifically to evaluate wholesale market opportunities such as expansion of energy imbalance markets.

Wide scale adoption of emerging and existing digital technology solutions may assist regulated utilities in the registration, scheduling, dispatch/activation, measurement/verification, and financial settlement of energy customers and their devices. The Department is directed to provide to the Committee not later than 180 days after enactment of this act a report that explores the obstacles and opportunities for adoption of information technology modernization technologies by utilities bound by the current cost-of-service regulatory model. Further, the report shall include the current treatment of the adoption of such technologies in rate recovery.

NUCLEAR ENERGY

Appropriations, 2022	$1,654,800,000
Budget estimate, 2023	1,675,060,000
Committee recommendation	1,765,600,000

The Committee recommends $1,765,600,000 for Nuclear Energy. Within available funds, the Committee recommends $82,574,000 for program direction.

Nuclear Energy provides nearly one-fifth of our Nation's electricity, and nearly 60 percent of our carbon free electricity. Advanced nuclear technologies hold promising potential for reliable, safe, emission-free energy. The Department is encouraged to prioritize funds for public-private partnerships to demonstrate advanced reactor designs and fuel types by the late 2020s, including through the Advanced Reactor Demonstration Program.

The Committee also continues to strongly support the recommendations of the Blue Ribbon Commission on America's Nuclear Future and believes that near-term action is needed to address the accumulating inventory of spent nuclear fuel. The Committee supports continued funding for consolidation of spent nuclear fuel from around the United States to one or more interim central storage facilities.

The Committee is concerned that a recently published study found that certain small modular reactor designs may produce more spent nuclear fuel per power produced, compared to traditional reactors. The fiscal year 2020 Omnibus Appropriations Act required that the Department to contract with the National Academy of Sciences on a report to study the non-proliferation and security risks and international safeguards challenges associated with advanced nuclear reactors and related fuel cycle technologies, including the fuel cycle for small modular reactors. The Department is directed to provide a report and briefing to the Committee 90 days after enactment of the act describing how it plans to implement recommendations from the report, including how it would propose to fund advanced reactors that produce lower waste yields, compared to traditional reactors.

The Department is reminded that it does not have authority to redirect any appropriations between control points. Transfer or reprogramming of funds requires Congressional approval. The Department may not repurpose or re-scope projects identified in control points without prior Congressional notification.

Nuclear Energy University Program [NEUP].—Since 2009, the Department has allocated up to 20 percent of funds appropriated to Nuclear Energy research and development programs to fund university-led R&D and university infrastructure projects through an open, competitive solicitation process using formally certified peer reviewers. The recommendation continues a separate control point to fund NEUP and other crosscutting program responsibilities [SBIR, STTR, and TCF] to provide greater transparency and flexibility for this program. The Department is directed to provide to the Committees prior to the obligation of these funds a detailed spending and execution plan for NEUP activities. The Department is directed to provide to the Committees not later 90 days after enactment of this act and quarterly thereafter briefings on the imple-

mentation of NEUP. The Department is directed to provide the Committee not later than 180 days after enactment of this act, a report detailing the needs of university reactor refurbishments and the potential need to upgrade or build additional university reactors. The report shall include a detailed plan including total lifecycle costs and associated funding profiles for potential new university reactors. As in fiscal year 2022, the Committee does not provide funds for the planning and construction of new university nuclear reactors.

Within available funds for NEUP, SBIR/STTR, and TCF, the Committee recommends $6,500,000 for the University Nuclear Leadership Program, previously funded as the Integrated University Program. The Committee notes the importance of this program, in developing highly qualified nuclear specialists to meet national needs. Further, the Committee notes its support for the diversification of financial assistance it provides through the program to include supporting nontechnical nuclear research that serves to increase community participation and confidence in nuclear energy systems.

Advanced Reactor Licensing.—The Committee recommends up to $5,000,000 for the Advanced Nuclear Licensing Energy Cost-Share Grant Program as authorized under 42 U.S.C. 16280.

The Committee recognizes the importance of creating a domestic graphite supply for the nuclear energy industry. The Department is encouraged to explore activities to secure a domestic supply of nuclear grade graphite at synthetic graphite facilities that are U.S.-based and U.S.-owned.

NUCLEAR ENERGY ENABLING TECHNOLOGIES

The Committee recommendation provides $10,000,000 for integrated energy systems, including projects with hydrogen co-located with nuclear.

Joint Modeling and Simulation Program.—The Committee recommendation continues the requirement that use and application of the codes and tools shall be funded by the end user, not the Joint Modeling and Simulation Program.

Nuclear Science User Facilities.—The recommendation includes not less than $12,000,000 for computational support.

FUEL CYCLE RESEARCH, DEVELOPMENT, AND DEMONSTRATION

To support availability of high-assay low-enriched uranium [HALEU] and other advanced nuclear fuels, consistent with section 2001 of the Energy Act of 2020, the recommendation includes $182,000,000, including $2,000,000 for Mining, Shipping, and Transportation; $150,000,000 for Advanced Nuclear Fuel Availability; and not less than $30,000,000 within Material Recovery and Waste Form Development.

Advanced Nuclear Fuel Availability.—The Committee supports the continued development of the Advanced Nuclear Fuel Availability program to make available small quantities of HALEU in the short term and supports the transition of these activities to the private sector for commercial HALEU production and domestic supply chain capabilities for the long term.

The Department is directed to move forward with a program that is competitive. The Department is further directed to provide the Committee with a plan for the program that includes specific milestones and timelines for completion of the program, as well as expected lifecycle costs, within 90 days of enactment of this act. The Department may not obligate more than 50 percent of amounts provided to the Office of Nuclear Energy until the Department submits the required report. The Committee encourages the Department to ensure that all federally-funded transfers and shipments of uranium hexafluoride and depleted uranium hexafluoride, shall to the extent practicable, use American manufactured shipping cylinders and transportation casks.

Material Recovery and Waste Form Development.—The Committee recommends $30,000,000 for Material Recovery and Waste Form Development, including not less than $28,000,000 for EBR–II Processing for HALEU. The Department is encouraged to continue activities related to the ZIRCEX process.

Accident Tolerant Fuels.—The Committee continues to place a high priority on this program and urges the Department to maintain focus and priority on achieving results in these efforts. The Committee recommends $115,000,000 for development of nuclear fuels with enhanced accident-tolerant characteristics to significantly mitigate the potential consequences of a nuclear accident. The recommendation provides not less than $17,000,000 for further development of silicon carbide ceramic matrix composite fuel cladding for light water reactors. The Committee remains concerned that funding for the industry-led portions of the Accident Tolerant Fuels program is not being obligated by the Department in a timely manner. The Department is reminded reallocation or reprograming of funds require the Committee's approval. The Department is directed to align its contracts with the three industry-lead teams with the funding provided by the Committee. Finally, the Department is directed to provide the Committee with a table summarizing the allocation of fiscal year 2023 funds no later than 30 days after the enactment of this act.

TRISO Fuel and Graphite Qualification.—Within the funds recommended Tristructural Isotropic fuels, $10,000,000 is to continue the transition of TRISO fuel to a multiple-producer market, ensuring that more than one industry source would be available to the commercial and government markets.

Integrated Waste Management System.—The Department is directed to move forward under existing authority to identify a site for a Federal interim storage facility. The Department is further directed to use a consent-based approach when undertaking these activities. The Department is reminded that the Nuclear Waste Policy Act provides for a wide variety of activities that may take place prior to the limitation in that act.

REACTOR CONCEPTS RESEARCH, DEVELOPMENT, AND DEMONSTRATION

Advanced Small Modular Reactor Research, Development, and Demonstration.—The Committee is concerned with changing budgets and re-financing of currently funded small modular reactor designs. The Department is directed to provide to the Committee a briefing and regular updates prior to any proposed contractual and

engineering design changes for currently funded advanced reactor projects. The Committee recommends $138,000,000 for work to support regulatory development, design, and demonstration activities. Within these funds, $108,000,000 is for competitively-awarded demonstrations of small modular reactors with not less than two awardees. The Department is encouraged to move expeditiously on a solicitation of this award.

Advanced Reactor Technologies.—The Committee recommends not less than $5,000,000 for continued work on the Supercritical Transformational Electric Power Research and Development. The Committee supports the collaboration between the National laboratories and industry partners to develop and validate sCO_2 power conversion specifically for modular micronuclear reactors by spring of 2023. This work will continue to be coordinated with the Office of Fossil Energy and Carbon Management.

The Committee recommends $25,000,000 for MW-scale reactor research and development, including up to $15,000,000 for MARVEL. The Department is encouraged to move expeditiously on the solicitation and award of these funds and to streamline its procurement process to ensure implementation is not delayed.

Advanced Reactor Concepts Industry Awards.—The Advanced Reactor Concepts [ARC] program provided a platform to support innovative advanced reactor designs early in the research phase. With the award of funds by the Department for its comprehensive Advanced Reactor Demonstration program, it's unclear how the ARC program fits into the Departments long term goals. Therefore, no funds are provided for awards under ARC.

Light Water Reactor Sustainability.—The most cost-effective way for the United States to maintain low-cost, carbon-free electricity is to safely extend the lives of our Nation's existing nuclear reactors from 60 to 80 years. The Committee encourages the Department to maximize benefits of the operating light water reactor fleet under the program.

ADVANCED REACTOR DEMONSTRATION PROGRAM

The primary goal of this program is to focus government and industry resources on actual construction of real demonstration reactors that are safe and affordable (to build and operate) in the near and mid-term. This program will help facilitate the accelerated deployment of advanced reactors. The Department is directed to continue to focus resources on partners capable of project delivery in the next four to 6 years and is directed to continue to ensure the program moves forward expeditiously. Further the Committee encourages the Department to consider including the Milestone-Based Demonstration Projects approach as authorized in section 9005 of the Energy Act of 2020 for existing Advanced Reactor Demonstration Projects [ARDP] awards. Finally, the Department is directed to clearly articulate future funding needs for the programs within the ARDP in future budget requests.

National Reactor Innovation Center.—The recommendation supports capital design and construction activities for demonstration reactor test bed preparation at Idaho National Laboratory supporting advanced reactor demonstration activities. The Department is directed to provide to the Committee not later than 90 days after

enactment of this act a briefing on the support and proposed activities, timelines for these activities, and expected out year costs of the National Reactor Innovation Center.

Construction.—Funds above the request are provided to complete preliminary design and initiate construction for the Safeguards Category 1 advanced reactor testbed at the Idaho National Laboratory.

INFRASTRUCTURE

INL Facilities Operations and Maintenance.—The recommendation provides $326,924,000 for INL Facilities Operations and Maintenance.

ORNL Facilities Operations and Maintenance.—The Committee recommends $20,000,000 for the continued safe operations and maintenance of ORNL hot cells.

Idaho Sitewide Safeguard and Security.—The recommendation provides $156,600,000 for Idaho Sitewide Safeguards and Security.

FOSSIL ENERGY AND CARBON MANAGEMENT

Appropriations, 2022	$825,000,000
Budget estimate, 2023	893,160,000
Committee recommendation	880,000,000

The Committee recommends $880,000,000 for Fossil Energy Research and Development. Within available funds, the Committee recommends $70,000,000 for program direction.

Additional direction related to Department-wide crosscutting initiatives is provided under the heading Crosscutting Initiatives in the front matter of the Department of Energy.

The Committee continues to support the budget request, which refocuses funding toward industrial emission reduction and climate-centric activities focused on decarbonization. The Department is encouraged to prioritize Carbon Capture Utilization and Storage [CCUS] funding on projects and research that look to reduce the cost of these technologies for commercial deployment.

National Carbon Capture Center.—The Committee recommends funding for the Department's National Carbon Capture Center consistent with the cooperative agreement. The Department is directed to use funds within CCUS and Power Systems for research and development across a broad range of technology and fuel applications as it determines to be merited.

The Committee recognizes the value in the production of carbon-neutral chemicals in decarbonizing the industrial sector. Therefore, the Committee recommends $10,000,000 for a laboratory demonstration project for carbon-neutral methanol synthesis from direct air capture and carbon-free hydrogen production.

Solid Oxide Fuel Cell Systems & Hydrogen.—The recommendation provides not less than $110,000,000 for the research, development, and demonstration of solid oxide fuel cell systems and hydrogen production, transportation, storage, and use. Further, the Committee encourages studies to assess solutions to decrease potential NOx emissions from the direct combustion of hydrogen in natural gas fired power plants. These studies shall be conducted through both laboratory and in-field testing, in geographically diverse areas, and should include participation by electric power research

organizations, universities, national labs, environmental organizations, and utilities. The Committee recognizes the importance of advancing solid oxide fuel cell systems, especially for distributed and central power generation electrolysis, combined heat and power, and storage applications.

University Training and Research.—The Committee supports the Department's efforts to offer undergraduate, graduate, and postgraduate students majoring in STEM disciplines the opportunity to learn about programs, policies, and research, development, demonstration, and deployment initiatives within the Office of Fossil Energy and Carbon Management. Further, the Committee supports the budget request increase and new control point for the University Training and Research [UTR], which comprises funding for University Coal Research [UCR], Historically Black Colleges and Universities [HBCUs] and other Minority Serving Institutions.

Ethane Study.—The Committee directs the Department to provide a status update and expected timeline for release on their congressionally requested report on ethane production and consumption trends no later than 30 days after the enactment of this act.

Interagency Working Group on Coal and Power Plant Communities.—The Committee supports the Administration's efforts to assist coal communities through their Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization which is led by the Department. Within available funds, $3,000,000 is recommended for these efforts.

The Committee supports the continuation of the Energy Department's Cooperative Agreements to develop cost sharing partnerships to conduct basic, fundamental, and applied research that assist industry in developing, deploying, and commercializing efficient, low-carbon, nonpolluting energy technologies that could compete effectively in meeting requirements for clean fuels, chemical feedstocks, electricity, and water resources.

CARBON MANAGEMENT TECHNOLGIES

CCUS is a process that captures carbon dioxide emissions from sources and either reuses or stores it so it will not enter the atmosphere. The potential for these technologies is considerable, and the use of these technologies will decrease the costs for mitigating climate change in addition to deploying clean energy and energy efficient technologies.

The Department is directed to conduct CCUS activities, including front-end engineering and design studies, large pilot projects, and demonstration projects that capture and securely store commercial volumes of carbon dioxide from fossil energy power plants, industrial facilities, or directly from the air consistent with the objectives of title IV of the Energy Act of 2020.

In order to mitigate the detrimental effects of climate change and to meet net-zero goals, it is necessary to accelerate the use of methods for carbon removal and storage, including the use and management of natural systems to sequester carbon and to store it permanently underground via mineralization processes. The Department is directed to establish a program to support research and development of novel, proof-of-principle carbon containment projects with the goal of finding and de-risking methods and locations to remove

atmospheric carbon dioxide that are effective, safe, low cost, and scalable. The recommendation provides up to $50,000,000 to support work at multiple sites to pursue research, development, and deployment of carbon containment technologies and proximate carbon dioxide capturing systems that also meet regional economic and ecological restoration policy goals such as catastrophic wildfire mitigation and job creation.

Carbon Capture.—The recommendation provides $135,000,000 for carbon capture. Within available funds, the committee recommends up to $90,000,000 to support front-end engineering and design studies, large pilot projects, and demonstration projects.

Carbon Dioxide Removal.—Within available funds the Committee provides up to $15,000,000 for research, development, and demonstration activities related to the indirect sequestration of carbon dioxide in ocean waters.

Carbon Utilization.—The Committee encourages research and development activities in the Carbon Utilization Program to support valuable and innovative uses of captured carbon, including biological utilization by the conversion of carbon dioxide to high-value products such as chemicals, plastics, building materials, curing for cement, and the integration of carbon utilization technologies with fossil fuel power plants, such as biological conversion systems. Within available funds for Carbon Utilization, not less than $8,000,000, is for a competitive solicitation to conduct tests of technologies for CO_2 absorption integrated with algae systems for capturing and reusing CO_2 to produce useful fuels and chemicals, giving priority for teams with university participants.

Carbon Transport and Storage.—The recommendation provides not less than $40,000,000 for CarbonSAFE.

The Committee acknowledges the importance of identifying ocean-based geological formations suitable for commercial-scale carbon capture operations. Within the amounts provided for Carbon Storage, the Department is encouraged to support surveys and site characterization of promising ocean-based geologic formations, and to partner with non-Federal entities with the technological capabilities to accelerate and improve this process.

The recommendation includes not less than $5,000,000 for integrated energy systems. The Committee directs the Department to continue efforts to support natural gas demand response pilot programs.

Hydrogen and Carbon Management.—The agreement provides not less than $20,000,000 for materials research and development. The Department is directed to support the development of ceramic matrix composite [CMC] materials in accordance with the CMC Manufacturing Roadmap and section 4005 of the Energy Act of 2020.

The Committee is encouraged by ongoing research and development activities by the Department related to hydrogen-fueled rotating detonation combustion. Power generation systems utilizing this technology offer a credible energy solution for zero-carbon electric grid. The Department is encouraged to support a full-scope demonstrator program for this device.

The Committee encourages the Department to continue expanding its research and demonstration capabilities toward production,

storage, transport and utilization of hydrogen. This work shall focus on net-negative carbon hydrogen production from modular gasification and co-gasification of mixed wastes, biomass, and traditional feedstocks, solid oxide electrolysis cell technology development, carbon capture, advanced turbines, natural gas-based hydrogen production, hydrogen pipeline infrastructure and, subsurface hydrogen storage.

Within available funding, the Committee recommends $1,500,000 to accelerate development and deployment of wireless sensor systems for coal-fired power generation in order to improve generative efficiency, reduce emissions, and lower maintenance costs.

The Committee encourages continued work on coal and coal biomass to both liquids and solids activities and encourages the Department to focus on research and development to improve cost and efficiency of coal-to-fuels technology implementation and polygeneration.

Supercritical Transformational Electric Power [STEP] Generation.—The Committee supports competitively awarded research and development activities, coordinated with the Offices of Nuclear Energy and Energy Efficiency and Renewable Energy, to advance the use of supercritical power cycles.

RESOURCE TECHNOLOGIES AND SUSTINABILITY

Advanced Remediation Technologies.—The Committee supports university research and field investigations in the Gulf of Mexico to confirm the nature, regional context, and hydrocarbon system behavior of gas hydrate deposits and recommends up to $10,000,000 for these activities.

The Committee recommends $10,000,000 for further research on multipronged approaches for characterizing the constituents of and managing the cleaning of water produced during the extraction of oil and natural gas, of which $8,000,000 is available to partner with research universities engaged in the study of characterizing, cleaning, treating, and managing produced water and who are willing to engage though public private partnerships with the energy industry to develop and assess commercially viable technology to achieve the same. The Committee encourages the Department to work with industry to identify and develop-to a commercial scale-technologies that can characterize, clean and effectively treat produced water to have beneficial reuse.

The Committee supports the continued funding of the Risk Based Data Management System, and in particular, it's functions under FracFocus. The Committee also believes FracFocus should maintain its autonomy and not be incorporated into any Federal agency.

The Department is encouraged to support continued research and technology development to develop natural resources in the most environmentally prudent way possible. The Department is encouraged to support innovative testing and deployment through the Department's Field Test Sites comprehensive field experiments that improve the environmental impact of recovery, collect critical data and insights on geology, and provide operational efficiency.

Methane Mitigation Technologies.—The recommendation provides $60,000,000 for Methane Mitigation Technologies, which includes activities previously funded through Emissions Mitigation from

Midstream Infrastructure and Emissions Quantification from Natural Gas Infrastructure. The Committee supports advanced methane mitigation solutions and novel sensor technologies that allow for continuous and remote monitoring of emissions for upstream, midstream and distribution gas infrastructure. Further, the Committee remains supportive of investment in smart pipeline sensors and controls, internal pipeline inspection and repair, and composite and advanced material science technologies.

The Department is encouraged to collaborate with external stakeholders in making use of commercial assets to monitor methane emissions from satellites and other methane emissions detection technologies to isolate the source of emissions at the individual facility level and to explore technologies, including in coordination with public-private partnerships, that promote innovative approaches, such as detection technologies in support of reducing methane gas emissions. The recommendation provides up to $5,000,000 for advanced observational technologies, as validated in peer-reviewed publications, to globally identify and mitigate methane and volatile organic compound emissions from existing operations assisting worldwide partners and governments deploy targeted reduction measures. Further, the Department is directed brief the Committee within 180 days of enactment of this act on the progress for this work.

Natural Gas Decarbonization and Hydrogen Technologies.—Within available funds, the Committee recommends up to $10,000,000 for a demonstration project focused on producing hydrogen from the processing of produced water and mineral substances, and transporting hydrogen using existing energy infrastructure.

Within available funds, up to $10,000,000 is recommended for research to develop hydrogen transportation and storage infrastructure, including the safety, mechanical integrity and regulatory impacts of blending hydrogen into existing natural gas pipelines. Comprehensive planning approaches for transitioning segments of natural gas users to increased hydrogen use should be part of the program, including analysis of the infrastructure required to transport hydrogen.

The Committee supports the Department's efforts to utilize natural gas and related infrastructure more effectively for decarbonization solutions, including research to convert natural gas, natural gas liquids and other gas streams to low-carbon, sustainable products, including chemicals and fuels, such as ammonia and hydrogen. Further, the Committee supports comprehensive planning approaches for transitioning segments of the economy using hydrogen and other low-carbon fuels. This planning should include both production, storage, and transportation of these fuels. The Department is encouraged to establish the Center for Sustainable Fuels and Chemicals at the National Energy Technology Lab.

Mineral Sustainability.—The Mineral Sustainability subprogram will support domestic supply chain networks required for the economically, environmentally, and geopolitical sustainable production of critical minerals. The Committee believes that finding near-term and future domestic sources is a top national security priority. The Department is directed to submit to the Committee within 180 days of enactment of this act an assessment of the vulnerabilities

to the U.S. energy system from foreign reliance for critical and strategic minerals and the actions the Department is taking to bolster domestic mineral production.

The Committee is aware of the Departments efforts to expand the capabilities of the United States in advanced battery manufacturing, including for long-duration grid-scale energy storage and electric vehicles. As the Department continues its efforts to scale up a domestic advanced battery supply chain, including battery manufacturing demonstration projects, the Committee encourages the Department to seek a broad spectrum of battery chemistries not wholly exclusive to lithium-ion based battery technology.

Within available funding, up to $5,000,000 is recommended for university-led consortium for research and development of biofilm-based barrier technologies to reduce methane emissions from orphan wells.

Within available funds, the Committee recommends the Department to continue its external agency activities to develop and test advanced separation technologies and accelerate the advancement of commercially viable technologies for the recovery of rare earth elements and minerals from byproduct sources. The Committee expects research to support pilot-scale and experimental activities for near-term applications, which encompass the extraction and recovery of rare earth elements and minerals. The Committee encourages the Department to continue investments to accelerate the advancement of commercially viable technologies for the recovery of rare earth elements and critical minerals, including from lignite. Further, the Committee encourages the Department to fund a more detailed assessment of lignite resources and to devise cost-effective methods of removing rare earths from lignite.

The Department is directed to continue the Carbon Ore, Rare Earths, and Critical Minerals [CORE–CM] Program.

Within available funds, the Committee recommends up to $6,000,000 for the second year of three for the Department in collaboration with the Department of Commerce and U.S. Geological Survey to pilot a research and development project to enhance the security and stability of the rare earth element supply chain. Research should include approaches to mining of domestic rare earth elements that are critical to U.S. technology development and manufacturing, as well as emphasize environmentally responsible mining practices. The department is encouraged to partner with universities in these efforts.

Carbon Fiber Technology Facility.—Within available funding, the Committee recommends not less than $5,000,000 for utilizing coal as a precursor for high-value added products at the Carbon Fiber Technology Facility.

NATIONAL ENERGY TECHNOLOGY LABORATORY

No funds may be used to plan, develop, implement, or pursue the consolidation or closure of any NETL sites.

The Committee recommends $87,000,000 for NETL Research and Operations and not less than $55,000,000 for NETL Infrastructure. Further, within NETL Infrastructure, the Department is directed to prioritize funds for Joule, the Computational Science and Engineering Center, the Center for Artificial Intelligence and Machine

Learning, site-wide upgrades for safety, and addressing and avoiding deferred maintenance.

The Committee supports the Human Resources Shared Service Center.

ENERGY PROJECTS

Appropriations, 2022	.....
Budget estimate, 2023	.....
Committee recommendation	$109,767,000

The Energy Projects account is included to provide for Congressionally Directed Spending at the Department. The recommendation provides $109,767,000 for the following list of projects.

The Committee reminds recipients that statutory cost sharing requirements may apply to these projects.

The Department may use program direction funds, as necessary, from the appropriate program offices to implement these projects.

CONGRESSIONALLY DIRECTED SPENDING OF ENERGY PROJECTS

[In thousands of dollars]

Project Name	Committee recommendation
Clean Heat Homes, VT	8,500
Patrick Leahy, VT	1,600
Resilient Power for Community Health Centers, VT	500
Brandon Senior Citizens Center Solar Project, VT	7
Solar Energy Demonstration Project for Public Libraries, VT	57
MultiCare Mary Bridge Hospital Electrical Infrastructure, WA	5,500
Solar Array for Higher Education, WA	1,100
California State Maritime Academy Academic Microgrid, CA	1,000
Marin Clean Energy Storage Program, CA	500
Mecca and North Shore Energy Infrastructure Resiliency Project, CA	500
City of Santa Clara—Fire Station Microgrid Project, CA	500
South Coast Air Quality Management District: Zero Emission Fuel Cell Locomotive, CA	500
Edward Fenn Elementary School Solar Project, NH	100
Ground Mount Solar, NH	67
Historic Colonial Theatre Clean Energy Solar Array, NH	51
Opportunity of Hope for Mental Health Solar Array, NH	397
YMCA of Greater Nashua Solar Panel Installation, NH	459
Roof-Top Solar Array Gorham Public Works Garage, NH	89
Solar Energy and Affordable Housing in Barrington and Keene, NH	750
Rindge Recreation Light Replacement, NH	138
Bluefield Battery Prototyping Laboratory—Phase 1, WV	328
Hardwood Cross Laminated Timbers for Energy Efficient Modular Homes, WV	1,200
Solar at Capitol Market, WV	713
Town of Wardensville Photovoltaic Solar Field, WV	375
West Virginia Regional Technology Park Energy Efficiency and Decarbonization Project, WV	328
New Mexico State University Agrivoltaics Research Program, NM	844
Albuquerque Public Housing Electrification, NM	1,700
Electrifying Homes in Low-Income Areas of Sante Fe, NM	250
Testbed for Clean Energy and Grid Modernization, NM	1,600
Medford Irrigation District Community Solar, OR	1,120
Forging Oregon's Renewable Energy Source Transition Through Reimagining Education + Energy (FOREST TREE), OR	2,000
City of Kenosha Solar Panels, WI	3,000
City of Madison Truax Apartment Solar Project, WI	1,500
City of Racine Storage Garage Site, WI	1,235
Chicago Libraries Solar Power Project, IL	1,000
Quincy Solar Farm Project, IL	1,400
Solar Panels at Childcare Center, CT	165
Town of Hamden Administrative Building Energy Efficiency Improvements, CT	600
Stamford LED Streetlighting Project, CT	2,000
Net-Zero Emissions at Public Schools in Manchester, CT	1,900

CONGRESSIONALLY DIRECTED SPENDING OF ENERGY PROJECTS—Continued

[In thousands of dollars]

Project Name	Committee recommendation
Emergency Shelter Improvements in Madison, CT	1,000
Energy Improvements for Rhode Island Public Buildings, RI	5,000
Energy Efficient Upgrades, RI	750
Energy Efficient Retrofits, RI	250
Town Hall—Energy Efficiency Upgrades, RI	125
Ho'ahu Energy Cooperative Molokai's community-based renewable energy, HI	3,000
YWCA Kauai solar-plus-storage resilience project, HI	110
Solar Panel Installation at Goucher College, MD	750
Low Income Housing Electrification and Indoor Air Quality Improvements, MD	1,000
Lincoln County Power District—Solar, NV	1,750
University of Nevada, Reno—Lithium Characterization Analysis, NV	1,600
Caliente—Advanced Metering Infrastructure, NV	148
Clark County—Energy Efficiency, NV	1,000
Accelerating Hydrogen Research in NY to Support Deployment of Clean Energy and Clean Industry, NY	250
Tompkins County EV ARC, NY	128
Memorial Pool Energy Efficiency Retrofit, NY	700
Energy Assessments for Low Income Neighborhoods and Disadvantaged Communities, NY	1,500
Town of DeWitt Hydrogen Fueling Station, NY	280
Enhancing the Royal Oak Farmers Market as a Community Resiliency Hub, MI	411
Northwestern Michigan College Campus Geothermal Project, MI	2,700
BioGas Turbine Driven Blower, MI	1,000
Euclid Microgrid, OH	1,500
University of Akron Research Foundation Managed Sustainable Electric Powered System for Summit County Multi-Unit Affordable Sustainable Housing, OH	1,125
Solar Panel Installation at Department of Public Works Canopy, NJ	250
Lower Willow Creek Micro-Hydro Electric Generation Project, CO	425
El Paso County LED Retrofit Energy Efficiency Project, CO	445
Clean Energy for Facilities Project, CO	800
Pinewood Springs Energy Resiliency Microgrid, CO	425
Denver and Arapahoe Disposal Site Renewable Natural Gas, CO	150
Georgia Hydrogen Testing Consortium, GA	2,500
Decatur Police Department Energy Improvement Project, GA	500
Combined Heat and Power System for One North Commercialization Hub, ME	2,500
Electric Vehicle Automotive Certification Expansion, ME	750
Central Maine Community College—Renewable Energy Project, ME	500
District Energy Solar and Geothermal Improvements in Rochester, MN	2,000
St. Louis Park Electrify Community Cohort Grant Program, MN	1,000
Cybersecurity Center for Offshore Wind energy, VA	1,000
SmartFlower Solar Installation and Renewable Energy Programming, VA	15
Energy DELTA Lab—Project Oasis, VA	1,500
Luzerne County Transportation Authority Solar Panel Installation, PA	625
Cybersecurity Consortium for Innovation, University of Arkansas Little Rock, AR	5,000
Cyber-PERTT Technology, LA	1,000
Hydrogen Infused Active Energy Emission Technology, LA	1,100
Brewer Recreational Facility Energy Modernization Project, ME	232
University of Tulsa Produced Water Treatment using Compact Separator System, OK	1,500
University of Tulsa Utilization of Existing Pipelines in Hydrogen Transport, OK	1,250
University of Tulsa CO2 Transportation and Storage, OK	1,250
Electric Power Testbed to Secure the U.S. Power Grid against Cyber Attacks, OK	1,500
Alaska Liquid Natural Gas Pipeline Front-End Engineering and Design (FEED), AK	4,000
Unalaska Aging Infrastructure Replacement, AK	2,500
Hydrokinetic Power System, AK	1,250
Ambler Tank Farm, AK	650
Marine Energy Feasibility Study for Remote Alaskan Villages, AK	1,500

Naval Petroleum and Oil Shale Reserves

Appropriations, 2022	$13,650,000
Budget estimate, 2023	13,004,000
Committee recommendation	13,004,000

The Committee recommends $13,004,000 for Naval Petroleum and Oil Shale Reserves.

STRATEGIC PETROLEUM RESERVE

Appropriations, 2022	$219,000,000
Budget estimate, 2023	214,175,000
Committee recommendation	52,460,000

The Committee recommends $192,460,000 for the Strategic Petroleum Reserve and proposes sale of the Northeast Gasoline Supply Reserve. After accounting for proceeds from the sale of the Northeast Gasoline Supply Reserve, the recommendation provides a net appropriation of $52,460,000.

SPR PETROLEUM ACCOUNT

Appropriations, 2022	$7,350,000
Budget estimate, 2023	8,000,000
Committee recommendation	8,000,000

The Committee recommends $8,000,000 for the SPR Petroleum Account.

NORTHEAST HOME HEATING OIL RESERVE

Appropriations, 2022	$6,500,000
Budget estimate, 2023	7,000,000
Committee recommendation	7,000,000

The Committee recommends $7,000,000 for the Northeast Home Heating Oil Reserve.

ENERGY INFORMATION ADMINISTRATION

Appropriations, 2022	$129,087,000
Budget estimate, 2023	144,480,000
Committee recommendation	144,000,000

The Committee recommends $144,000,000 for the Energy Information Administration.

The Committee recommends up to $3,000,000 to the Energy Information Administration to conduct a monthly survey of electric and heating service providers of final termination notices sent due to bill non-payment, service disconnections due to bill non-payment, and Service reconnections of customers disconnected for bill non-payment, in a form and manner determined by the agency.

NON-DEFENSE ENVIRONMENTAL CLEANUP

Appropriations, 2022	$333,863,000
Budget estimate, 2023	323,249,000
Committee recommendation	373,583,000

The Committee recommends $373,583,000 for Non-Defense Environmental Cleanup.

Gaseous Diffusion Plants.—The Committee recommends $138,438,000 for cleanup activities at the Gaseous Diffusion Plants. An additional $15,000,000 is recommended for infrastructure improvements required for the shipping and disposal of oxide cylinders, as well as advance the near term shipment of cylinders and

may be used to demonstrate multicar oxide rail shipment at Paducah.

Small Sites.—The Committee recommends $139,963,000 for Small Sites. Within available funds, the Committee recommends $26,409,000 for the Energy Technology Engineering Center, $11,220,000,000 for Idaho National Laboratory, $67,000,000 for Moab, $15,000,000 to continue work at Lawrence Berkeley National Laboratory, and $20,000,000 for excess Office of Science facilities.

URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND

Appropriations, 2022	$860,000,000
Budget estimate, 2023	822,421,000
Committee recommendation	869,000,000

The Committee recommends $869,000,000 for activities funded from the Uranium Enrichment Decontamination and Decommissioning Fund.

Of this funding, $240,000,000 is recommended for the Paducah site, of which $2,000,000 is directed for a reindustrialization study. The additional funding recommendation includes funds above the budget request to support stable funding for cleanup activities at the Paducah site. The Committee encourages the Department of Energy to utilize the additional funds to advance deactivation work on the C–333 Process Building, one of the four large process buildings at the site. The Committee is encouraged by the workforce development partnership with labor unions to train workers in the fields of radiation protection and the Resource Conservation and Recovery Act to build up the next generation of field workers. The Committee encourages the Department to continue prioritizing partnerships by utilizing local community colleges and universities to train local citizens to advance the deactivation of C–333.

SCIENCE

Appropriations, 2022	$7,475,000,000
Budget estimate, 2023	7,799,211,000
Committee recommendation	8,100,000,000

The Committee recommends $8,100,000,000 for Science. The recommendation includes $211,211,000 for program direction.

Additional direction related to Department-wide crosscutting initiatives is provided under the heading Crosscutting Initiatives in front matter for the Department of Energy.

Quantum Information Science.—The Committee directs the Office of Science to continue its ongoing efforts to advance quantum information science. The recommendation provides not less than $255,000,000 for quantum information science, including not less than $120,000,000 for research and $125,000,000 for the five National Quantum Information Science Research Centers. The Department is encouraged to continue its coordination efforts with National Science Foundation, other Federal agencies, private sector stakeholders, and the user community to promote researcher access to quantum systems, enhance the U.S. quantum research enterprise, develop the U.S. quantum computing industry, and educate

the future quantum computing workforce. Further, the Department is directed to provide to the Committee not later than 90 days after enactment of this act a report of near-term application developments and of the research funding breakdown across the five National Quantum Information Science Research Centers.

Artificial Intelligence and Machine Learning.—The Committee recommends not less than $135,000,000 for Artificial Intelligence and Machine Learning across the Office of Science Programs. As the stewards of the leadership computing facilities, the Committee expects Advanced Scientific Computing Research to take a lead role in the Department's artificial intelligence and machine learning activities. The Committee appreciates the Department's focus on the development of foundational artificial intelligence and machine learning capabilities, and encourages the Office of Science to apply those capabilities to the Office of Science's mission with a focus on accelerating scientific discovery in its Scientific User Facilities and large experiments.

HBCU/MSI Engagement.—The Committee supports the Reaching a New Energy Sciences Workforce [RENEW] and the Funding for Accelerated, Inclusive Research [FAIR] initiatives to increase participation and retention of underrepresented groups in the Office of Science's research activities. The Committee encourages the Department to continue funding to support research and development needs of graduate and post-graduate science programs at Historically Black Colleges and Universities and minority serving institutions. The Department is directed to provide to the Committee not later than 90 days after enactment of this act and yearly thereafter briefings on implementation of these programs.

Established Program to Stimulate Competitive Research.—The Committee continues to support the Established Program to Stimulate Competitive Research [EPSCoR] program and its goals of broadening participation in sustainable and competitive basic energy research in eligible jurisdictions. The Committee recommends $35,000,000 for EPSCoR. The Department is directed to continue annual or at minimum, biennial implementation grant solicitations. Further, the Committee recommends that EPSCoR be implemented and funded across all the Department of Science Programs.

Facility Operations.—The Committee is disappointed with the Department's lack of support for robust user facility operations in the budget request. The operation of large-scale scientific user facilities is integral to the mission of the Office of Science. The Department maintains and operates 28 user facilities across the country as shared resources for the scientific community. Nearly 34,000 researchers make use of these facilities each year. The Committee believes that supporting these vital user facilities should be a top priority for the Department to advance scientific discovery. The Department is directed to prioritize the stewardship of the user facilities in future budget requests.

Microelectronics.—Support for innovation in the semiconductor manufacturing industry is critical to building a reliable domestic supply chain, continuing global scientific leadership, and protecting the National security and economic interests of the United States. To further these goals and to advance the underpinning material, surface, and plasma science, the Department is encouraged to sup-

port microelectronics research and microelectronics science research centers.

Energy Earthshots.—The Department's Energy Earthshots initiative looks to accelerate breakthroughs of affordable and reliable clean energy solutions, to reduce emissions. The Committee recommends up to $100,000,000 for Energy Earthshots, including up to $50,000,000 from Basic Energy Sciences, up to $25,000,000 from Advanced Scientific Computing Research, and up to $25,000,000 from Biological and Environmental Research.

ADVANCED SCIENTIFIC COMPUTING RESEARCH

The Committee recommends $1,077,000,000 for Advanced Scientific Computing Research [ASCR].

The Committee strongly supports ASCR's leadership in emerging areas relevant to the Department's mission, including artificial intelligence and quantum information science. The Committee commends ASCR's pursuit of machine learning tools for scientific applications and its support for the development of algorithms for future deployable quantum computers.

High Performance Computing and Network Facilities.—The Committee recommends $263,000,000 for the Oak Ridge Leadership Computing Facility, $178,000,000 for the Argonne Leadership Computing Facility, $130,000,000 for the National Energy Research Scientific Computing Center, and $91,000,000 for ESnet.

Mathematical, Computational, and Computer Sciences Research.—Maintaining international leadership in high performance computing requires a long term and sustained commitment to basic research in computing and computational sciences, including applied math, software development, networking science, and computing competency among scientific fields. The Committee recommends not less than $280,000,000 for Mathematical, Computational, and Computer Sciences Research. Further, the Committee supports the computational sciences workforce programs and recommends not less than $20,000,000 for the Computational Sciences Graduate Fellowship.

The Committee supports the Center for Advanced Mathematics for Energy Research Applications [CAMERA] and encourages the Department to support the creation of a cross-cutting research program that leverages applied math, computer science and computational science to deliver AI research, development, and deployment to increase the scientific productivity of the user facilities.

The Department is encouraged to explore the viability of photonic quantum computing, in coordination with other Federal agencies. The Department is encouraged to consider mechanisms to provide access to ion trap quantum computing resources, particularly with the ability to integrate with existing high-performance computing resources.

BASIC ENERGY SCIENCES

The Committee recommends $2,540,439,000 for Basic Energy Sciences [BES].

The Committee recommends not less than $566,000,000 to provide for operations at the five BES light sources and $311,000,000 for the high-flux neutron sources. The Committee recommends not

less than $149,000,000 for operations at the five BES Nanoscale Science Research Centers and to adequately invest in the recapitalization of key instruments and infrastructure, and in staff and other resources necessary to deliver critical scientific capabilities to users.

The Committee recommends $25,000,000 for the Batteries and Energy Storage Hub, the Joint Center for Energy Storage Research, and $20,000,000 for the Fuels from Sunlight Hub.

The recommendation provides not less than $130,000,000 for Energy Frontier Research Centers to continue multi-disciplinary, fundamental research needed to address scientific grand challenges.

Within available funding, the Committee recommends $1,000,000 to establish a center, with coordination between the National laboratories and universities, focused on computational research for precision design of materials. The Committee recommends that this research be focused on developing computational research relevant to the Materials Genome Initiative, the National Quantum Initiative and Computational Materials Science in order to discover and understand advanced materials with unique properties that are able to develop new quantum device capabilities, such as enhanced resolution in imaging, sensors, and detectors, as well as significantly larger computational capabilities.

The recommendation provides not less than $17,500,000 for other project costs, including $5,000,000 for Advanced Photon Source Upgrade, $4,000,000 for Linac Coherent Light Source-II-HE, $5,000,000 for the Second Target Station, $2,000,000 for HFIR Pressure Vessel Replacement, and $1,500,000 NSLS II Experimental Tools III. Further, the Committee is encouraged that the Department is moving forward with construction of additional beamlines so the Nation's scientists can more fully leverage the investment that has been made in the NSLS II while it is the most powerful X-Ray light source in the Nation.

The Committee recommends not less than $25,000,000 for the NSLS II Experimental Tools II. The recommendation includes $25,000,000 for NSRC Recapitalization.

BIOLOGICAL AND ENVIRONMENTAL RESEARCH

The Committee recommends $913,685,000 for Biological and Environmental Research. The recommendation includes not less than $406,450,000 for Biological Systems Science and not less than $421,500,000 for Earth and Environmental Systems Sciences.

The Committee recommends no less than $120,000,000 for the four Bioenergy Research Centers to accelerate R&D needed for advanced fuels and products.

The Committee directs the Department to maintain Genomic Science as a top priority and recommends not less than $109,000,000 for Foundational Genomics Research. Further, the Committee recommends not less than $45,000,000 for Biomolecular Characterization and Imaging Science. The Committee recommends $90,000,000 for the Joint Genome Institute, an essential component for genomic research. The Committee supports national microbiome database collaborative.

The Committee recommends the development and prototyping of fabricated ecosystem testbeds, sensing systems and data capabili-

ties to enable interrogation of biological-environmental interactions across molecular to ecosystem-relevant scales-under controlled laboratory conditions and through remote connections to field observatories.

The Committee recommends the Department provide $2,000,000 in funding for academia to perform independent evaluations of climate models using existing data sets and peer-reviewed publications of climate-scale processes to determine various models' ability to reproduce the actual climate.

The Committee recommends not less than $120,000,000 for Environmental System Science.

The Committee directs the Department to continue to support the Environmental System Science Science Focus Areas, and enabling infrastructure such as the SPRUCE manipulation site and management of the AmeriFLUX project.

The recommendation includes $30,000,000 to support proposed enhanced investments in field experiments and process modelling activities associated with the terrestrial-aquatic project located in the mid-Atlantic, Great Lakes, and Puget Sound. This effort shall continue to leverage national laboratories' assets as well as local infrastructure and expertise at universities and other research institutions. The fiscal year 2022 Act directed the Department to provide to the Committee a ten-year research plan. The Committee is still awaiting this plan, and the Department is directed to provide the plan to the Committee not later than 30 days after enactment of this act.

The Department is encouraged to support activates to develop integrated mountainous hydroclimate modeling and observational capabilities. The new effort should leverage activities supported by other Federal agencies active in investigating how snow-dominated Upper Colorado mountainous systems are responding to extreme events and gradual warming, and the implications for water resilience in the western U.S.

The recommendation provides not less than $34,000,000 to support investment in observational and modeling of cloud aerosols effects on climate. Further, the Department is directed is continue coordination with National Oceanic and Atmospheric Administration, Office of Science and Technology Policy [OSTP], and other relevant agencies to continue research to improve earth system modeling to improve prediction and climate risk management in the service of U.S. public safety, security, and economic interests. The Department is encouraged, in cooperation with other agencies as relevant, to implement a pilot program providing instrumentation for observing marine aerosols, greenhouse gases, and other environmental factors as relevant, deployed on commercial or other non-dedicated ocean vessels, and to evaluate a sustained observing network using such platforms. The Committee remains supportive of the Department's activities to support the previously-directed 5-year plan and accompanying scientific assessment led by the Office of Science and Technology Policy [OSTP] on solar and other climate interventions. Further, the Department is directed to continue to support OSTP, in coordination with other agencies as relevant, in an interagency effort to coordinate research in climate intervention.

The Department is directed to give priority to optimizing the operation of Biological and Environmental Research User Facilities. The recommendation provides not less than $65,000,000 for operation of the Environmental and Molecular Sciences Laboratory and supports continued investment in the microbial molecular phenotyping capability. The Committee supports the budget request for Earth and Environmental Systems Sciences Facilities and infrastructure, and supports the continued work for the Environmental Molecular Sciences Laboratory for planning a high throughput multiomics pipeline.

FUSION ENERGY SCIENCES

The Committee recommends $743,222,000 for Fusion Energy Sciences.

U.S. Contribution to the International Thermonuclear Experimental Reactor [ITER] Project.—The Committee recommends $240,000,000 for the U.S. contribution to the ITER Project, of which not less than $60,000,000 is for in-cash contributions.

The Committee recommends not less than $14,000,000 for the Material Plasma Exposure eXperiment.

The Committee recommends not less than $63,000,000 for NSTX–U Operations, and not less than $35,000,000 for NSTX–U Research.

The Committee recommends not less than $75,000,000 for DIII–D Operations, and not less than $60,000,000 for DIII–D Research. The Department is encouraged to support activities to enable completion of planned facility enhancements, revitalization of critical equipment, and critical new tools to address critical research needs and secure U.S. leadership in support of ITER and a potential future fusion pilot plant. The Department is encouraged to provide increased research operations and enable broader participation in the DIII–D program by university researchers and graduate students, to fully exploit the world leading capabilities developed at the facility. Further, the Department is encouraged to support training activities at DIII–D for the important next generation of fusion scientists.

The Committee recommends not less than $32,000,000 for the High-Energy-Density Laboratory Plasmas to advance cutting-edge research in extreme States of matter, support and expand the capabilities of the LaserNetUS facilities, and continue investments in new intense, ultrafast laser technologies and facilities needed to implement the recommendations of the Brightest Light Initiative Workshop Report in order to retain U.S. leadership in these fields. The Committee encourages Department to support the priority research directions in the Inertial Fusion Energy Basic Research Needs report and directs the Office of Basic Energy Sciences to coordinate with the Office of Fusion Energy Sciences to advance materials research and other science priorities to support inertial fusion energy.

The Committee recognizes that university-based fusion and plasma science programs are a core component of the fusion energy science program and achieving the goals of the Fusion Energy Sciences Advisory Committee's "Powering the Future: Fusion and Plasmas" report. In addition to conducting high-impact and cost-ef-

fective research and development, university fusion programs serve as the primary pipeline for the next generation of fusion and plasma science researchers in the United States. Further, small- to medium-scale experimental facilities located at universities help spur innovation and exploration of new techniques that will lead to a successful fusion pilot plant by 2040. The Committee encourages the Department to prioritize investments in university pipeline programs and small- to medium-scale experimental facilities at universities.

The Committee recognizes the need for the upgrade of experimental fusion facilities and new initiatives. The recommendation provides up to $5,000,000 to support research for facility enhancements and new development and test facilities for university-based fusion experiments.

HIGH ENERGY PHYSICS

The Committee recommends $1,168,000,000 for High Energy Physics.

Research.—The Committee recommends $30,000,000 for the Sanford Underground Research Facility; not less than $85,000,000 for the HL–LHC Upgrade projects;

The recommendation includes not less than $6,000,000 for the Cosmic Microwave Background-Stage 4.

The Committee encourages the Department to fund facility operations at levels for optimal operations. The Committee encourages the Department to fund facility operations and MIEs at optimal levels.

NUCLEAR PHYSICS

Research.—The Department is directed to give priority to optimizing operations for all Nuclear Physics user facilities, including Realistic Heavy Ion Collider, Continuous Electron Beam Accelerator, Facility for Rare Isotope Beams, and Argonne Tandem Linac Accelerator System.

The recommendation provides not less than $20,000,000 for other project costs for the Electron Ion Collider.

The Committee encourages up to $15,500,000 for the Gamma-Ray Energy Tracking Array; up to $14,000,000 for MOLLER; up to $1,400,000 for Ton-Scale Neutrino-less Double Beta Decay; and up to $15,000,000 for the High Rigidity Spectrometer.

ISOTOPE R&D AND PRODUCTION

Isotope R&D and Production ensures robust supply chains of critical radioactive and stable isotopes for the Nation that no domestic entity has the infrastructure or core competency to produce.

The committee recommends up to $4,000,000 for the Department of Energy's Isotope Research & Development and Production Program to increase their inventory of Sr-90 in light of the Nation's growing demand for Sr-90 for multiple applications.

ACCELERATOR R&D AND PRODUCTION

Accelerator R&D and Production supports cross-cutting research and development in accelerator science and technology, access to

unique Office of Science accelerator research and development infrastructure, workforce development, and public-private partnerships to advance new technologies for use in the Office of Science's scientific facilities and in commercial products.

WORKFORCE DEVELOPMENT FOR TEACHERS AND SCIENTISTS

Within available funds, the Committee recommends $15,000,000 for Science Undergraduate Laboratory Internships; $2,200,000 for Community College Internships; $5,000,000 for the Graduate Student Research Program; $2,100,000 for the Visiting Faculty Program; $10,000,000 for Workforce Training for Underrepresented Minorities; $1,200,000 for the Albert Einstein Distinguished Educator Fellowship; $3,000,000 for the National Science Bowl; $700,000 for Technology Development and Online Application; $600,000 for Evaluation Studies; and $1,500,000 for Outreach.

The Department is encouraged to continue to work with 2-year, community and technical colleges, labor, and nongovernmental and industry consortia to pursue job training programs, including programs focused on displaced fossil fuel workers, that lead to an industry-recognized credential in the energy workforce.

SCIENCE LABORATORIES INFRASTRUCTURE

The Science Laboratories Infrastructure program sustains mission-ready infrastructure and safe and environmentally responsible operations by providing the infrastructure improvements necessary to support leading edge research by the Department's national laboratories.

NUCLEAR WASTE DISPOSAL

Appropriations, 2022	$27,500,000
Budget estimate, 2023	10,205,000
Committee recommendation	10,205,000

The Committee recommends $10,205,000 for Nuclear Waste Disposal. Funds for the Nuclear Waste Fund [NWF] oversight activities are to be derived from the Nuclear Waste Fund.

The Department is directed to provide to the Committee not later than 90 days after enactment of this act a briefing on anticipated future-year requirements for NWF oversight activities.

TECHNOLOGY TRANSITIONS

Appropriations, 2022	$19,470,000
Budget estimate, 2023	21,558,000
Committee recommendation	21,558,000

The Committee recommends $21,558,000 for the Office of Technology Transitions [OTT]. The Department is directed to provide the Committees on Appropriations of both Houses of Congress not later than 180 days after enactment of this act a report outlining OTT's 5-year roadmap to achieving its goal of commercializing the Department's technology.

CLEAN ENERGY DEMONSTRATIONS

Appropriations, 2022	$20,000,000
Budget estimate, 2023	214,052,000
Committee recommendation	150,000,000

The Committee recommends $150,000,000 for the Office of Clean Energy Demonstrations [OCED]. Within available funds, the Committee recommends $25,000,000 for program direction.

OCED was established to accelerate the maturation of near- and mid-term clean energy technologies and systems with the goal of quicker commercial adoption and increased availability. The Committee is encouraged by OCED's preliminary plan to conduct administrative and project management responsibilities for technology demonstrations and is directed to continue to provide the Committee quarterly briefings on these efforts.

The Department is directed to conduct OCED activities on a competitive basis and include cost-share requirements pursuant to section 988 of the Energy Policy Act of 2005. The Department is encouraged to conduct these activities through technology neutral solicitations focused on crosscutting energy challenges, including focusing on highest emitting U.S. energy sectors. It is expected that the Department avoid the practice of making awards dependent on funding from future years' appropriations.

ADVANCED RESEARCH PROJECTS AGENCY–ENERGY

Appropriations, 2022	$450,000,000
Budget estimate, 2023	700,150,000
Committee recommendation	570,364,000

The Committee recommends $567,692,000 for the Advanced Research Projects Agency-Energy [ARPA–E]. Within available funds, the Committee recommends $44,000,000 for program direction.

The budget request proposes to expand ARPA–E's scope to focus on climate innovations, adaptation, and resilience. The Committee notes that ARPA–E already has the ability to fund this work through section 5012 of the America COMPETES Act. This includes climate-related innovations, and further, the Committee notes that ARPA–E already funds such activities.

The Department is encouraged to disburse funds appropriated for ARPA–E on eligible projects within a reasonable time period, consistent with past practices.

INNOVATIVE TECHNOLOGY LOAN GUARANTEE PROGRAM

ADMINISTRATIVE EXPENSES

GROSS APPROPRIATION

Appropriations, 2022	$32,000,000
Budget estimate, 2023	182,000,000
Committee recommendation	66,206,000

OFFSETTING COLLECTIONS

Appropriations, 2022	−$3,000,000
Budget estimate, 2023	−35,000,000
Committee recommendation	−35,000,000

NET APPROPRIATION

Appropriations, 2022	$29,000,000
Budget estimate, 2023	179,000,000
Committee recommendation	31,206,000

The Committee recommends $31,206,000 in administrative expenses for the Innovative Technology Loan Guarantee Program.

ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM

Appropriations, 2022	$5,000,000
Budget estimate, 2023	9,800,000
Committee recommendation	9,800,000

The Committee recommends $9,800,000 for the Advanced Technology Vehicles Manufacturing Loan Program.

TRIBAL ENERGY LOAN GUARANTEE PROGRAM

Appropriations, 2022	$2,000,000
Budget estimate, 2023	1,860,000
Committee recommendation	10,000,000

The Committee recommends $10,000,000 for the Tribal Energy Loan Guarantee Program.

Many American Indian and Alaska Native communities face extremely challenging energy realities and pay some of the Nation's highest prices for energy and electricity. Yet, Tribal lands are known to have significant potential for energy development. Congress recognized this challenge and authorized Tribal Energy Loan Guarantee Program [TELGP] in the Energy Policy Act of 2005 (Public Law 109–58). TELGP was authorized with $2,000,000,000 in partial loan guarantees in support of debt financing for Tribal energy development projects.

The Consolidated Appropriations Act of 2022 (Public Law 117–103) included language allowing the TELGP applicants to access direct loans from the Federal Financing Bank. The Department is encouraged to move swiftly in implementing these changes to ensure accessibility of TELGP loans. Further, the Department is encouraged to take formal steps to market this program and the new eligibilities to ensure the program's availability, benefits, and application process are made known to potential applicants who are ready to seek financing.

OFFICE OF INDIAN ENERGY POLICY AND PROGRAMS

Appropriations, 2022	$58,000,000
Budget estimate, 2023	150,039,000
Committee recommendation	110,000,000

The Committee recommends $110,000,000 for the Office of Indian Energy Policy and Programs.

The Committee encourages the Department to use its cost share waiver authority under section 2602 of the Energy Policy Act of 1992, as modified by section 8013 of the Energy Act of 2020, when appropriate.

The Committee supports the budget request to provide financing options to help provide power to Tribal homes that current lack

electricity. Within available funds, the Committee recommends not less than $45,000,000 to advance technical assistance, demonstration, and deployment of clean energy for households and communities in Tribal nations to improve reliability, resilience, and alleviate energy poverty. The Department is encouraged to prioritize households and communities that lack connection to the electric grid. The Department is encouraged to collaborate with the Office of EERE, including the Solar Energy Technologies Office, and the Office of Electricity in issuing these funds.

Within available funds, the Committee recommends up to $8,000,000 for coordinated research, development, deployment, and training related to advanced microgrid-enabling technologies, with a focus on underserved and Indigenous communities in remote and islanded areas. The Committee encouraged the Department to partner with organizations with specialized experience addressing local energy challenges, including community-based organizations and institutions of higher education, with a priority for minority-serving institutions.

The Committee supports the Office of Indian Energy's efforts to utilize local Subject Matter Experts to assist Indian Tribes and Alaska Native Villages in development energy projects and providing support for energy planning. The Committee encourages the Office of Indian Energy to design funding opportunity announcements that do not exclude Tribes based on local land ownership structures, consistent with expanded authority under section 2602 of the Energy Policy Act of 1992, as modified by section 8013 of the Energy Act of 2020.

DEPARTMENTAL ADMINISTRATION

(GROSS)

Appropriations, 2022	$340,578,000
Budget estimate, 2023	497,781,000
Committee recommendation	357,906,000

(MISCELLANEOUS REVENUES)

Appropriations, 2022	−$100,578,000
Budget estimate, 2023	−100,578,000
Committee recommendation	−100,578,000

NET APPROPRIATION

Appropriations, 2022	$240,000,000
Budget estimate, 2023	397,203,000
Committee recommendation	257,328,000

The Committee recommends $357,906,000 in funding for Departmental Administration. This funding is offset by $100,578,000 in revenue for a net appropriation of $257,328,000.

International Affairs.—Within available funds, the Committee recommends $2,000,000 for the Israel Binational Industrial Research and Development [BIRD] Foundation and $4,000,000 to continue the U.S. Israel Center of Excellence in Energy, Engineering, and Water Technology.

U.S. Energy Employment Report.—The Committee directs the Department to continue the annual U.S. energy employment report

that includes a comprehensive statistical survey to collect data, publish the data, and provide a summary report. The information collected should include data relating to employment figures and demographics in the U.S. energy sector using methodology approved by the Office of Management and Budget in 2016.

The Committee is supportive of the work on the CIO Business Operations Support Services [CBOSS] program and directs the Department to provide regular updates on any developments regarding this effort.

The Committee encourages the Arctic Energy Office to explore the feasibility, scalability, and potential commercialization of utilizing data server waste heat from immersion cooling technologies as a heat source for integration with other renewable energy resources for heat pump district heating purposes.

The Committee encourages the Department to consider potential steps to ensuring that all photovoltaic modules installed or used in the performance of an energy saving performance contract, utility service energy contract, or any other agreement with the Department that involved photovoltaic modules installed on Federal property, are in compliance with the requirements of the Buy America Act.

OFFICE OF THE INSPECTOR GENERAL

Appropriations, 2022	$78,000,000
Budget estimate, 2023	106,808,000
Committee recommendation	92,000,000

The Committee recommends $92,000,000 for the Office of the Inspector General.

The Office of the Inspector General is directed to continue providing quarterly briefings to the Committee on implementation of the independent audit strategy.

ATOMIC ENERGY DEFENSE ACTIVITIES

NATIONAL NUCLEAR SECURITY ADMINISTRATION

The Committee recommendation for the National Nuclear Security Administration [NNSA] continues funding for recapitalization of our nuclear weapons infrastructure, while modernizing and maintaining a safe, secure, and credible nuclear deterrent without the need for underground testing.

The Committee supports continuing important efforts to secure and permanently eliminate remaining stockpiles of nuclear and radiological materials both here and abroad to reduce the global danger from the proliferation of weapons of mass destruction. The Committee also supports Naval Reactors and the important role they play in enabling the Navy's nuclear fleet.

A highly skilled and diverse workforce is required to maintain and modernize the nuclear weapons stockpile and execute the global nonproliferation initiatives of the NNSA. The Committee commends the NNSA for considerable progress made to recruit and retain this unique workforce, but reminds NNSA to remain within authorized staffing levels in the coming fiscal year.

PROJECT MANAGEMENT

The Committee notes NNSA's inability to properly estimate costs and timelines for large projects. The NNSA is encouraged to assess and reassess as needed current performance on projects costing more than $750,000,000, and make appropriate project management changes. When reassessing, the Committee encourages the NNSA to identify problems in cost and schedule estimates early, and provide updated information to the Committee immediately.

WEAPONS ACTIVITIES

Appropriations, 2022	$15,920,000,000
Budget estimate, 2023	16,486,298,000
Committee recommendation	16,986,298,000

The Committee recommends $16,986,298,000 for Weapons Activities to ensure the safety, security, reliability, and effectiveness of the Nation's nuclear weapons stockpile without the need for nuclear testing.

University Collaboration.—The Committee notes progress in developing the scope for establishment of the Center of Excellence regarding lifetime extension and materials degradation issues, including its expansion to the entire nuclear security enterprise. NNSA is encouraged to continue these efforts, including developing a recruiting pipeline capability across the enterprise, in consultation with institutions that have an existing track record with institutions traditionally underrepresented in the nuclear security industry, including Minority Serving Institutions and Historically Black Colleges and Universities.

Cattle.—The Committee notes the presence of unauthorized and unbranded cattle on Department land near Los Alamos National Laboratory. The cattle pose health, safety, and environmental risks. The Committee encourages the NNSA to remove all unauthorized and unbranded cattle between Water Canyon and Frijoles Canyon within 12 months of enactment of this act. The Committee also directs the Department to provide a plan for removal of all unauthorized and unbranded cattle from Department property near Los Alamos National Laboratory, including statutory impediments to that plan, no later than 12 months after enactment of this act.

STOCKPILE MANAGEMENT

Consistent with the fiscal year 2023 budget request and the 2022 Nuclear Posture Review, the Committee provides no funding for the B83–1 service life extension and the W80–4 Alteration of the Sea-Launched Cruise Missile.

Plutonium Pit Production.—The Committee continues to support NNSA's two-site pit production strategy, but believes that NNSA is not fully accounting for risk to schedule and cost. The fiscal year 2021 Act directed creation of an integrated master schedule [IMS], and the fiscal year 2022 Act directed NNSA to brief the Committee on Appropriations of both Houses of Congress not less than quarterly on progress to meeting the IMS milestones. The Committee has not received these briefings. Per 50 U.S.C. 2756, the NNSA is required to provide an annual report on priorities not funded in each respective year's President's Budget Request. Prior to obli-

gating $500,000,000 in funds provided above the fiscal year 2023 budget request for the Savannah River Plutonium Processing Facility, the NNSA is required to provide a report to the Committee on Appropriations of both Houses of Congress on its plan to establish a two-site IMS, covering the entirety of the work required to produce 80 pits per year, and a timeline that NNSA has confidence will achieve this critical requirement. Funds may be obligated 30 days after the report is provided.

NNSA and the Department of Defense have stressed that the timeline for achieving 80 pits per year will extend beyond 2030. The contingency plan provided to the Committee included insufficient detail on meeting strategic needs if 80 pits per year is not achievable by 2030. NNSA is directed to provide the Committee on Appropriations of both Houses of Congress with an updated contingency plan, coordinated with the Department of Defense and based on current pit production timelines, no later than 15 days after enactment of this act.

STOCKPILE RESEARCH, TECHNOLOGY AND ENGINEERING

The Committee recommends $2,969,166,000 for Stockpile Research, Technology, and Engineering.

Academic Programs.—The Committee recommends $111,912,000 for Academic Programs, recognizing the importance of the Academic Programs in supporting fundamental science and technology research at universities that support stockpile stewardship, the development of the next generation of highly-trained workforce, and the maintenance of a strong network of independent technical peers. Of the funds provided for the NNSA's Academic Alliances Programs, $10,000,000 is designated for the Tribal Colleges and Universities Partnership Program and $40,000,000 for the Minority Serving Institution Partnership Program.

Inertial Confinement Fusion Ignition and High-Yield.—The Committee recommends $630,000,000 for the Inertial Confinement Fusion Ignition and High-Yield Campaign program.

Advanced Simulation and Computing.—The Committee recommends $751,000,000 for Advanced Simulation and Computing.

DEFENSE NUCLEAR NONPROLIFERATION

Appropriations, 2022	$2,354,000,000
Budget estimate, 2023	2,346,257,000
Committee recommendation	2,538,000,000

The Committee recommends $2,538,000,000 for Defense Nuclear Nonproliferation.

Defense Nuclear Nonproliferation is critically important to our National security by preventing nuclear materials and weapons from falling into the wrong hands, including non-weapons nations, terrorist organizations, and non-state actors. Defense Nuclear Nonproliferation helps protect our Nation from emerging and ever evolving threats.

The Committee recommends $51,200,000 to pack and ship material from Y–12 to a domestic commercial processor to begin production of limited quantities of HALEU. The Committee also recommends $30,000,000 to remove HALEU from a partner country.

As the Office of Nuclear Energy works to promote delivery of advanced reactors, the NNSA will play a vital role in making sure appropriate safeguards are considered early in the process. The Committee encourages the NNSA to continue to cooperate and support the Office of Nuclear Energy in developing safeguards concepts, policies, and technologies to address the proliferation challenges unique to advanced nuclear reactors. The NNSA is further encouraged to cooperate with the National laboratories and industry to support the implementation of "safeguards-by-design" features in advanced nuclear reactors.

UNIVERSITY CONSORTIA FOR NUCLEAR NONPROLIFERATION RESEARCH

The Department of Energy's three University Consortia for Nuclear Nonproliferation Research educate undergraduate and graduate students in specialized fields essential to sustaining the workforce in nonproliferation technology, while contributing research and development to DOE's nuclear complex. The Committee recognizes the importance of this program and fully funds these efforts within Defense Nuclear Nonproliferation Research and Development.

NAVAL REACTORS

Appropriations, 2022	$1,918,000,000
Budget estimate, 2023	2,081,445,000
Committee recommendation	2,081,445,000

The Committee recommends $2,081,445,000 for Naval Reactors.

COLUMBIA-CLASS REACTOR SYSTEMS DEVELOPMENT

The Committee recommends $53,900,000 for Columbia-Class Reactor Systems Development. Columbia-class submarines remain vital to maintaining our survivable deterrent.

The Committee recommends $719,637,000 for Naval Reactors Development. The Committee directs Naval Reactors to provide quarterly briefings to the Committees on Appropriations of both Houses of Congress outlining its research and development program's direction and plan for the future. Within the available funds, the Committee recommends $90,890,000 for the Advanced Test Reactor.

FEDERAL SALARIES AND EXPENSES

Appropriations, 2022	$464,000,000
Budget estimate, 2023	496,400,000
Committee recommendation	496,400,000

The Committee recommends $496,400,000 for Federal Salaries and Expenses. The Committee continues to support funding for the necessary recruitment and retention of the highly-skilled personnel needed to meet NNSA's important mission. NNSA is directed to only hire within authorized personnel numbers provided for a given fiscal year, and if NNSA exceeds this authorized amount, then the Administrator must submit to the Committees on Appropriations of both Houses of Congress within 30 days a report justifying the excess. The NNSA is directed to continue providing monthly updates on the status of hiring and retention.

DEFENSE ENVIRONMENTAL CLEANUP

Appropriations, 2022	$6,710,000,000
Budget estimate, 2023	7,105,863,000
Committee recommendation	7,064,084,000

The Committee recommendation for Defense Environmental Cleanup is $7,064,084,000.

Future Budget Requests.—The Committee directs the Department to include out-year funding projections in the annual budget request by control point for Environmental Management, and an estimate of the total cost and time to complete each site.

Richland.—As a signatory to the Tri-Party Agreement, the Department is required to meet specific compliance milestones toward the cleanup of the Hanford site. Among other things, the Department committed to provide the funding necessary to enable full compliance with its cleanup milestones. The Committee recognizes that significant progress has been made at the Hanford site, but greater funding will be necessary to meet compliance milestones. In order to fund the Department's compliance with its legal obligations under the Tri-Party Agreement, the Committee recommends $1,005,603,000 for Richland Operations.

Within available funds, the Department is directed to carry out maintenance and public safety efforts at the Manhattan Project National Historical Park, including the B Reactor roof replacement. Further, within available funds the Department is directed to support the Hanford Workforce Engagement Center to provide education and advocacy to current and former Hanford employees on all available Federal and State compensation programs as well as the Hazardous Materials and Emergency Response facilities, which provide valuable training to Hanford employees.

None of the Richland Operations funds shall be used to carry out activities with the Office of River Protection's tank farms.

Office of River Protection.—The Committee recommends $1,730,408,000 for the Office of River Protection. Funds are provided for full engineering, procurement, and construction work on the High-Level Waste Treatment Facility, for design and engineering on the Pre-Treatment Facility, to ensure compliance with the 2016 Consent Decree and Tri-Party Agreement milestones, and to continue tank waste retrievals.

Program Direction.—The Committee recognizes the need to prepare the next generation of environmental management workforce and encourages the Department to continue mentoring, training, and recruiting the next generation of environmental management workforce.

Technology Development.—The Committee supports the Department's efforts to expand technology development and demonstration to address its long-term and technically complex cleanup challenges. Within the amount recommended, up to $7,000,000 is recommended for work on qualification, testing and research to advance the state-of-the-art containment ventilation systems.

DEFENSE URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING

Appropriations, 2022	$573,300,000
Budget estimate, 2023	.....
Committee recommendation	579,000,000

The Committee recommendation for Defense Uranium Enrichment Decontamination and Decommissioning is $579,000,000.

OTHER DEFENSE ACTIVITIES

Appropriations, 2022	$985,000,000
Budget estimate, 2023	978,351,000
Committee recommendation	1,040,237,000

The Committee recommends $1,040,237,000 for Other Defense Activities.

POWER MARKETING ADMINISTRATIONS

The Committee recognizes the important role the Power Marketing Administrations play in delivering affordable power, maintaining grid reliability, and supporting the Nation's Federal multipurpose water projects.

OPERATIONS AND MAINTENANCE, SOUTHEASTERN POWER ADMINISTRATION

Appropriations, 2022	.....
Budget estimate, 2023	.....
Committee recommendation	.....

OPERATIONS AND MAINTENANCE, SOUTHWESTERN POWER ADMINISTRATION

Appropriations, 2022	$10,400,000
Budget estimate, 2023	10,608,000
Committee recommendation	10,608,000

The Committee recommends a net appropriation of $10,608,000 for the Southwestern Power Administration.

CONSTRUCTION, REHABILITATION, OPERATIONS AND MAINTENANCE, WESTERN AREA POWER ADMINISTRATION

Appropriations, 2022	$90,772,000
Budget estimate, 2023	98,732,000
Committee recommendation	98,732,000

The Committee recommends a net appropriation of $98,732,000 for the Western Area Power Administration.

FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND

Appropriations, 2022	$228,000
Budget estimate, 2023	228,000
Committee recommendation	228,000

The Committee recommends a net appropriation of $228,000 for the Falcon and Amistad Operating and Maintenance Fund.

FEDERAL ENERGY REGULATORY COMMISSION

SALARIES AND EXPENSES

Appropriations, 2022	$466,426,000
Budget estimate, 2023	508,400,000
Committee recommendation	508,400,000

REVENUES APPLIED

Appropriations, 2022	−$466,426,000
Budget estimate, 2023	−508,400,000
Committee recommendation	508,400,000

The Committee recommendation for the Federal Energy Regulatory Commission [FERC] is $508,400,000. Revenues for FERC are established at a rate equal to the budget authority, resulting in a net appropriation of $0.

DEPARTMENT OF ENERGY

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
ENERGY PROGRAMS					
Defense Production Act Domestic Clean Energy Accelerator					
Defense Production Act Domestic Clean Energy Accelerator	.....	.....	475,000	+475,000	+475,000
Program Direction	.....	.....	25,000	+25,000	+25,000
Subtotal, Defense Production Act Domestic Clean Energy Accelerator	.....	.....	500,000	+500,000	+500,000
ENERGY EFFICIENCY AND RENEWABLE ENERGY					
Sustainable Transportation:					
Vehicle Technologies	420,000	602,731	520,000	+100,000	−82,731
Bioenergy Technologies	262,000	340,000	288,500	+26,500	−51,500
Hydrogen and Fuel Cell Technologies	157,500	186,000	180,000	+22,500	−6,000
Subtotal, Sustainable Transportation	839,500	1,128,731	988,500	+149,000	−140,231
Renewable Energy:					
Solar Energy Technologies	290,000	534,575	310,000	+20,000	−224,575
Wind Energy Technologies	114,000	345,390	210,000	+96,000	−135,390
Water Power Technologies	162,000	190,500	196,000	+34,000	+5,500
Geothermal Technologies	109,500	202,000	125,000	+15,500	−77,000
Renewable Energy Grid Integration	40,000	57,730	57,730	+17,730	.....
Subtotal, Renewable Energy	715,500	1,330,195	898,730	+183,230	−431,465
Energy Efficiency:					
Advanced Manufacturing	416,000	582,500	505,000	+89,000	−77,500
Building Technologies	307,500	392,000	364,770	+57,270	−27,230
Federal Energy Management Program	40,000	.....	.....	−40,000	.....

Weatherization and Intergovernmental Program:					
Weatherization:					
Weatherization Assistance Program	313,000	.....	.....	−313,000	.....
Training and Technical Assistance	6,000	.....	.....	−6,000	.....
Weatherization Readiness Fund	15,000	.....	.....	−15,000	.....
Subtotal, Weatherization	334,000	.....	.....	−334,000	.....
State Energy Program	63,000	.....	.....	−63,000	.....
Local Government Energy Program	10,000	.....	.....	−10,000	.....
Build Back Better Challenge Grants	.....	.....	.....	.....	.....
Energy Future Grants	20,000	.....	.....	−20,000	.....
Subtotal, Weatherization and Intergovernmental Program	427,000	.....	.....	−427,000	.....
Subtotal, Energy Efficiency	1,190,500	974,500	869,770	−320,730	−104,730
State and Community Energy Programs:					
Weatherization:					
Weatherization Assistance Program	.....	.....	313,000	+313,000	+313,000
Training and Technical Assistance	.....	.....	10,000	+10,000	+10,000
Weatherization Readiness Fund	.....	.....	30,000	+30,000	+30,000
LIHEAP Advantage Pilot	.....	.....	.....	.....	.....
Subtotal, Weatherization	.....	.....	353,000	+353,000	+353,000
State Energy Program	.....	.....	65,000	+65,000	+65,000
Local Government Energy Program	.....	.....	10,000	+10,000	+10,000
Energy Future Grants	.....	.....	30,000	+30,000	+30,000
Subtotal, State and Community Energy Programs	.....	.....	105,000	+105,000	+105,000
Manufacturing and Energy Supply Chains:					
Facility and Workforce Assistance	.....	.....	23,000	+23,000	+23,000
Energy Sector Industrial Base Technical Assistance	.....	.....	2,000	+2,000	+2,000
Subtotal, Manufacturing and Energy Supply Chains	.....	.....	25,000	+25,000	+25,000
Federal Energy Management Program:					
Federal Energy Management	.....	.....	35,000	+35,000	+35,000
Federal Energy Efficiency Fund	.....	.....	25,000	+25,000	+25,000
Net-Zero Laboratory Initiative	.....	.....	.....	.....	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Subtotal, Federal Energy Management Program			60,000	+60,000	+60,000
Corporate Support:					
Facilities and Infrastructure:					
National Renewable Energy Laboratory [NREL]	140,000	210,100	168,600	+28,600	−41,500
21–EE–001, Energy Materials Processing at Scale (EMAPS)	8,000	60,000	60,000	+52,000	
23–TBD, South Table Mountain (STM) Carbon Free District Heating/Cooling		31,500			−31,500
Subtotal, Facilities and Infrastructure	148,000	301,600	228,600	+80,600	−73,000
Program Direction	209,453	224,474	245,000	+35,547	+20,526
Strategic Programs	20,000	59,385	25,400	+5,400	−33,985
Subtotal, Corporate Support	377,453	585,459	499,000	+121,547	−86,459
Subtotal, Energy Efficiency and Renewable Energy	3,122,953	4,018,885	3,799,000	+676,047	−219,885
Congressionally Directed Spending	77,047			−77,047	
Rescission					
TOTAL, ENERGY EFFICENCY AND RENEWABLE ENERGY	3,200,000	4,018,885	3,799,000	+599,000	−219,885
STATE AND COMMUNITY ENERGY PROGRAMS					
Weatherization:					
Weatherization Assistance Program		362,170			−362,170
Training and Technical Assistance		10,000			−10,000
Weatherization Readiness Fund		30,000			−30,000
LIHEAP Advantage Pilot		100,000			−100,000
Subtotal, Weatherization		502,170			−502,170
State Energy Program		70,000			−70,000
Local Government Energy Program		25,000			−25,000

Energy Future Grants	.....	105,000	.....	.....	−105,000
Program Direction	.....	24,727	.....	.....	−24,727
TOTAL, STATE AND COMMUNITY ENERGY PROGRAMS	.....	726,897	.....	.....	−726,897
MANUFACTURING AND ENERGY SUPPLY CHAINS					
Facility and Workforce Assistance	.....	18,000	.....	.....	−18,000
Energy Sector Industrial Base Technical Assistance	.....	3,000	.....	.....	−3,000
Program Direction	.....	6,424	.....	.....	−6,424
TOTAL, MANUFACTURING AND ENERGY SUPPLY CHAINS	.....	27,424	.....	.....	−27,424
FEDERAL ENERGY MANAGEMENT PROGRAM					
Federal Energy Management	.....	38,150	.....	.....	−38,150
Federal Energy Efficiency Fund	.....	60,000	.....	.....	−60,000
Net-Zero Laboratory Initiative	.....	57,000	.....	.....	−57,000
Program Direction	.....	14,511	.....	.....	−14,511
TOTAL, FEDERAL ENERGY MANAGEMENT PROGRAM	.....	169,661	.....	.....	−169,661
CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE					
Risk Management Technology and Tools	129,804	125,000	130,000	+196	+5,000
Response and Restoration	18,000	24,000	22,000	+4,000	−2,000
Information Sharing, Partnerships and Exercises	19,000	28,000	25,000	+6,000	−3,000
Program Direction	16,000	25,143	25,143	+9,143	.....
Congressionally Directed Spending	3,000	.....	.....	−3,000	.....
TOTAL, CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE	185,804	202,143	202,143	+16,339	.....
ELECTRICITY					
Grid Controls and Communications:					
Transmission Reliability and Resilience	26,000	37,300	37,300	+11,300	.....
Energy Delivery Grid Operations Technology	23,000	39,000	34,000	+11,000	−5,000
Resilient Distribution Systems	55,000	50,000	50,000	−5,000	.....
Cyber Resilient and Secure Utility Communications Networks	11,150	20,000	18,000	+6,850	−2,000

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Subtotal, Grid Controls and Communications	115,150	146,300	139,300	+24,150	−7,000
Grid Hardware, Components, and Systems:					
Energy Storage:					
Research	73,000	81,000	95,000	+22,000	+14,000
Construction: 20–OE–100 Grid Storage Launchpad	47,000	.....	.....	−47,000	.....
Subtotal, Energy Storage	120,000	81,000	95,000	−25,000	+14,000
Transformer Resilience and Advanced Components	11,000	22,500	22,500	+11,500	.....
Applied Grid Transformation Solutions	.....	30,000	26,200	+26,200	−3,800
Subtotal, Grid Hardware, Components, and Systems	131,000	133,500	143,700	+12,700	+10,200
Grid Deployment:					
Grid Planning and Development	.....	.....	10,000	+10,000	+10,000
Grid Technical Assistance	.....	.....	21,000	+21,000	+21,000
Wholesale Electricity Market Technical Assistance and Grants	.....	.....	10,000	+10,000	+10,000
Interregional and Offshore Transmission Planning	.....	.....	17,000	+17,000	+17,000
Subtotal, Grid Deployment	.....	.....	58,000	+58,000	+58,000
Transmission Permitting and Technical Assistance	8,000	.....	.....	−8,000	.....
Program Direction	20,000	17,586	21,000	+1,000	+3,414
Congressionally Directed Spending	2,850	.....	.....	−2,850	.....
TOTAL, ELECTRICITY	277,000	297,386	362,000	+85,000	+64,614
GRID DEPLOYMENT OFFICE					
Grid Planning and Development	.....	16,200	.....	.....	−16,200
Grid Technical Assistance	.....	29,500	.....	.....	−29,500
Wholesale Electricity Market Technical Assistance and Grants	.....	19,000	.....	.....	−19,000

Interregional and Offshore Transmission Planning	.....	20,000	.....	.....	−20,000
Program Direction	.....	5,521	.....	.....	−5,521
Acquiring and Condemning Property	.....	150,000	.....	.....	−150,000
TOTAL, GRID DEPLOYMENT OFFICE	.....	240,221	.....	.....	−240,221
NUCLEAR ENERGY					
Integrated University Program	6,000	.....	.....	−6,000	.....
STEP R&D	.....	.....	.....	.....	.....
Nuclear Energy Enabling Technologies:					
Crosscutting Technology Development	29,000	35,250	31,000	+2,000	−4,250
Joint Modeling and Simulation Program	30,000	28,327	28,327	−1,673	.....
Nuclear Science User Facilities	33,000	39,160	34,000	+1,000	−5,160
Transformational Challenge Reactor	25,000	.....	.....	−25,000	.....
Subtotal, Nuclear Energy Enabling Technologies	117,000	102,737	93,327	−23,673	−9,410
Fuel Cycle Research and Development:					
Front End Fuel Cycle:					
Mining, Conversion, and Transportation	2,000	1,500	2,000	.....	+500
Advanced Nuclear Fuel Availability	45,000	95,000	150,000	+105,000	+55,000
Subtotal, Front End Fuel Cycle	47,000	96,500	152,000	+105,000	+55,500
Material Recovery and Waste Form Development	30,000	38,000	30,000	.....	−8,000
Advanced Fuels:					
Accident Tolerant Fuels	115,000	113,900	115,000	.....	+1,100
Triso Fuel and Graphite Qualification	37,000	27,000	27,000	−10,000	.....
Subtotal, Advanced Fuels	152,000	140,900	142,000	−10,000	+1,100
Fuel Cycle Laboratory R&D	23,150	46,500	23,500	+350	−23,000
Used Nuclear Fuel Disposition R&D	50,000	46,875	46,875	−3,125	.....
Integrated Waste Management System	18,000	53,000	40,000	+22,000	−13,000
Subtotal, Fuel Cycle Research and Development	320,150	421,775	434,375	+114,225	+12,600
Reactor Concepts RD&D:					
Advanced Small Modular Reactor RD&D	150,000	40,000	138,000	−12,000	+98,000
Light Water Reactor Sustainability	48,000	45,000	45,000	−3,000	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Advanced Reactor Technologies	59,000	50,000	36,000	−23,000	−14,000
Subtotal, Reactor Concepts RD&D	257,000	135,000	219,000	−38,000	+84,000
Versatile Test Reactor Project:					
Other Project Costs		45,000			−45,000
21–E–200 VTR Project					
Subtotal, Versatile Test Reactor Project		45,000			−45,000
Advanced Reactors Demonstration Program:					
National Reactor Innovation Center	55,000	75,000	75,000	+20,000	
Construction:					
23–E–200 Laboratory for Operations and Testing in the United States			20,000	+20,000	+20,000
Subtotal, National Reactor Innovation Center	55,000	75,000	95,000	+40,000	+20,000
Demonstration 1	30,000		29,000	−1,000	+29,000
Demonstration 2	30,000		29,000	−1,000	+29,000
Risk Reduction for Future Demonstrations	115,000	140,238	135,000	+20,000	−5,238
Regulatory Development	15,000	10,250	10,250	−4,750	
Advanced Reactors Safeguards	5,000	4,750	4,750	−250	
Subtotal, Advanced Reactors Demonstration Program	250,000	230,238	303,000	+53,000	+72,762
Infrastructure:					
ORNL Nuclear Facilities O&M	20,000		20,000		+20,000
INL Facilities Operations and Maintenance	295,000	326,924	326,924	+31,924	
Research Reactor Infrastructure	15,000		17,500	+2,500	+17,500
Construction:					
16–E–200 Sample Preparation Laboratory, INL	41,850	7,300	7,300	−34,550	

Subtotal, Construction	41,850	7,300	7,300	−34,550	.....
Subtotal, Infrastructure	371,850	334,224	371,724	−126	+37,500
Idaho Sitewide Safeguards and Security	149,800	156,600	156,600	+6,800	.....
International Nuclear Energy Cooperation	3,000	3,000	.....	−3,000	−3,000
Program Direction	80,000	85,457	82,574	+2,574	−2,883
NEUP, SBIR/STTR, and TCF	100,000	.....	.....	−100,000	.....
Directed R&D and University Programs	.....	161,029	105,000	+105,000	−56,029
TOTAL, NUCLEAR ENERGY	1,654,800	1,675,060	1,765,600	+110,800	+90,540
FOSSIL ENERGY AND CARBON MANAGEMENT					
Carbon Management Technologies:					
Carbon Capture	99,000	162,905	135,000	+36,000	−27,905
Carbon Dioxide Removal	49,000	65,000	70,000	+21,000	+5,000
Carbon Utilization	29,000	50,000	50,000	+21,000	.....
Carbon Transport and Storage	97,000	122,000	111,000	+14,000	−11,000
Advanced Energy and Hydrogen Systems	94,000	.....	.....	−94,000	.....
Hydrogen with Carbon Management	.....	74,000	98,000	+98,000	+24,000
Policy and Analysis	.....	4,000	2,000	+2,000	−2,000
Justice and Engagement	.....	1,000	.....	.....	−1,000
Crosscutting Research	33,000	.....	.....	−33,000	.....
STEP (Supercritical CO2)	15,000	.....	.....	−15,000	.....
Subtotal, Carbon Management Technologies	416,000	478,905	466,000	+50,000	−12,905
Resource Technologies and Sustainability	110,000	.....	.....	−110,000	.....
Advanced Remediation Technologies	.....	12,964	40,000	+40,000	+27,036
Methane Mitigation Technologies	.....	100,000	60,000	+60,000	−40,000
Natural Gas Decarbonization and Hydrogen Technologies	.....	26,000	26,000	+26,000	.....
Mineral Sustainability	53,000	44,000	53,000	.....	+9,000
Subtotal, Resource Technologies and Sustainability	163,000	182,964	179,000	+16,000	−3,964
Repurposing Fossil Energy Assets	.....	6,000	6,000	+6,000	.....
Program Direction	66,800	70,291	70,000	+3,200	−291
Special Recruitment Programs	1,001	1,000	1,000	−1	.....
University Training and Research	.....	13,000	13,000	+13,000	.....
NETL Research and Operations	83,000	83,000	87,000	+4,000	+4,000
NETL Infrastructure	75,000	55,000	55,000	−20,000	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
NETL Interagency Working Group	.....	3,000	3,000	+3,000	.....
Congressionally Directed Spending	20,199	.....	.....	−20,199	.....
Floor Amendments	.....	.....	.....	.....	.....
TOTAL, FOSSIL ENERGY AND CARBON MANAGEMENT	825,000	893,160	880,000	+55,000	−13,160
ENERGY PROJECTS	.....	.....	109,767	+109,767	−109,767
NAVAL PETROLEUM AND OIL SHALE RESERVES	13,650	13,004	13,004	−646	.....
STRATEGIC PETROLEUM RESERVE					
STRATEGIC PETROLEUM RESERVE	219,000	214,175	52,460	−166,540	−161,715
TOTAL, STRATEGIC PETROLEUM RESERVE	219,000	214,175	52,460	−166,540	−161,715
SPR PETROLEUM RESERVE	7,350	8,000	8,000	+650	.....
NORTHEAST HOME HEATING OIL RESERVE	6,500	7,000	7,000	+500	.....
ENERGY INFORMATION ADMINISTRATION	129,087	144,480	144,000	+14,913	−480
NON–DEFENSE ENVIRONMENTAL CLEANUP					
Fast Flux Test Reactor Facility (WA)	3,100	3,200	3,200	+100	.....
Gaseous Diffusion Plants	121,203	123,438	138,438	+17,235	+15,000
Small Sites	119,340	104,629	139,963	+20,623	+35,334
West Valley Demonstration Project	88,120	89,882	89,882	+1,762	.....
Management and Storage of Elemental Mercury	2,100	2,100	2,100	.....	.....
Mercury Receipts	.....	3,000	3,000	+3,000	.....
Use of Mercury Receipts	.....	−3,000	−3,000	−3,000	.....
TOTAL, NON–DEFENSE ENVIRONMENTAL CLEANUP	333,863	323,249	373,583	+39,720	+50,334

URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND					
Oak Ridge	105,000	92,946	92,946	−12,054	.....
Nuclear Facility D&D, Paducah	240,000	199,269	240,000	.....	+40,731
Portsmouth:					
Nuclear Facility D&D, Portsmouth	392,911	432,354	432,354	+39,443	.....
Construction:					
15–U–408 On-site Waste Disposal Facility, Portsmouth	8,900	.....	.....	−8,900	.....
20–U–401 On-site Waste Disposal Facility (Cell Line 2&3)	65,235	48,040	48,040	−17,195	.....
Subtotal, Portsmouth	467,046	480,394	480,394	+13,348	.....
Pension and Community and Regulatory Support	31,799	25,412	30,412	−1,387	+5,000
Title X Uranium/Thorium Reimbursement Program	16,155	24,400	25,248	+9,093	+848
TOTAL, UED&D FUND	860,000	822,421	869,000	+9,000	+46,579
SCIENCE					
Advanced Scientific Computing Research:					
Research	906,000	991,741	1,000,000	+94,000	+8,259
Construction:					
17–SC–20 Office of Science Exascale Computing Project (SC–ECP)	129,000	77,000	77,000	−52,000	.....
Subtotal, Advanced Scientific Computing Research	1,035,000	1,068,741	1,077,000	+42,000	+8,259
Basic Energy Sciences:					
Research	2,003,800	2,127,239	2,247,239	+243,439	+120,000
Construction:					
13–SC–10 LINAC coherent light source II (LCLS–II), SLAC	28,100	.....	.....	−28,100	.....
18–SC–10 Advanced Photon Source Upgrade (APS–U), ANL	101,000	9,200	9,200	−91,800	.....
18–SC–11 Spallation Neutron Source Proton Power Upgrade (PPU), ORNL	17,000	17,000	17,000	.....	.....
18–SC–12 Advanced Light Source Upgrade (ALS–U), LBNL	75,100	135,000	135,000	+59,900	.....
18–SC–13 Linac Coherent Light Source-II–High Energy (LCLS–II–HE), SLAC	50,000	90,000	90,000	+40,000	.....
19–SC–14 Second Target Station (STS), ORNL	32,000	32,000	32,000	.....	.....
21–SC–10 Cryomodule Repair and Maintenance Facility	1,000	10,000	10,000	+9,000	.....
Subtotal, Construction	304,200	293,200	293,200	−11,000	.....
Subtotal, Basic Energy Sciences	2,308,000	2,420,439	2,540,439	+232,439	+120,000

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Biological and Environmental Research	815,000	903,685	913,685	+98,685	+10,000
Fusion Energy Sciences:					
Research	460,000	482,222	492,222	+32,222	+10,000
Construction:					
14–SC–60 US Contributions to ITER (US ITER)	242,000	240,000	240,000	−2,000	.....
20–SC–61 Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC	11,000	1,000	11,000	.....	+10,000
Subtotal, Construction	253,000	241,000	251,000	−2,000	+10,000
Subtotal, Fusion Energy Sciences	713,000	723,222	743,222	+30,222	+20,000
High Energy Physics					
Research	810,000	824,020	870,000	+60,000	+45,980
Construction:					
11–SC–40 Long Baseline Neutrino Facility / Deep Underground Neutrino Experiment (LBNF/DUNE), FNAL	176,000	176,000	176,000	.....	.....
11–SC–41 Muon to electron conversion experiment, FNAL	2,000	2,000	2,000	.....	.....
18–SC–42 Proton Improvement Plan II (PIP–II), FNAL	90,000	120,000	120,000	+30,000	.....
Subtotal, Construction	268,000	298,000	298,000	+30,000	.....
Subtotal, High Energy Physics	1,078,000	1,122,020	1,168,000	+90,000	+45,980
Nuclear Physics:					
Research	708,000	719,196	755,196	+47,196	+36,000
Construction:					
14–SC–50 Facility for Rare Isotope Beams, MSU	.....	.....	.....	.....	.....
20–SC–52 Electron Ion Collider, BNL	20,000	20,000	50,000	+30,000	+30,000
Subtotal, Construction	20,000	20,000	50,000	+30,000	+30,000
Subtotal, Nuclear Physics	728,000	739,196	805,196	+77,196	+66,000

Isotope R&D and Production:					
Research:	70,000	85,451	91,451	+21,451	+6,000
Construction:					
20–SC–51 US Stable Isotope Production and Research Center, ORNL	12,000	12,000	24,000	+12,000	+12,000
Subtotal, Construction	12,000	12,000	24,000	+12,000	+12,000
Subtotal, Isotope R&D and Production	82,000	97,451	115,451	+33,451	+18,000
Accelerator R&D and Production	18,000	27,436	27,436	+9,436	.....
Workforce Development for Teachers and Scientists	35,000	41,300	41,300	+6,300	.....
Science Laboratories Infrastructure:					
Infrastructure Support:					
Payment in Lieu of Taxes	4,820	4,891	4,891	+71	.....
Oak Ridge Landlord	6,430	6,559	6,559	+129	.....
Facilities and Infrastructure	14,450	15,200	15,200	+750	.....
Oak Ridge Nuclear Operations	26,000	20,000	26,000	.....	+6,000
Subtotal, Infrastructure Support	51,700	46,650	52,650	+950	+6,000
Construction:					
17–SC–71 Integrated Engineering Research Center, FNAL	10,250	.....	.....	−10,250	.....
19–SC–71 Science User Support Center, BNL	38,000	.....	.....	−38,000	.....
19–SC–73 Translational Research Capability, ORNL	21,500	.....	.....	−21,500	.....
19–SC–74 BioEPIC, LBNL	35,000	45,000	45,000	+10,000	.....
20–SC–71 Critical Utilities Rehabilitation Project, BNL	26,000	13,000	26,000	.....	+13,000
20–SC–72 Seismic and Safety Modernization, LBNL	18,000	27,500	27,500	+9,500	.....
20–SC–73 CEBAF Renovation and Expansion, TJNAF	10,000	2,000	2,000	−8,000	.....
20–SC–75 Large Scale Collaboration Center, SLAC	21,000	30,000	21,000	.....	−9,000
20–SC–76 Tritium System Demolition and Disposal, PPPL	6,400	.....	.....	−6,400	.....
20–SC–77 Argonne Utilities Upgrade, ANL	10,000	8,000	8,000	−2,000	.....
20–SC–78 Linear Assets Modernization Project, LBNL	10,400	23,425	23,425	+13,025	.....
20–SC–79 Critical Utilities Infrastructure Revitalization, SLAC	8,500	25,425	25,425	+16,925	.....
20–SC–80 Utilities Infrastructure Project, FNAL	10,500	20,000	20,000	+9,500	.....
21–SC–71 Princeton Plasma Innovation Center, PPPL	7,750	10,000	10,000	+2,250	.....
21–SC–72 Critical Infrastructure Recovery & Renewal, PPPL	2,000	4,000	4,000	+2,000	.....
21–SC–73 Ames Infrastructure Modernization	2,000	.....	1,000	−1,000	+1,000
22–SC–71, Critical Infrastructure Modernization Project (CIMP), ORNL	1,000	.....	1,000	.....	+1,000
22–SC–72, Thomas Jefferson Infrastructure Improvements (TJII), TJNAF	1,000	.....	1,000	.....	+1,000

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Subtotal, Construction:	239,300	208,350	215,350	−23,950	+7,000
Subtotal, Science Laboratories Infrastructure	291,000	255,000	268,000	−23,000	+13,000
Safeguards and Security	170,000	189,510	189,060	+19,060	−450
Program Direction	202,000	211,211	211,211	+9,211	
TOTAL, SCIENCE	7,475,000	7,799,211	8,100,000	+625,000	+300,789
NUCLEAR WASTE DISPOSAL	27,500	10,205	10,205	−17,295	
TECHNOLOGY TRANSITIONS					
Technology Transitions Programs	11,095	8,375	10,658	−437	+2,283
Program Direction	8,375	13,183	10,900	+2,525	−2,283
TOTAL, TECHNOLOGY TRANSITIONS	19,470	21,558	21,558	+2,088	
CLEAN ENERGY DEMONSTRATIONS					
Demonstrations	12,000	189,052	125,000	+113,000	−64,052
Program Direction	8,000	25,000	25,000	+17,000	
TOTAL, CLEAN ENERGY DEMONSTRATIONS	20,000	214,052	150,000	+130,000	−64,052
ADVANCED RESEARCH PROJECTS AGENCY–ENERGY					
ARPA–E Projects	414,000	643,000	526,364	+112,364	−116,636
Program Direction	36,000	57,150	44,000	+8,000	−13,150
TOTAL, ARPA–E	450,000	700,150	570,364	+120,364	−129,786

TITLE 17—INNOVATIVE TECHNOLOGY LOAN GUARANTEE PGM					
Administrative Expenses	32,000	66,206	66,206	+34,206	.....
Title XVII Loan Guarantee Credit Subsidy	.....	150,000	.....	.....	−150,000
New Loan Authority	.....	25,000	.....	.....	−25,000
Offsetting Collection	−3,000	−35,000	−35,000	−32,000	.....
Guaranteed Loan Subsidy Recission	.....	.....	−150,000	.....	.....
New Loan Authority	.....	.....	150,000	.....	.....
TOTAL, TITLE 17—INNOVATIVE TECHNOLOGY LOAN GUARANTEE PROGRAM	29,000	206,206	31,206	+2,206	−175,000
ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PGM					
Administrative Expenses	5,000	9,800	9,800	+4,800	.....
TOTAL, ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM	5,000	9,800	9,800	+4,800	.....
TRIBAL ENERGY LOAN GUARANTEE PROGRAM					
Guaranteed Loan Subsidy	.....	.....	8,000	+8,000	+8,000
Administrative Expenses	2,000	1,860	2,000	.....	+140
TOTAL, TRIBAL ENERGY LOAN GUARANTEE PROGRAM	2,000	1,860	10,000	+8,000	+8,140
INDIAN ENERGY POLICY AND PROGRAMS					
Indian Energy Program	52,477	129,736	92,000	+39,523	−37,736
Program Direction	5,523	20,303	18,000	+12,477	−2,303
TOTAL, INDIAN ENERGY POLICY AND PROGRAMS	58,000	150,039	110,000	+52,000	−40,039
DEPARTMENTAL ADMINISTRATION					
Salaries and Expenses:					
Office of the Secretary	5,582	6,642	6,112	+530	−512
Congressional and Intergovernmental Affairs	6,000	7,142	5,000	−1,000	−2,142
Chief Financial Officer	56,591	62,283	62,283	+5,692	.....
Economic Impact and Diversity	20,000	34,140	34,140	+14,140	.....
Chief Information Officer	197,000	233,731	201,758	+4,758	−31,973
Artificial Intelligence and Technology Office	1,000	2,608	1,000	.....	−1,608

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
International Affairs	28,000	62,141	30,000	+2,000	−32,141
Other Departmental Administration	170,115	219,789	181,261	+11,146	−38,528
Subtotal, Salaries and Expenses	484,288	628,476	524,226	+39,938	−104,250
Strategic Partnership Projects	40,000	40,000	40,000	.....	.....
Subtotal, Departmental Administration	524,288	668,476	564,226	+39,938	−104,250
Funding from Other Defense Activities	−183,710	−170,695	−203,648	−19,938	−32,953
Floor amendments	.....	.....	.....	.....	.....
Total, Departmental Administration (Gross)	340,578	497,781	357,906	+17,328	−139,875
Miscellaneous revenues	−100,578	−100,578	−100,578	.....	.....
TOTAL, DEPARTMENTAL ADMINISTRATION (Net)	240,000	397,203	257,325	+17,328	−139,875
OFFICE OF THE INSPECTOR GENERAL					
Office of the Inspector General	78,000	106,808	92,000	+14,000	−14,808
TOTAL, OFFICE OF THE INSPECTOR GENERAL	78,000	106,808	92,000	+14,000	−14,808
TOTAL, ENERGY PROGRAMS	16,116,024	19,400,258	18,448,018	+2,331,994	−952,240

ATOMIC ENERGY DEFENSE ACTIVITIES					
NATIONAL NUCLEAR SECURITY ADMINISTRATION					
WEAPONS ACTIVITIES					
Stockpile Management:					
Stockpile Major Modernization:					
B61 Life Extension Program	771,664	672,019	672,019	−99,645	.....
W88 Alteration Program	207,157	162,057	162,057	−45,100	.....
W80–4 Life Extension Program	1,080,400	1,122,451	1,122,451	+42,051	.....
W80–4 Alteration-SLCM	10,000	.....	.....	−10,000	.....
W87–1 Modification Program	691,031	680,127	680,127	−10,904	.....
W93	72,000	240,509	240,509	+168,509	.....
Subtotal, Stockpile Major Modernization	2,832,252	2,877,163	2,877,163	+44,911	.....
Stockpile Sustainment:					
B61 Stockpile systems	102,679	.....	130,664	+27,985	+130,664
W76 Stockpile systems	169,220	.....	190,577	+21,357	+190,577
W78 Stockpile systems	94,766	.....	140,209	+45,443	+140,209
W80 Stockpile systems	91,669	.....	98,318	+6,649	+98,318
B83 Stockpile systems	98,456	.....	58,930	−39,526	+58,930
W87 Stockpile systems	117,297	.....	124,541	+7,244	+124,541
W88 Stockpile systems	142,841	.....	139,934	−2,907	+139,934
Multi-Weapon Systems	363,555	.....	437,966	+74,411	+437,966
Subtotal, Stockpile Sustainment	1,180,483	.....	1,321,139	+140,656	+1,321,139
Stockpile Sustainment	.....	1,321,139	.....	.....	−1,321,139
Weapons Dismantlement and Disposition	56,000	50,966	56,000	.....	+5,034
Production Operations	568,941	630,894	630,894	+61,953	.....
Nuclear Enterprise Assurance (NEA/NWDA)	.....	48,911	48,911	+48,911	.....
Subtotal, Stockpile Management	4,637,676	4,929,073	4,934,107	+296,431	+5,034
Production Modernization:					
Primary Capability Modernization:					
Plutonium Modernization:					
Los Alamos Plutonium Operations	660,419	767,412	767,412	+106,993	.....
04–D–125 Chemistry and metallurgy replacement project LANL	.....	162,012	138,123	+138,123	−23,889
07–D–220–04 TRU Liquid Waste Facility, LANL	.....	24,759	24,759	+24,759	.....
15–D–302 TA–55 Reinvestment project III, LANL	.....	30,002	30,002	+30,002	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
21–D–512, Plutonium Pit Production Project, LANL	350,000	588,234	588,234	+238,234	
Subtotal, Los Alamos Plutonium Modernization	1,010,419	1,572,419	1,548,530	+538,111	−23,889
Savannah River Plutonium Operations	128,000	58,300	58,300	−69,700	
21–D–511, Savannah River Plutonium Processing Facility, SRS	475,000	700,000	1,200,000	+725,000	+500,000
Subtotal, Savannah River Plutonium Modernization	603,000	758,300	1,258,300	+655,300	+500,000
Enterprise Plutonium Support	107,098	88,993	88,993	−18,105	
Subtotal, Plutonium Modernization	1,720,517	2,419,712	2,895,823	+1,175,306	+476,111
High Explosives & Energetics:					
High Explosives & Energetics	68,785	101,380	101,380	+32,595	
15–D–301 HE Science & Engineering Facility, PX		20,000	20,000	+20,000	
21–D–510 HE Synthesis, Formulation, and Production, PX		108,000	108,000	+108,000	
23–D–516 Energetic Materials Characterization Facility, LANL		19,000	19,000	+19,000	
Subtotal, High Explosives & Energetics	68,785	248,380	248,380	+179,595	
Subtotal, Primary Capability Modernization	1,789,302	2,668,092	3,144,203	+1,354,901	+476,111
Secondary Capability Modernization:	488,097		536,363	+48,266	+536,363
Uranium Sustainment					
Uranium Modernization		297,531			−297,531
Depleted Uranium Modernization		170,171			−170,171
Lithium Modernization		68,661			−68,661
06–D–141 Uranium Processing Facility, Y–12		362,000	362,000	+362,000	
18–D–690, Lithium processing facility, Y–12		216,886	215,886	+215,886	−1,000
Subtotal, Secondary Capability Modernization	488,097	1,115,249	1,114,249	+626,152	−1,000
Tritium and Domestic Uranium Enrichment:	489,017		506,649	+17,632	+506,649

Tritium Sustainment and Modernization	.....	361,797	.....	.....	−361,797
Domestic Uranium Enrichment	.....	144,852	.....	.....	−144,852
18–D–650 Tritium Finishing Facility, SRS	.....	73,300	73,300	+73,300	.....
Subtotal, Tritium & DUE	489,017	579,949	579,949	+90,932	.....
Non-Nuclear Capability Modernization	144,563	123,084	123,084	−21,479	.....
Capability based investments	.....	154,220	154,200	+154,200	−20
Subtotal, Production Modernization	2,910,979	4,640,594	5,115,685	+2,204,706	+475,091
Stockpile Research, Technology, and Engineering:					
Assessment Science:					
Primary Assessment Technologies	150,000	154,507	154,507	+4,507	.....
Dynamic Materials Properties	130,981	124,366	124,366	−6,615	.....
Advanced Diagnostics	35,989	31,064	31,064	−4,925	.....
Secondary Assessment Technologies	84,000	72,104	72,104	−11,896	.....
Enhanced Capabilities for Subcritical Experiments	215,579	277,225	277,225	+61,646	.....
Hydrodynamic & Subcritical Execution Support	152,845	142,402	142,402	−10,443	.....
17–D–640 U1a complex enhancements project, NNSS	.....	53,130	53,130	+53,130	.....
Subtotal, Assessment Science	769,394	854,798	854,798	+85,404	.....
Engineering and Integrated Assessments:					
Archiving & Support	45,760	43,950	43,950	−1,810	.....
Delivery Environments	39,235	37,674	37,674	−1,561	.....
Weapons Survivability	59,500	93,303	93,303	+33,803	.....
Studies and Assessments	.....	5,000	5,000	+5,000	.....
Aging & Lifetimes	87,260	59,682	87,260	.....	+27,578
Stockpile Responsiveness	50,000	68,742	10,000	−40,000	−58,742
Advanced Certification & Qualification	60,330	58,104	58,104	−2,226	.....
Subtotal, Engineering and Integrated Assessments	342,085	366,455	335,291	−6,794	−31,164
Inertial Confinement Fusion	580,000	544,095	630,000	+50,000	+85,905
Advanced Simulation and Computing	747,012	742,646	750,604	+3,592	+7,958
Weapon Technology and Manufacturing Maturation:	292,630	.....	286,165	−6,465	+286,165
Surety Technology	.....	51,497	.....	.....	−51,497
Weapon Technology Development	.....	121,330	.....	.....	−121,330
Advanced Manufacturing Development	.....	113,338	.....	.....	−113,338
Subtotal, Weapon Technology and Manufacturing Maturation	292,630	286,165	286,165	−6,465	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Academic Programs	111,912	100,499	111,912	.....	+ 11,413
Subtotal, Stockpile Research, Technology, and Engineering	2,843,033	2,894,658	2,968,770	+ 125,737	+ 74,112
Infrastructure and Operations:					
Operating:					
Operations of facilities	1,014,000	1,038,000	1,038,000	+ 24,000	.....
Safety and environmental operations	165,354	162,000	162,000	− 3,354	.....
Maintenance and repair of facilities	700,000	680,000	625,763	− 74,237	− 54,237
Recapitalization:					
Infrastructure and safety	600,000	561,663	561,663	− 38,337	.....
Capability based investments	187,566	.....	.....	− 187,566	.....
Planning for Programmatic Construction (Pre-CD–1)	10,000	.....	.....	− 10,000	.....
Subtotal, Recapitalization	797,566	561,663	561,663	− 235,903	.....
Subtotal, Operating	2,676,920	2,441,663	2,387,426	− 289,494	− 54,237
I&O Construction:					
Programmatic Construction:					
06–D–141 Uranium Processing Facility, Y–12	600,000	.....	.....	− 600,000	.....
07–D–220–04 TRU Liquid Waste Facility, LANL	30,000	.....	.....	− 30,000	.....
15–D–302 TA–55 Reinvestment project III, LANL	27,000	.....	.....	− 27,000	.....
17–D–640 U1a complex enhancements project, NNSS	135,000	.....	.....	− 135,000	.....
18–D–650 Tritium Finishing Facility, SRS	27,000	.....	.....	− 27,000	.....
18–D–690, Lithium processing facility, Y–12	167,902	.....	.....	− 167,902	.....
21–D–510 HE Synthesis, Formulation, and Production, PX	44,500	.....	.....	− 44,500	.....
22–D–513, Power Sources Capability, SNL	13,827	.....	.....	− 13,827	.....
Chemistry and Metallurgy Replacement (CMRR):					
04–D–125 Chemistry and metallurgy replacement project, LANL	138,123	.....	.....	− 138,123	.....

Subtotal, Programmatic Construction and CMMR	1,183,352	.....	.....	−1,183,352	.....
Mission Enabling:					
22–D–514 Digital Infrastructure Capability Expansion, LLNL	8,000	67,300	67,300	+59,300	.....
23–D–517 Electrical Power Capacity Upgrade, LANL	.....	24,000	24,000	+24,000	.....
23–D–518 Operations & Waste Management Office Building, LANL	.....	48,500	48,500	+48,500	.....
23–D–519 Special Materials Facility, Y–12	.....	49,500	49,500	+49,500	.....
Subtotal, Mission Enabling	8,000	189,300	189,300	+181,300	.....
Subtotal, I&O Construction:	1,191,352	189,300	189,300	−1,002,052	.....
Subtotal, Infrastructure and Operations	3,868,272	2,630,963	2,576,726	−1,291,546	−54,237
Secure Transportation Asset:					
STA Operations and Equipment	213,704	214,367	214,367	+663	.....
Program Direction	117,060	130,070	130,070	+13,010	.....
Subtotal, Secure Transportation Asset	330,764	344,437	344,437	+13,673	.....
Defense Nuclear Security:					
Defense Nuclear Security (DNS)	821,090	878,363	878,363	+57,273	.....
Construction:					
17–D–710 West End Protected Area Reduction Project, Y–12	23,000	3,928	3,928	−19,072	.....
Subtotal, Defense Nuclear Security	844,090	882,291	882,291	+38,201	.....
Information Technology and Cyber Security	406,530	445,654	445,654	+39,124	.....
Legacy Contractor Pensions (WA)	78,656	114,632	114,632	+35,976	.....
Use of prior year balances	.....	−396,004	−396,004	−396,004	.....
TOTAL, WEAPONS ACTIVITIES	15,920,000	16,486,298	16,986,298	+1,066,298	+500,000
DEFENSE NUCLEAR NONPROLIFERATION					
Material Management and Minimization:					
Conversion	100,660	153,260	153,260	+52,600	.....
Nuclear Material Removal	42,100	41,600	71,600	+29,500	+30,000
Material Disposition	200,186	256,025	256,025	+55,839	.....
Subtotal, Material Management and Minimization	342,946	450,885	480,885	+137,939	+30,000

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Global Material Security:					
International Nuclear Security	79,939	81,155	91,155	+11,216	+10,000
Domestic Radiological Security	158,002	.....	.....	−158,002	.....
International Radiological Security	95,000	.....	.....	−95,000	.....
Radiological Security	.....	244,827	269,827	+269,827	+25,000
Nuclear Smuggling Detection and Deterrence	198,500	178,095	195,595	−2,905	+17,500
Subtotal, Global Material Security	531,441	504,077	556,577	+25,136	+52,500
Nonproliferation and Arms Control	184,795	207,656	230,656	+45,861	+23,000
Defense Nuclear Nonproliferation R&D:					
Proliferation Detection	269,407	287,283	299,283	+29,876	+12,000
Nuclear Detonation Detection	294,500	279,205	279,205	−15,295	.....
Nonproliferation Fuels Development	20,000	.....	20,000	.....	+20,000
Nonproliferation Stewardship Program	100,329	109,343	132,586	+32,257	+23,243
Forensics R&D	45,000	44,414	44,414	−586	.....
Subtotal, Defense Nuclear Nonproliferation R&D	729,236	720,245	775,488	+46,252	+55,243
NNSA Bioassurance Program	.....	20,000	20,000	+20,000	.....
Nonproliferation Construction:					
18–D–150 Surplus Plutonium Disposition Project, SRS	156,000	71,764	71,764	−84,236	.....
Subtotal, Nonproliferation Construction	156,000	71,764	71,764	−84,236	.....
Nuclear Counterterrorism and Incident Response:					
Emergency Operations	14,597	29,896	29,896	+15,299	.....
Counterterrorism and Counterproliferation	356,185	409,074	440,074	+83,889	+31,000
Subtotal, Nuclear Counterterrorism and Incident Response	370,782	438,970	469,970	+99,188	+31,000
Legacy Contractor Pensions (DNN)	38,800	55,708	55,708	+16,908	.....

Use of prior-year balances	.....	−123,048	−123,048	−123,048	.....
TOTAL, DEFENSE NUCLEAR NONPROLIFERATION	2,354,000	2,346,257	2,538,000	+184,000	+191,743
NAVAL REACTORS					
Naval Reactors Development	640,684	798,590	719,637	+78,953	−78,953
Columbia-class Reactor Systems Development	55,000	53,900	53,900	−1,100	.....
S8G Prototype Refueling	126,000	20,000	20,000	−106,000	.....
Naval Reactors Operations and Infrastructure	594,017	695,165	695,165	+101,148	.....
Program Direction	55,579	58,525	58,525	+2,946	.....
Construction:					
14–D–901 Spent Fuel Handling Recapitalization project, NRF	400,000	397,845	421,798	+21,798	+23,953
21–D–530 KL Steam and Condensate Upgrades	.....	.....	55,000	+55,000	+55,000
22–D–531 KL Chemistry and Radiological Health Building	41,620	.....	.....	−41,620	.....
22–D–532 KL Security Upgrades	5,100	.....	.....	−5,100	.....
23–D–533 BL Component Test Complex	.....	57,420	57,420	+57,420	.....
Subtotal, Construction	446,720	455,265	534,218	+87,498	+78,953
TOTAL, NAVAL REACTORS	1,918,000	2,081,445	2,081,445	+163,445	.....
FEDERAL SALARIES AND EXPENSES					
Federal Salaries and Expenses	464,000	513,200	513,200	+49,200	.....
Use of Prior-Year Balances	.....	−16,800	−16,800	−16,800	.....
TOTAL, FEDERAL SALARIES AND EXPENSES	464,000	496,400	496,400	+32,400	.....
TOTAL, NATIONAL NUCLEAR SECURITY ADMINISTRATION	20,656,000	21,410,400	22,102,143	+1,446,143	+691,743
DEFENSE ENVIRONMENTAL CLEANUP					
Closure Sites Administration	3,987	4,067	4,067	+80	.....
Richland:					
River Corridor and Other Cleanup Operations	254,479	221,000	279,085	+24,606	+58,085
Central Plateau Remediation	650,926	672,240	694,155	+43,229	+21,915
RL Community and Regulatory Support	8,621	10,013	10,013	+1,392	.....
Construction:					
18–D–404 WESF Modifications and Capsule Storage	8,000	3,100	3,100	−4,900	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
22–D–401 L–888, 400 Area Fire Station	15,200	3,100	3,100	−12,100	.....
22–D–402 L–897, 200 Area Water Treatment Facility	12,800	8,900	8,900	−3,900	.....
23–D–404 181D Export Water System Reconfiguration and Upgrade	.....	6,770	6,770	+6,770	.....
23–D–405 181B Export Water System Reconfiguration and Upgrade	.....	480	480	+480	.....
Subtotal, Construction	36,000	22,350	22,350	−13,650	.....
Subtotal, Richland	950,026	925,603	1,005,603	+55,577	+80,000
Office of River Protection:					
Waste Treatment and Immobilization Plant Commissioning	50,000	462,700	462,700	+412,700	.....
Rad Liquid Tank Waste Stabilization and Disposition	837,642	801,100	851,100	+13,458	+50,000
Construction:					
01–D–16 D High-level Waste Facility	144,358	358,939	392,200	+247,842	+33,261
01–D–16 E Pretreatment Facility	20,000	20,000	20,000	.....	.....
18–D–16 Waste Treatment and Immobilization Plant—LBL/Direct Feed LAW	586,000	.....	.....	−586,000	.....
23–D–403 Hanford 200 West Area Tank Farms Risk Management Project	.....	45,000	4,408	+4,408	−40,592
Subtotal, Construction	750,358	423,939	416,608	−333,750	−7,331
ORP Low-level Waste Offsite Disposal	7,000	.....	.....	−7,000	.....
Subtotal, Office of River Protection	1,645,000	1,687,739	1,730,408	+85,408	+42,669
Idaho National Laboratory:					
Idaho Cleanup and Waste Disposition	432,313	350,658	424,295	−8,018	+73,637
Idaho Community and Regulatory Support	2,658	2,705	2,705	+47	.....
Construction:					
22–D–403 Idaho Spent Nuclear Fuel Staging Facility	3,000	8,000	8,000	+5,000	.....
22–D–404 Additional ICDF Landfill Disposal Cell and Evaporation Ponds Project	5,000	8,000	8,000	+3,000	.....
23–D–402 Calcine Construction	.....	10,000	15,000	+15,000	+5,000

Subtotal, Construction	8,000	26,000	31,000	+23,000	+5,000
Total, Idaho National Laboratory	442,971	379,363	458,000	+15,029	+78,637
NNSA Sites and Nevada Offsites:					
Lawrence Livermore National Laboratory	1,806	1,842	1,842	+36	.....
Separations Process Research Unit	15,000	15,300	15,300	+300	.....
Nevada	75,737	62,652	62,652	−13,085	.....
Sandia National Laboratory	4,576	4,003	4,003	−573	.....
Los Alamos National Laboratory	275,119	286,316	286,316	+11,197	.....
Los Alamos Excess Facilities D&D	17,000	40,519	40,519	+23,519	.....
LLNL Excess Facilities D&D	35,000	12,004	35,000	.....	+22,996
Total, NNSA Sites and Nevada Off-sites	424,238	422,636	445,632	+21,394	+22,996
Oak Ridge Reservation:					
OR Nuclear Facility D&D	337,062	334,221	334,221	−2,841	.....
U233 Disposition Program	55,000	47,628	55,628	+628	+8,000
OR Cleanup and Disposition	73,725	62,000	62,000	−11,725	.....
Construction:					
14–D–403 Outfall 200 Mercury Treatment Facility	.....	.....	10,000	+10,000	+10,000
17–D–401 On-site Waste Disposal Facility	12,500	35,000	35,000	+22,500	.....
Subtotal, Construction	12,500	35,000	45,000	+32,500	+10,000
OR Community & Regulatory Support	5,096	5,300	5,300	+204	.....
OR Technology Development and Deployment	3,000	3,000	3,000	.....	.....
Total, Oak Ridge Reservation	486,383	487,149	505,149	+18,766	+18,000
Savannah River Site:					
SR Site Risk Management Operations:					
SR Site Risk Management Operations	459,090	416,317	485,864	+26,774	+69,547
Construction:					
18–D–402 Emergency Operations Center Replacement, SR	8,999	25,568	25,568	+16,569	.....
19–D–701 SR Security System Replacement	5,000	5,000	12,000	+7,000	+7,000
Total, SR Site Risk Management Operations	473,089	446,885	523,432	+50,343	+76,547

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
SR Community and Regulatory Support	11,805	12,137	12,137	+332	.....
SR National Laboratory Operations and Maintenance	.....	41,000	41,000	+41,000	.....
SR Radioactive Liquid Tank Waste Stabilization and Disposition	889,365	851,660	851,660	−37,705	.....
Construction:					
18–D–402 Saltstone Disposal unit #8/9	68,000	49,832	49,832	−18,168	.....
20–D–401 Saltstone Disposal Unit #10, 11, 12	19,500	37,668	37,668	+18,168	.....
Subtotal, Construction	87,500	87,500	87,500	.....	.....
Savannah River Legacy Pensions	130,882	132,294	132,294	+1,412	.....
Total, Savannah River Site	1,592,641	1,571,476	1,648,023	+55,382	+76,547
Waste Isolation Pilot Plant:					
Waste Isolation Pilot Plant	353,424	371,943	372,418	+18,994	+475
Construction:					
15–D–411 Safety Significant Confinement Ventilation System, WIPP	65,000	59,073	59,073	−5,927	.....
15–D–412 Exhaust Shaft, WIPP	25,000	25,000	25,000	.....	.....
Total, Waste Isolation Pilot Plant	443,424	456,016	456,491	+13,067	+475
Program Direction	305,207	317,002	317,002	+11,795	.....
Program Support	62,979	103,239	103,239	+40,260	.....
Safeguards and Security	323,144	309,573	330,470	+7,326	+20,897
Technology Development	30,000	25,000	60,000	+30,000	+35,000
Subtotal, Defense Environmental Cleanup	6,710,000	6,688,863	7,064,084	+354,084	+375,221
Federal Contribution to the Uranium Enrichment D&D Fund	.....	417,000	.....	.....	−417,000

TOTAL, DEFENSE ENVIRONMENTAL CLEANUP	6,710,000	7,105,863	7,064,084	+354,084	−41,779
DEFENSE UED&D	573,333	.....	579,000	+5,667	+579,000
OTHER DEFENSE ACTIVITIES					
Environment, Health, Safety and Security:					
Environment, Health, Safety and Security	132,732	138,854	138,854	+6,122	.....
Program Direction—Environment, Health, Safety and Security	73,588	76,685	76,685	+3,097	.....
Subtotal, Environment, Health, Safety and Security	206,320	215,539	215,539	+9,219	.....
Enterprise Assessments:					
Enterprise Assessments	27,335	27,486	27,486	+151	.....
Program Direction	56,049	57,941	57,941	+1,892	.....
Subtotal, Enterprise Assessments	83,384	85,427	85,427	+2,043	.....
Specialized Security Activities	328,500	306,067	335,000	+6,500	+28,933
Office of Legacy Management:					
Legacy Management Activities—Defense	158,797	174,163	174,163	+15,366	.....
Program Direction—Legacy Management	19,933	21,983	21,983	+2,050	.....
Subtotal, Office of Legacy Management	178,730	196,146	196,146	+17,416	.....
Defense Related Administrative Support	183,710	170,695	203,648	+19,938	+32,953
Office of Hearings and Appeals	4,356	4,477	4,477	+121	.....
TOTAL, OTHER DEFENSE ACTIVITIES	985,000	978,351	1,040,237	+55,237	+61,886
TOTAL, ATOMIC ENERGY DEFENSE ACTIVITIES	28,924,333	29,494,614	30,785,464	+1,861,131	+1,290,850
POWER MARKETING ADMINISTRATIONS (1)					
SOUTHEASTERN POWER ADMINISTRATION					
Operation and Maintenance:					
Purchase Power and Wheeling	66,353	92,687	92,687	+26,334	.....
Program Direction	7,284	8,273	8,273	+989	.....
Subtotal, Operation and Maintenance	73,637	100,960	100,960	+27,323	.....
Less Alternative Financing (for PPW)	−13,353	−13,991	−13,991	−638	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Less Alternative Financing (for PD)	−100	−100	−100	.....	.....
Offsetting Collections (for PPW)	−53,000	−78,696	−78,696	−25,696	.....
Offsetting Collections (for PD)	−7,184	−8,173	−8,173	−989	.....
TOTAL, SOUTHEASTERN POWER ADMINISTRATION	.....	.....	.....	.....	.....
SOUTHWESTERN POWER ADMINISTRATION					
Operation and Maintenance:					
Operation and Maintenance	11,082	15,517	15,517	+4,435	.....
Purchase Power and Wheeling	62,000	93,000	93,000	+31,000	.....
Program Direction	36,833	38,250	38,250	+1,417	.....
Construction	15,901	16,035	16,035	+134	.....
Subtotal, Operation and Maintenance	125,816	162,802	162,802	+36,986	.....
Less Alternative Financing (for O&M)	−4,591	−5,279	−5,279	−688	.....
Less Alternative Financing (for PPW)	−23,000	−23,000	−23,000	.....	.....
Less Alternative Financing (for Construction)	−10,901	−11,035	−11,035	−134	.....
Less Alternative Financing (for PD)	.....	.....	.....	.....	.....
Offsetting Collections (for PD)	−33,529	−34,882	−34,882	−1,353	.....
Offsetting Collections (for O&M)	−4,395	−7,998	−7,998	−3,603	.....
Offsetting Collections (for PPW)	−39,000	−70,000	−70,000	−31,000	.....
TOTAL, SOUTHWESTERN POWER ADMINISTRATION	10,400	10,608	10,608	+208	.....
WESTERN AREA POWER ADMINISTRATION					
Operation and Maintenance:					
Construction and Rehabilitation	35,185	47,189	47,189	+12,004	.....
Operation and Maintenance	81,983	85,229	85,229	+3,246	.....

Purchase Power and Wheeling	443,677	625,405	625,405	+181,728	.....
Program Direction	267,246	277,287	277,287	+10,041	.....
Subtotal, Operation and Maintenance	828,091	1,035,110	1,035,110	+207,019	.....
Less Alternative Financing (for O&M)	−7,122	−7,641	−7,641	−519	.....
Less Alternative Financing (for Construction)	−31,090	−38,219	−38,219	−7,129	.....
Less Alternative Financing (for PD)	−51,849	−54,868	−54,868	−3,019	.....
Less Alternative Financing (for PPW)	−273,677	−275,322	−275,322	−1,645	.....
Offsetting Collections (for PD)	−166,935	−171,661	−171,661	−4,726	.....
Offsetting Collections (for O&M)	−27,530	−29,180	−29,180	−1,650	.....
Purchase Power & Wheeling Financed from Offsetting (PL 108–447/109–103)	−170,000	−350,083	−350,083	−180,083	.....
Offsetting Collections—Colorado River Dam (PL 98–381)	−9,116	−9,404	−9,404	−288	.....
Use of Prior-Year Balances	.....	.....	.....	.....	.....
TOTAL, WESTERN AREA POWER ADMINISTRATION	90,772	98,732	98,732	+7,960	.....
FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND					
Falcon And Amistad Operation And Maintenance	7,545	7,928	7,928	+383	.....
Offsetting Collections—Falcon and Amistad Fund	−5,580	−6,102	−6,102	−522	.....
Less Alternative Financing—Falcon and Amistad Fund	−1,737	−1,598	−1,598	+139	.....
TOTAL, FALCON AND AMISTAD O&M FUND	228	228	228	.....	.....
TOTAL, POWER MARKETING ADMINISTRATIONS	101,400	109,568	109,568	+8,168	.....
FEDERAL ENERGY REGULATORY COMMISSION					
Federal Energy Regulatory Commission	466,426	508,400	508,400	+41,974	.....
FERC Revenues	−466,426	−508,400	−508,400	−41,974	.....
TOTAL, FEDERAL ENERGY REGULATORY COMMISSION	.....	.....	.....	.....	.....
General Provisions					
Colorado River Basin Fund (305(b))	2,000	.....	2,000	.....	+2,000
Defense Nuclear Nonproliferation Construction Project 99–D–143 Rescission	−282,133	.....	.....	+282,133	.....
Naval Reactors Rescission	−6,000	.....	.....	+6,000	.....
Guaranteed Loan Subsidy Rescission (sec 309)	.....	.....	.....	.....	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
New Loan Authority (sec 309)	.....	.....	.....	.....	.....
Total, General Provisions	−286,133	.....	2,000	+288,133	+2,000
GRAND TOTAL, DEPARTMENT OF ENERGY	44,855,624	49,004,440	49,345,050	+4,489,426	+340,610
(Total amount appropriated)	(45,143,757)	(49,004,440)	(49,345,050)	(+4,201,293)	(+340,610)
(Rescissions)	(−288,133)	.....	.....	(+288,133)	.....
(Rescissions of emergency funding)	.....	.....	.....	.....	.....
SUMMARY OF ACCOUNTS					
Energy Efficiency and Renewable Energy	3,200,000	4,018,885	3,799,000	+599,000	−219,885
State and Community Energy Programs	.....	726,897	.....	.....	−726,897
Manufacturing and Energy Supply Chains	.....	27,424	.....	.....	−27,424
Federal Energy Management Program	.....	169,661	.....	.....	−169,661
Cybersecurity, Energy Security, and Emergency Response	185,804	202,143	202,143	+16,339	.....
Electricity	277,000	297,386	362,000	+85,000	+64,614
Grid Deployment	.....	240,221	.....	.....	−240,221
Nuclear Energy	1,654,800	1,675,060	1,765,600	+110,800	+90,540
Fossil Energy and Carbon Management	825,000	893,160	880,000	+55,000	−13,160
Energy Projects	.....	.....	110,094	+110,094	+110,094
Naval Petroleum & Oil Shale Reserves	13,650	13,004	13,004	−646	.....
Strategic Petroleum Reserve	219,000	214,175	52,460	−166,540	−161,715
SPR Petroleum Account	7,350	8,000	8,000	+650	.....
Northeast Home Heating Oil Reserve	6,500	7,000	7,000	+500	.....
Energy Information Administration	129,087	144,480	144,000	+14,913	−480
Non-Defense Environmental Cleanup	333,863	323,249	373,583	+39,720	+50,334
Uranium Enrichment D&D Fund	860,000	822,421	869,000	+9,000	+46,579
Science	7,475,000	7,799,211	8,100,000	+625,000	+300,789
Nuclear Waste Disposal	27,500	10,205	10,205	−17,295	.....
Technology Transitions	19,470	21,558	21,558	+2,088	.....

Clean Energy Demonstrations	20,000	214,052	150,000	+130,000	−64,052
Defense Production Act Domestic Clean Energy Accelerator	.....	.....	500,000	+500,000	+500,000
Advanced Research Projects Agency-Energy	450,000	700,150	567,365	+117,365	−132,785
Title 17 Innovative technology loan guarantee program	29,000	206,206	31,206	+2,206	−175,000
Advanced Technology Vehicles Manufacturing Loan Program	5,000	9,800	9,800	+4,800	.....
Tribal Energy Loan Guarantee program	2,000	1,860	10,000	+8,000	+8,140
Indian Energy Policy and Programs	58,000	150,039	110,000	+52,000	−40,039
Departmental administration	240,000	397,203	260,000	+20,000	−137,203
Office of the Inspector General	78,000	106,808	92,000	+14,000	−14,808
Atomic Energy Defense Activities:	.....	.....	.....	.....	.....
National Nuclear Security Administration:					
Weapons Activities	15,920,000	16,486,298	16,986,298	+1,066,298	+500,000
Defense Nuclear Nonproliferation	2,354,000	2,346,257	2,538,000	+184,000	+191,743
Naval Reactors	1,918,000	2,081,445	2,081,445	+163,445	.....
Federal Salaries and Expenses	464,000	496,400	496,400	+32,400	.....
Subtotal, National Nuclear Security Admin	20,656,000	21,410,400	22,102,143	+1,446,143	+691,743
Defense Environmental Cleanup	6,710,000	7,105,863	7,064,084	+354,084	−41,779
Defense UED&D	573,333	.....	579,000	+5,667	+579,000
Other Defense Activities	985,000	978,351	1,040,237	+55,237	+61,886
Total, Atomic Energy Defense Activities	28,924,333	29,494,614	30,785,464	+1,861,131	+1,290,850
Power Marketing Administrations [1]:					
Southeastern Power Administration	.....	.....	.....	.....	.....
Southwestern Power Administration	10,400	10,608	10,608	+208	.....
Western Area Power Administration	90,772	98,732	98,732	+7,960	.....
Falcon and Amistad Operating and Maintenance Fund	228	228	228	.....	.....
Total, Power Marketing Administrations	101,400	109,568	109,568	+8,168	.....
Federal Energy Regulatory Commission:					
Salaries and Expenses	466,426	508,400	508,400	+41,974	.....
Revenues	−466,426	−508,400	−508,400	−41,974	.....
General Provision:					
Colorado River Basin Fund (305 (b))	2,000	.....	2,000	.....	+2,000
Defense Nuclear Nonproliferation Construction Project 99–D–143 Rescission	−282,133	.....	.....	+282,133	.....

DEPARTMENT OF ENERGY—Continued

[In thousands of dollars]

	2022 appropriations	Budget estimate	Committee recommendation	Committee recommendation compared to—	
				2022 appropriations	Budget estimate
Naval Reactors Rescission	−6,000	.....	.....	+6,000	.....
Subtotal, General Provisions	−286,133	.....	2,000	+288,133	+2,000
Total Summary of Accounts, Department of Energy	44,855,624	49,004,440	49,345,050	+4,489,426	+340,610
FUNCTION RECAP:					
DEFENSE	28,786,000	29,651,214	30,942,064	+2,156,064	+1,290,850
NON–DEFENSE	16,069,624	19,353,226	18,402,986	+2,333,362	−950,240

[1] Totals include alternative financing costs, reimbursable agreement funding, and power purchase and wheeling expenditures. Offsetting collection totals reflect funds collected for annual expenses, including power purchase and wheeling.

GENERAL PROVISIONS—DEPARTMENT OF ENERGY

Section 301. The bill includes a provision related to reprogramming.

Section 302. The bill includes a provision to authorize intelligence activities pending enactment of the fiscal year 2022 Intelligence Authorization Act.

Section 303. The bill includes a provision related to high-hazard nuclear facilities.

Section 304. The bill includes a provision regarding the approval of critical decision-2 and critical decision-3 for certain construction projects.

Section 305. The bill includes a provision to prohibit certain payments.

Section 306. The bill includes a provision regarding property disposition.

Section 307. The bill includes a provision transferring certain funds that may only be used for cleanup related activities at the Paducah, KY and Portsmouth, OH gaseous diffusion plants.

Section 308. The bill includes a provision that prohibits the use of certain funds in this title unless project management is conducted.

Section 309. The bill includes a provision related to the loan programs.

Section 310. The bill includes a provision regarding a pilot program for storage of used nuclear fuel.

TITLE IV

INDEPENDENT AGENCIES

APPALACHIAN REGIONAL COMMISSION

Appropriations, 2022	$195,000,000
Budget estimate, 2023	235,000,000
Committee recommendation	200,000,000

The Committee recommends $200,000,000 for the Appalachian Regional Commission [ARC].

Within available funds, the Committee recommends up to $13,000,000 to address the substance abuse crisis that disproportionally affects Appalachia.

Within available funds, the Committee recommends $16,000,000 for a program of industrial site and workforce development in Southern and South Central Appalachia, focused primarily on the automotive supplier sector and the aviation sector. $13,500,000 of that amount is recommended for activities in Southern Appalachia. The funds shall be distributed to States that have distressed counties in Southern and South Central Appalachia using the ARC Area Development Formula.

Within available funds, the Committee recommends $16,000,000 for a program of basic infrastructure improvements in distressed counties in Central Appalachia. Funds shall be distributed according to ARC's distressed counties formula and shall be in addition to the regular allocation to distressed counties.

Within available funds, the Committee recommends $15,000,000 to continue a program of high-speed broadband deployment in economically distressed counties within the North Central and Northern Appalachian regions.

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

SALARIES AND EXPENSES

Appropriations, 2022	$36,000,000
Budget estimate, 2023	41,401,000
Committee recommendation	41,936,000

The Committee recommends $41,936,000 for the Defense Nuclear Facilities Safety Board. Congress permanently authorized the Inspector General for the Nuclear Regulatory Commission to serve as the Inspector General for the Defense Nuclear Facilities Safety Board. The Committee recommendation includes $1,520,000 within the Office of Inspector General of the Nuclear Regulatory Commission to perform these services.

DELTA REGIONAL AUTHORITY

Appropriations, 2022	$30,100,000
Budget estimate, 2023	30,100,000
Committee recommendation	30,100,000

The Committee recommends $30,100,000 for the Delta Regional Authority.

Within available funds, not less than $15,000,000 shall be used for flood control, basic public infrastructure development and transportation improvements, which shall be allocated separate from the State formula funding method.

DENALI COMMISSION

Appropriations, 2022	$15,100,000
Budget estimate, 2023	15,100,000
Committee recommendation	17,000,000

The Committee recommends $17,000,000,000 for the Denali Commission.

NORTHERN BORDER REGIONAL COMMISSION

Appropriations, 2022	$35,000,000
Budget estimate, 2023	36,000,000
Committee recommendation	40,000,000

The Committee recommends $40,000,000 for the Northern Border Regional Commission [NBRC]. Within available funds, not less than $4,000,000 is recommended for initiatives that seek to address the decline in forest-based economies throughout the region and $1,250,000 is recommended for the State Capacity Building Grant Program authorized in the 2018 Farm Bill, provided that the funds support dedicated in-state resources focused on NBRC programs.

SOUTHEAST CRESCENT REGIONAL COMMISSION

Appropriations, 2022	$5,000,000
Budget estimate, 2023	7,000,000
Committee recommendation	7,000,000

The Committee recommends $7,000,000 for the Southeast Crescent Regional Commission.

SOUTHWEST BORDER REGIONAL COMMISSION

Appropriations, 2022	$2,500,000
Budget estimate, 2023	2,500,000
Committee recommendation	5,000,000

The Committee recommends $5,000,000 for the Southwest Border Regional Commission.

NUCLEAR REGULATORY COMMISSION

SALARIES AND EXPENSES

Appropriations, 2022	$873,000,000
Budget estimate, 2023	911,384,000
Committee recommendation	911,384,000

REVENUES

Appropriations, 2022	−$745,258,000
Budget estimate, 2023	−777,498,000
Committee recommendation	−777,498,000

NET APPROPRIATION

Appropriations, 2022	$128,600,000
Budget estimate, 2023	133,886,000
Committee recommendation	133,886,000

The Committee recommendation for the Nuclear Regulatory Commission [NRC] provides the following amounts:

[Dollars in thousands]

Account	Fiscal Year 2022 Enacted	Fiscal Year 2023 Request	Committee Recommendation
Nuclear Reactor Safety	$477,430	$490,673	$490,673
Nuclear Materials and Waste Safety	107,337	111,594	111,594
Decomissioning of Low-Level Waste	22,856	23,866	23,866
Integrated University Program	16,000	.....	16,000
Corporate Support	266,278	285,251	285,251
Total, Program Level	889,901	911,384	927,384
Savings and Carryover	−16,000	.....	−16,000
Total	873,901	911,384	911,384

The Commission is directed to provide budget request amounts rounded to the thousands in all tables in future budget request submissions.

Integrated University Program.—The Commission is directed to use $16,000,000 of prior year, unobligated balances for the Integrated University Program, including for grants to support research projects that do not align with programmatic missions but are critical to maintaining the discipline of nuclear science and engineering. Because the Commission has already collected fees corresponding to these activities in prior years, the Committee does not include these funds within the fee base calculation for determining authorized revenues, and does not provide authority to collect additional offsetting receipts for their use.

Reactor Oversight and Safety.—The Commission is directed to continue to provide regular briefings to the Committee on the Commission's current reactor oversight and safety program and on any proposed changes before they are implemented.

Budget Execution Plan.—The Commission is directed to provide to the Committee not later than 30 days after enactment of this act a specific budget execution plan. The plan shall include details at the product line level within each of the control points.

Advanced Nuclear Reactor Regulatory Infrastructure.—The recommendation includes $18,000,000 for the development of regulatory infrastructure for advanced nuclear technologies, which is not subject to the Commission's general fee recovery collection requirements. The Committee encourages the Commission to incorporate nuclear safeguards and security requirements into its development of the advanced reactor regulatory infrastructure and to work with the Department of Energy, the International Atomic En-

ergy Agency, and other groups in the formulation of its licensing requirements.

Accident Tolerant Fuels Program.—The Committee is encouraged by recent progress regarding lead test assemblies in the accident tolerant fuel [ATF] program. The Commission is directed to submit a report to the Committee on the preparedness for ATF licensing with a focus on what steps are being taken to ensure that licensing activities (including higher burnup and enrichment) support projected deployment schedules.

OFFICE OF INSPECTOR GENERAL

GROSS APPROPRIATION

Appropriations, 2022	$13,799,000
Budget estimate, 2023	15,769,000
Committee recommendation	15,769,000

REVENUES

Appropriations, 2022	−$11,442,000
Budget estimate, 2023	−12,655,000
Committee recommendation	−12,655,000

NET APPROPRIATION

Appropriations, 2022	$2,357,000
Budget estimate, 2023	3,114,000
Committee recommendation	3,114,000

The Committee recommends $15,769,000 for the Office of Inspector General, the same as the budget request, which is offset by revenues estimated at $12,655,000 for a net appropriation of $3,114,000. The Office of Inspector General serves both the Nuclear Regulatory Commission and the Defense Nuclear Facilities Safety Board, and the recommendation includes $1,520,000 for that purpose, which is not available from fee revenues.

NUCLEAR WASTE TECHNICAL REVIEW BOARD

Appropriations, 2022	$3,800,000
Budget estimate, 2023	3,945,000
Committee recommendation	3,945,000

The Committee recommends $3,945,000 for the Nuclear Waste Technical Review Board to be derived from the Nuclear Waste Fund.

GENERAL PROVISIONS

Section 401. The bill includes a provision regarding Congressional requests for information.

Section 402. The bill includes a provision regarding reprogramming.

TITLE V

GENERAL PROVISIONS

The following list of general provisions is recommended by the Committee:

Section 501. The bill includes a provision regarding influencing congressional action.

Section 502. The bill includes a provision regarding transfer authority.

Section 503. The bill includes a provision regarding environmental justice.

Section 504. The bill includes a provision regarding requirements for computer networks.

PROGRAM, PROJECT, AND ACTIVITY

In fiscal year 2023, the following information provides the definition of the term "program, project or activity" for departments and agencies under the jurisdiction of the Energy and Water Development and Related Agencies Appropriations Act. The term "program, project or activity" shall include the most specific level of budget items identified in the Energy and Water Development and Related Agencies Appropriations Act, 2023, and the explanatory statement accompanying the bill.

If a sequestration order is necessary pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99–177), in implementing the Presidential order, departments and agencies shall apply any percentage reduction required for fiscal year 2023 pursuant to the provisions of such Public Law to all items specified in the report accompanying the bill by the Senate Committee on Appropriations in support of the fiscal year 2023 budget estimates as modified by congressional action.

COMPLIANCE WITH PARAGRAPH 7, RULE XVI, OF THE STANDING RULES OF THE SENATE

Paragraph 7 of rule XVI requires Committee reports on general appropriations bills to identify each Committee amendment to the House bill "which proposes an item of appropriation which is not made to carry out the provisions of an existing law, a treaty stipulation, or an act or resolution previously passed by the Senate during that session."

The Committee is filing an original bill, which is not covered under this rule, but reports this information in the spirit of full disclosure.

The Committee recommends funding for the following programs or activities which currently lack authorization for fiscal year 2023:

[In thousand of dollars]

Agency/Program	Last Year of Authorization	Authorization Level	Appropriation in Last Year of Authorization	Net Appropriation in this Bill
Corps FUSRAP [1]	.....	.....	.....	278,338
Reclamation, WIIN Act, Subtitle J, Sections 4007, 4009(a) and 4009(c)	2021	415,000	166,000	166,000
Nuclear Energy Infrastructure and Facilities	2009	145,000	245,000	342,300
Nuclear Energy Safeguards and Security	2022	149,800	149,800	156,600
Energy Information Administration	1984	not specified	55,870	144,480
Office of Science	2013	6,007,000	4,876,000	8,100,000
Departmental Administration	1984	246,963	185,682	307,137
Atomic Energy Defense Activities:				
National Nuclear Security Administration:				
Weapons Activities	2022	15,981,328	15,920,000	16,986,298
Defense Nuclear Nonproliferation	2022	1,957,000	2,354,000	2,538,000
Naval Reactors	2022	1,860,705	1,918,000	2,081,445
Federal Salaries and Expenses	2022	464,000	464,000	496,400
Defense Environmental Cleanup	2022	6,480,759	6,710,000	7,064,084
Other Defense Activities	2022	920,000	985,000	1,040,237
Power Marketing Administrations:				
Southwestern	1984	40,254	36,229	10,608
Western Area	1984	259,700	194,630	98,732
Federal Energy Regulatory Commission	1984	not specified	29,582	.....
Defense Nuclear Facilities Safety Board	2022	31,000	36,000	41,401
Nuclear Regulatory Commission	1985	460,000	448,200	137,000

[1] Program was initiated in 1972 and has never received a separate authorization

COMPLIANCE WITH PARAGRAPH 12, RULE XXVI, OF THE STANDING RULES OF THE SENATE

Paragraph 12 of rule XXVI requires that Committee reports on a bill or joint resolution repealing or amending any statute or part of any statute include "(a) the text of the statute or part thereof which is proposed to be repealed; and (b) a comparative print of that part of the bill or joint resolution making the amendment and of the statute or part thereof proposed to be amended, showing by stricken-through type and italics, parallel columns, or other appropriate typographical devices the omissions and insertions which would be made by the bill or joint resolution if enacted in the form recommended by the Committee."

In compliance with this rule, changes in existing law proposed to be made by the bill are shown as follows: existing law to be omitted is enclosed in black brackets; new matter is printed in italic; and existing law in which no change is proposed is shown in roman.

TITLE 42—THE PUBLIC HEALTH AND WELFARE

CHAPTER 109B—SECURE WATER

§ 10364. Water management improvement

(a) Authorization of grants and cooperative agreements

* * * * * * *

(e) Authorization of appropriations

There is authorized to be appropriated to carry out this section [$750,000,000] *$820,000,000*, to remain available until expended.

TITLE 43—PUBLIC LANDS

CHAPTER 40—RECLAMATION STATES EMERGENCY DROUGHT RELIEF

SUBCHAPTER I—DROUGHT PROGRAM

§ 2214. Applicable period of drought program

(c) Termination of authority

The authorities established under this subchapter shall terminate on September 30, [2022] *2023*.

* * * * * * *

SUBCHAPTER III—GENERAL AND MISCELLANEOUS PROVISIONS

§ 2241. Authorization of appropriations

Except as otherwise provided in section 2243 of this title (relating to temperature control devices at Shasta Dam, California), there is authorized to be appropriated not more than [$120,000,000] *$130,000,000* in total for the period of fiscal years 2006 through [2022] *2023*.

WATER RESOURCES DEVELOPMENT ACT OF 2000, PUBLIC LAW 106–541

TITLE V—MISCELLANEOUS PROVISIONS

SEC. 529. LAS VEGAS, NEVADA.

(a) DEFINITIONS.—

* * * * * * *

(b) PARTICIPATION IN PROJECT.—

(1) IN GENERAL.—

* * * * * * *

(3) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated [$30,000,000] *$40,000,000* to carry out this section.

WATER SUPPLY, RELIABILITY, AND ENVIRONMENTAL IMPROVEMENT ACT, 2005, PUBLIC LAW 108–361

TITLE I—CALIFORNIA WATER SECURITY AND ENVIRONMENTAL ENHANCEMENT

SEC. 101. SHORT TITLE.

* * * * * * *

SEC. 103. BAY DELTA PROGRAM.

(a) IN GENERAL.—

* * * * * * *

(e) NEW AND EXPANDED AUTHORIZATIONS FOR FEDERAL AGENCIES.—

(1) IN GENERAL.—The heads of the Federal agencies described in this subsection are authorized to carry out the activities described in subsection (f) during each of fiscal years 2005 through [2022] *2023*, in coordination with the Governor.

* * * * * * *

(f) DESCRIPTION OF ACTIVITIES UNDER NEW AND EXPANDED AUTHORIZATIONS.—

(1) CONVEYANCE.— * * *

* * * * * * *

(3) LEVEE STABILITY.—

(A) IN GENERAL.— * * *

(B) REPORT.—Not later than 180 days after the date of enactment of this Act, the Secretary of the Army shall submit to the appropriate authorizing and appropriating committees of the Senate and the House of Representatives a report that describes the levee stability reconstruction projects and priorities that will be carried out under this title during each of fiscal years 2005 through [2022] *2023*.

* * * * * * *

(4) PROGRAM MANAGEMENT, OVERSIGHT, AND COORDINATION.—

(A) IN GENERAL.—Of the amounts authorized to be appropriated under section 109, not more than [$25,000,000] *$30,000,000* may be expended by the Secretary or the other heads of Federal agencies, either directly or through grants, contracts, or cooperative agreements with agencies of the State, for—

* * * * * * *

SEC. 107. FEDERAL SHARE OF COSTS.

(a) IN GENERAL.—The Federal share of the cost of implementing the Calfed Bay-Delta Program for fiscal years 2005 through [2022] *2023* in the aggregate, as set forth in the Record of Decision, shall not exceed 33.3 percent.

* * * * * * *

SEC. 109. AUTHORIZATION OF APPROPRIATION.

There are authorized to be appropriated to the Secretary and the heads of the Federal agencies to pay the Federal share of the cost of carrying out the new and expanded authorities described in subsections (e) and (f) of section 103 $389,000,000 for the period of fiscal years 2005 through [2022] *2023*, to remain available until expended.

OMNIBUS PUBLIC LAND MANAGEMENT ACT OF 2009, PUBLIC LAW 111–11

TITLE IX—BUREAU OF RECLAMATION AUTHORIZATIONS

SUBTITLE B—PROJECT AUTHORIZATIONS

SEC. 9016. RIO GRANDE PUEBLOS, NEW MEXICO.

* * * * * * *

(g) AUTHORIZATION OF APPROPRIATIONS.

(1) STUDY.—* * *

(2) PROJECTS.—There is authorized to be appropriated to carry out subsection (d) $6,000,000 for each of fiscal years 2010 through [2022] *2023*.

DISCLOSURE OF CONGRESSIONALLY DIRECTED SPENDING ITEMS

The Constitution vests in the Congress the power of the purse. The Committee believes strongly that Congress should make the decisions on how to allocate the people's money.

As defined in Rule XLIV of the Standing Rules of the Senate, the term "congressionally directed spending item" means a provision or report language included primarily at the request of a Senator, providing, authorizing, or recommending a specific amount of discretionary budget authority, credit authority, or other spending authority for a contract, loan, loan guarantee, grant, loan authority, or other expenditure with or to an entity, or targeted to a specific State, locality or congressional district, other than through a statutory or administrative, formula-driven, or competitive award process.

For each item, a Member is required to provide a certification that neither the Member nor the Member's immediate family has a pecuniary interest in such congressionally directed spending item. Such certifications are available to the public on the website of the Senate Committee on Appropriations (https://www.appropriations.senate.gov/congressionally-directed-spending-requests).

Following is a list of congressionally directed spending items included in the Senate recommendation discussed in this report, along with the name of each Senator who submitted a request to the Committee of jurisdiction for each item so identified. Neither the Committee recommendation nor this report contains any limited tax benefits or limited tariff benefits as defined in rule XLIV.

CONGRESSIONALLY DIRECTED SPENDING ITEMS

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Army Corps of Engineers (Civil).	Construction	Acequias Environmental Infrastructure, NM; U.S. Army Corps of Engineers.	.....	9,600	9,600	Heinrich, Luján
Army Corps of Engineers (Civil).	Construction	Albany, GA; U.S. Army Corps of Engineers	.....	4,000	4,000	Ossoff
Army Corps of Engineers (Civil).	Construction	Atchison, KS CSO Environmental Infrastructure; U.S. Army Corps of Engineers.	.....	500	500	Moran
Army Corps of Engineers (Civil).	Construction	Barnegat Inlet to Little Egg Inlet, NJ; U.S. Army Corps of Engineers	.....	20,000	20,000	Booker, Menendez
Army Corps of Engineers (Civil).	Construction	Calaveras County, Section 219, CA; U.S. Army Corps of Engineers ..	.....	1,000	1,000	Feinstein, Padilla
Army Corps of Engineers (Civil).	Construction	Calcasieu River and Pass, LA; U.S. Army Corps of Engineers	.....	9,000	9,000	Cassidy
Army Corps of Engineers (Civil).	Construction	Central West Virginia Environmental Infrastructure, WV (Section 571); U.S. Army Corps of Engineers.	.....	10,000	10,000	Capito
Army Corps of Engineers (Civil).	Construction	Charleston Harbor, SC; U.S. Army Corps of Engineers	.....	10,000	10,000	Graham
Army Corps of Engineers (Civil).	Construction	Chesapeake Bay Environmental Restoration & Protection Program, DC, DE, MD, NY, PA, VA & WV (Hoopers Island, MD); U.S. Army Corps of Engineers.	.....	100	100	Van Hollen
Army Corps of Engineers (Civil).	Construction	Chesapeake Bay Environmental Restoration & Protection Program, DC, DE, MD, NY, PA, VA & WV; U.S. Army Corps of Engineers.	.....	11,250	11,250	Cardin, Casey
Army Corps of Engineers (Civil).	Construction	Chesapeake Bay Oyster Recovery, MD and VA; U.S. Army Corps of Engineers.	3,500	4,000	7,500	Van Hollen
Army Corps of Engineers (Civil).	Construction	Columbia River Channel Improvements, OR & WA; U.S. Army Corps of Engineers.	.....	4,000	4,000	Merkley, Wyden
Army Corps of Engineers (Civil).	Construction	Delaware Coast Protection, DE; U.S. Army Corps of Engineers	.....	150	150	Carper, Coons
Army Corps of Engineers (Civil).	Construction	Des Plaines River, IL (Phase II); U.S. Army Corps of Engineers	.....	11,000	11,000	Durbin
Army Corps of Engineers (Civil).	Construction	Desert Hot Springs, Section 219, CA; U.S. Army Corps of Engineers	.....	800	800	Feinstein, Padilla
Army Corps of Engineers (Civil).	Construction	Desoto County Regional Wasteway System, MS; U.S. Army Corps of Engineers.	.....	7,835	7,835	Hyde-Smith, Wicker

CONGRESSIONALLY DIRECTED SPENDING ITEMS—Continued

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Army Corps of Engineers (Civil).	Construction	Duwamish and Green River Basin, WA; U.S. Army Corps of Engineers.	.....	2,000	2,000	Cantwell, Murray
Army Corps of Engineers (Civil).	Construction	Hamilton Airfield Wetlands Restoration, CA; U.S. Army Corps of Engineers.	.....	40,000	40,000	Feinstein, Padilla
Army Corps of Engineers (Civil).	Construction	Hudson-Raritan Estuary Ecosystem Restoration Stony Creek Marsh, NY & NJ; U.S. Army Corps of Engineers.	.....	500	500	Schumer
Army Corps of Engineers (Civil).	Construction	Lakes Marion and Moultrie, SC; U.S. Army Corps of Engineers	.....	10,512	10,512	Graham
Army Corps of Engineers (Civil).	Construction	Lugert-Altus Irrigation District, OK; U.S. Army Corps of Engineers	.....	5,000	5,000	Inhofe
Army Corps of Engineers (Civil).	Construction	Madison and St. Clair Counties, Cahokia Heights, IL; U.S. Army Corps of Engineers.	.....	3,500	3,500	Durbin
Army Corps of Engineers (Civil).	Construction	Madison and St. Clair Counties, Wood River & Belleville, IL; U.S. Army Corps of Engineers.	.....	3,500	3,500	Durbin
Army Corps of Engineers (Civil).	Construction	McClellan-Kerr Arkansas River Navigation System (MKARNS), AR & OK; U.S. Army Corps of Engineers.	.....	10,000	10,000	Inhofe
Army Corps of Engineers (Civil).	Construction	Michigan Combined Sewer Overflows, Lansing, MI; U.S. Army Corps of Engineers.	.....	6,000	6,000	Peters, Stabenow
Army Corps of Engineers (Civil).	Construction	Mud Mountain Dam, WA; U.S. Army Corps of Engineers	.....	10,612	10,612	Cantwell, Murray
Army Corps of Engineers (Civil).	Construction	Murrieta Creek, CA; U.S. Army Corps of Engineers	.....	8,500	8,500	Feinstein, Padilla
Army Corps of Engineers (Civil).	Construction	Norfolk Harbor and Channels, Craney Island, VA; U.S. Army Corps of Engineers.	.....	30,000	30,000	Kaine, Warner
Army Corps of Engineers (Civil).	Construction	Ohio Environmental Infrastructure, Section 594, Avon Lake, OH; U.S. Army Corps of Engineers.	.....	1,000	1,000	Brown
Army Corps of Engineers (Civil).	Construction	Ohio Environmental Infrastructure, Section 594, Canfield Township, OH; U.S. Army Corps of Engineers.	.....	1,000	1,000	Brown
Army Corps of Engineers (Civil).	Construction	Ohio Environmental Infrastructure, Section 594, Cleveland, OH; U.S. Army Corps of Engineers.	.....	1,000	1,000	Brown
Army Corps of Engineers (Civil).	Construction	Ohio Riverfront, Cincinnati, OH; U.S. Army Corps of Engineers	.....	900	900	Brown

Army Corps of Engineers (Civil).	Construction	Pawcatuck River Coastal Storm Risk Management, RI; U.S. Army Corps of Engineers.	.....	10,000	10,000	Reed
Army Corps of Engineers (Civil).	Construction	Puget Sound Nearshore Marine Habitat Restoration, WA; U.S. Army Corps of Engineers.	.....	6,000	6,000	Cantwell, Murray
Army Corps of Engineers (Civil).	Construction	South Central, PA, Environmental Restoration, Allegheny County; U.S. Army Corps of Engineers.	.....	2,000	2,000	Casey
Army Corps of Engineers (Civil).	Construction	South Central, PA, Environmental Restoration; U.S. Army Corps of Engineers.	.....	4,000	4,000	Casey
Army Corps of Engineers (Civil).	Construction	Southern West Virginia Environmental Infrastructure, WV (Section 340); U.S. Army Corps of Engineers.	.....	10,000	10,000	Capito
Army Corps of Engineers (Civil).	Construction	Southwest Coastal Louisiana Hurricane Protection, LA; U.S. Army Corps of Engineers.	.....	10,000	10,000	Cassidy
Army Corps of Engineers (Civil).	Construction	Townsends Inlet to Cape May Inlet, NJ; U.S. Army Corps of Engineers.	.....	1,000	1,000	Menendez
Army Corps of Engineers (Civil).	Construction	Unalaska (Dutch Harbor) Channels, AK; U.S. Army Corps of Engineers.	.....	25,600	25,600	Murkowski
Army Corps of Engineers (Civil).	Construction	Upper Mississippi River—Illinois WW System, IL, IA, MN, MO & WI; U.S. Army Corps of Engineers.	.....	49,300	49,300	Baldwin, Blunt, Duckworth, Durbin, Klobuchar, Smith
Army Corps of Engineers (Civil).	Construction	Western Rural Water—ARIZONA, IDAHO, MONTANA, RURAL NEVADA, NEW MEXICO, RURAL UTAH, AND WYOMING—New Mexico Environmental Infrastructure, NM; U.S. Army Corps of Engineers.	.....	11,000	11,000	Heinrich, Luján
Army Corps of Engineers (Civil).	Construction	Western Rural Water—ARIZONA, IDAHO, MONTANA, RURAL NEVADA, NEW MEXICO, RURAL UTAH, AND WYOMING (Douglas, AZ); U.S. Army Corps of Engineers.	.....	2,175	2,175	Kelly, Sinema
Army Corps of Engineers (Civil).	Construction	Western Rural Water—ARIZONA, IDAHO, MONTANA, RURAL NEVADA, NEW MEXICO, RURAL UTAH, AND WYOMING (Fort Tuthill, AZ); U.S. Army Corps of Engineers.	.....	3,300	3,300	Kelly, Sinema
Army Corps of Engineers (Civil).	Construction/ Dam Safety	Cave Buttes Dam Feasibility Study , AZ; U.S. Army Corps of Engineers.	.....	200	200	Kelly, Sinema
Army Corps of Engineers (Civil).	Construction/ Section 103	Lakeshore Drive Seawall Restoration, MI; U.S. Army Corps of Engineers.	.....	100	100	Peters
Army Corps of Engineers (Civil).	Construction/ Section 103	North Beach Boardwalk Erosion Control & Shoreline Resiliency, VA; U.S. Army Corps of Engineers.	.....	50	50	Kaine, Warner
Army Corps of Engineers (Civil).	Construction/ Section 14	BIA Route 2 Near on the Tree, SD; U.S. Army Corps of Engineers	.....	100	100	Rounds
Army Corps of Engineers (Civil).	Construction/ Section 14	Ring Thunder Road, Mellette County, SD; U.S. Army Corps of Engineers.	.....	1,300	1,300	Rounds
Army Corps of Engineers (Civil).	Construction/ Section 204	Hampton Roads Beneficial Use, VA; U.S. Army Corps of Engineers ..	.....	200	200	Kaine, Warner

CONGRESSIONALLY DIRECTED SPENDING ITEMS—Continued

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Army Corps of Engineers (Civil).	Construction/ Section 205	Grand Rapids Riverfront, MI; U.S. Army Corps of Engineers		100	100	Peters, Stabenow
Army Corps of Engineers (Civil).	Construction/ Section 205	Jefferson Chalmers Area, MI; U.S. Army Corps of Engineers		300	300	Peters
Army Corps of Engineers (Civil).	Construction/ Section 205	Silver Creek Resiliency, RI; U.S. Army Corps of Engineers		50	50	Reed
Army Corps of Engineers (Civil).	Construction/ Section 206	Upper Santa Clara River Watershed Management Project, CA; U.S. Army Corps of Engineers.		50	50	Feinstein, Padilla
Army Corps of Engineers (Civil).	Investigations	Atlantic Intracoastal Waterway, North Landing Bridge, VA; U.S. Army Corps of Engineers.		5,000	5,000	Kaine, Warner
Army Corps of Engineers (Civil).	Investigations	Bonneville Lock and Dam, Tribal Housing, WA; U.S. Army Corps of Engineers.		100	100	Cantwell, Murray
Army Corps of Engineers (Civil).	Investigations	Brunswick County Beaches (Holden Beach), NC; U.S. Army Corps of Engineers.		1,000	1,000	Burr
Army Corps of Engineers (Civil).	Investigations	Brunswick County Beaches (Oak Island), NC; U.S. Army Corps of Engineers.		500	500	Burr
Army Corps of Engineers (Civil).	Investigations	Brunswick Harbor, GA; U.S. Army Corps of Engineers		1,600	1,600	Ossoff, Warnock
Army Corps of Engineers (Civil).	Investigations	Charleston Peninsula Study, SC; U.S. Army Corps of Engineers		13,325	13,325	Graham
Army Corps of Engineers (Civil).	Investigations	Charleston, SC Tidal and Inland Flooding—Flood Risk Management; U.S. Army Corps of Engineers.		200	200	Graham
Army Corps of Engineers (Civil).	Investigations	Columbia River Turning Basin Navigation Improvements, WA & OR; U.S. Army Corps of Engineers.		900	900	Cantwell, Murray
Army Corps of Engineers (Civil).	Investigations	Deepening Study for Tennessee—Tombigbee Waterway (TTWW), AL and MS and Black Warrior and Tombigbee (BWT) Rivers; U.S. Army Corps of Engineers.		2,600	2,600	Shelby
Army Corps of Engineers (Civil).	Investigations	Folly Beach, SC; U.S. Army Corps of Engineers		500	500	Graham
Army Corps of Engineers (Civil).	Investigations	Great Lakes Coastal Resiliency Study, IL, IN, MI, MN, NY, OH, PA & WI; U.S. Army Corps of Engineers.	600	2,400	3,000	Schumer
Army Corps of Engineers (Civil).	Investigations	Gulfport Harbor, MS; U.S. Army Corps of Engineers		200	200	Hyde-Smith, Wicker

Army Corps of Engineers (Civil).	Investigations	Hartford and East Hartford, CT; U.S. Army Corps of Engineers		1,000	1,000	Blumenthal, Murphy
Army Corps of Engineers (Civil).	Investigations	Homer Navigation Improvements, AK; U.S. Army Corps of Engineers		300	300	Murkowski
Army Corps of Engineers (Civil).	Investigations	John Day Lock and Dam, Tribal Housing, OR & WA; U.S. Army Corps of Engineers.		200	200	Cantwell, Murray
Army Corps of Engineers (Civil).	Investigations	Lower Missouri Basin—Brunswick L–246, MO; U.S. Army Corps of Engineers.		500	500	Blunt
Army Corps of Engineers (Civil).	Investigations	Lower Missouri Basin—Holt County, MO; U.S. Army Corps of Engineers.		600	600	Blunt
Army Corps of Engineers (Civil).	Investigations	Lower Missouri Basin—Jefferson City L–142, MO; U.S. Army Corps of Engineers.		500	500	Blunt
Army Corps of Engineers (Civil).	Investigations	Menominee River Deepening, MI & WI; U.S. Army Corps of Engineers.		600	600	Baldwin, Peters, Stabenow
Army Corps of Engineers (Civil).	Investigations	New York and New Jersey Harbor Deepening and Channel Improvements Study, NY & NJ; U.S. Army Corps of Engineers.		1,000	1,000	Booker, Menendez
Army Corps of Engineers (Civil).	Investigations	Northern California Streams, Lower Cache Creek, Yolo County, Woodland & Vicinity, CA; U.S. Army Corps of Engineers.		5,000	5,000	Feinstein, Padilla
Army Corps of Engineers (Civil).	Investigations	South Fork of the South Branch of the Chicago River, IL; U.S. Army Corps of Engineers.		1,300	1,300	Durbin
Army Corps of Engineers (Civil).	Investigations	St. George Harbor Improvement, AK; U.S. Army Corps of Engineers		2,500	2,500	Murkowski
Army Corps of Engineers (Civil).	Investigations	Tacoma Harbor, WA; U.S. Army Corps of Engineers		1,500	1,500	Cantwell, Murray
Army Corps of Engineers (Civil).	Investigations	Upper Guyandotte Feasibility Study, WV; U.S. Army Corps of Engineers.		250	250	Capito
Army Corps of Engineers (Civil).	Investigations	Upper Yuba River, Comprehensive Study, CA; U.S. Army Corps of Engineers.		300	300	Feinstein, Padilla
Army Corps of Engineers (Civil).	Investigations	Watertown and Vicinity, SD; U.S. Army Corps of Engineers		850	850	Rounds
Army Corps of Engineers (Civil).	Investigations	Willamette River Environmental Dredging, OR; U.S. Army Corps of Engineers.		374	374	Merkley, Wyden
Army Corps of Engineers (Civil).	Investigations	Wilmington Harbor Navigation Improvement Project, NC; U.S. Army Corps of Engineers.		1,500	1,500	Burr, Tillis
Army Corps of Engineers (Civil).	Investigations/ Tribal Partnership Program.	Lower Moreau River, SD; U.S. Army Corps of Engineers		230	230	Rounds
Army Corps of Engineers (Civil).	Investigations/ Tribal Partnership Program.	Thunder Butte Flood Risk Management, SD; U.S. Army Corps of Engineers.		430	430	Rounds
Army Corps of Engineers (Civil).	Mississippi River and Tributaries/ Construction.	Bayou Meto Basin, AR; U.S. Army Corps of Engineers		14,000	14,000	Boozman

CONGRESSIONALLY DIRECTED SPENDING ITEMS—Continued

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Army Corps of Engineers (Civil).	Mississippi River and Tributaries/ Construction.	Grand Prairie Region, AR; U.S. Army Corps of Engineers	.....	12,000	12,000	Boozman
Army Corps of Engineers (Civil).	Mississippi River and Tributaries/ Construction.	Morganza to the Gulf, LA; U.S. Army Corps of Engineers	.....	31,000	31,000	Cassidy
Army Corps of Engineers (Civil).	Mississippi River and Tributaries/ Construction.	Yazoo Basin, Delta Headwaters Project, MS; U.S. Army Corps of Engineers.	.....	7,400	7,400	Hyde-Smith
Army Corps of Engineers (Civil).	Mississippi River and Tributaries/ Construction.	Yazoo Basin, Upper Yazoo Projects, MS; U.S. Army Corps of Engineers.	.....	25,000	25,000	Hyde-Smith
Army Corps of Engineers (Civil).	Mississippi River and Tributaries/ Construction.	Yazoo Basin, Yazoo Backwater Area, MS; U.S. Army Corps of Engineers.	.....	4,500	4,500	Hyde-Smith, Wicker
Army Corps of Engineers (Civil).	Operation & Maintenance	Alabama River Lakes, AL; U.S. Army Corps of Engineers	23,248	6,700	29,948	Shelby
Army Corps of Engineers (Civil).	Operation & Maintenance	Apalachicola, Chattahoochee and Flint Rivers, GA, AL & FL; U.S. Army Corps of Engineers.	1,495	356	1,851	Shelby
Army Corps of Engineers (Civil).	Operation & Maintenance	Applegate Lake, Cole River Hatchery, OR; U.S. Army Corps of Engineers.	.....	247	247	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Baltimore Harbor & Channels (50 foot), MD—Tangier Island Beneficial Use, VA; U.S. Army Corps of Engineers.	24,750	300	25,050	Kaine, Warner
Army Corps of Engineers (Civil).	Operation & Maintenance	Black Warrior & Tombigbee Rivers (BWT), AL; U.S. Army Corps of Engineers.	63,945	7,250	71,195	Shelby
Army Corps of Engineers (Civil).	Operation & Maintenance	Branford Harbor, CT; U.S. Army Corps of Engineers	.....	380	380	Blumenthal, Murphy
Army Corps of Engineers (Civil).	Operation & Maintenance	Cedar Creek, DE; U.S. Army Corps of Engineers	.....	1,110	1,110	Carper, Coons
Army Corps of Engineers (Civil).	Operation & Maintenance	Chatham (Stage) Harbor, MA; U.S. Army Corps of Engineers	.....	800	800	Markey, Warren
Army Corps of Engineers (Civil).	Operation & Maintenance	Coos Bay, OR; U.S. Army Corps of Engineers	8,048	10,528	18,576	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Coquille River, OR; U.S. Army Corps of Engineers	574	320	894	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Dauphin Island Bay, AL; U.S. Army Corps of Engineers	.....	7,000	7,000	Shelby

Army Corps of Engineers (Civil).	Operation & Maintenance	Dunkirk Harbor, NY; U.S. Army Corps of Engineers	3	4,750	4,753	Schumer
Army Corps of Engineers (Civil).	Operation & Maintenance	George's River, ME; U.S. Army Corps of Engineers	.....	500	500	Collins
Army Corps of Engineers (Civil).	Operation & Maintenance	Great Sodus Bay Harbor, Breakwater, NY; U.S. Army Corps of Engineers.	.....	20,000	20,000	Schumer
Army Corps of Engineers (Civil).	Operation & Maintenance	Guilford Harbor, Guilford, CT; U.S. Army Corps of Engineers	.....	500	500	Blumenthal, Murphy
Army Corps of Engineers (Civil).	Operation & Maintenance	Isle au Haut Thoroughfare, ME; U.S. Army Corps of Engineers	.....	150	150	Collins, King
Army Corps of Engineers (Civil).	Operation & Maintenance	Intercoastal Waterway, Rehoboth Bay to Delaware Bay, DE; U.S. Army Corps of Engineers.	550	7,000	7,550	Carper
Army Corps of Engineers (Civil).	Operation & Maintenance	James River Channel, VA; U.S. Army Corps of Engineers	420	10,696	11,116	Kaine, Warner
Army Corps of Engineers (Civil).	Operation & Maintenance	Jim Woodruff Lock and Dam, Lake Seminole, FL, AL & GA; U.S. Army Corps of Engineers.	7,681	250	7,931	Shelby
Army Corps of Engineers (Civil).	Operation & Maintenance	John Day Lock & Dam, OR & WA; U.S. Army Corps of Engineers	7,533	960	8,493	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Lost Creek Lake, Cole Rivers Hatchery, OR; U.S. Army Corps of Engineers.	.....	1,995	1,995	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Manele Small Boat Harbor, HI; U.S. Army Corps of Engineers	.....	542	542	Schatz
Army Corps of Engineers (Civil).	Operation & Maintenance	Manteo (Shallowbag) Bay, NC; U.S. Army Corps of Engineers	1,420	5,845	7,265	Burr
Army Corps of Engineers (Civil).	Operation & Maintenance	McClellan-Kerr Arkansas River Navigation System (MKARNS), OK; U.S. Army Corps of Engineers.	69,197	18,300	87,497	Inhofe
Army Corps of Engineers (Civil).	Operation & Maintenance	Middle Rio Grande Endangered Species Collaborative Program, NM; U.S. Army Corps of Engineers.	.....	2,000	2,000	Heinrich, Luján
Army Corps of Engineers (Civil).	Operation & Maintenance	Mount St. Helens Sediment Control, WA; U.S. Army Corps of Engineers.	696	160	856	Cantwell, Murray
Army Corps of Engineers (Civil).	Operation & Maintenance	New York and New Jersey Harbor, NY & NJ (DMMP); U.S. Army Corps of Engineers.	.....	3,000	3,000	Booker, Menendez
Army Corps of Engineers (Civil).	Operation & Maintenance	Oswego Harbor, NY; U.S. Army Corps of Engineers	5,971	12,000	17,971	Schumer
Army Corps of Engineers (Civil).	Operation & Maintenance	Rollinson Channel, NC; U.S. Army Corps of Engineers	2,605	1,060	3,665	Burr
Army Corps of Engineers (Civil).	Operation & Maintenance	Scarborough River, ME; U.S. Army Corps of Engineers	.....	4,800	4,800	Collins
Army Corps of Engineers (Civil).	Operation & Maintenance	Skipanon Channel, OR; U.S. Army Corps of Engineers	9	50	59	Merkley, Wyden

CONGRESSIONALLY DIRECTED SPENDING ITEMS—Continued

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Army Corps of Engineers (Civil).	Operation & Maintenance	Stony Creek, CT; U.S. Army Corps of Engineers	.....	600	600	Blumenthal, Murphy
Army Corps of Engineers (Civil).	Operation & Maintenance	Tillamook Bay and Bar, OR; U.S. Army Corps of Engineers	59	330	389	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Tuttle Creek Lake, KS; U.S. Army Corps of Engineers	3,061	2,800	5,861	Moran
Army Corps of Engineers (Civil).	Operation & Maintenance	Umpqua River, OR; U.S. Army Corps of Engineers	1,278	702	1,980	Merkley, Wyden
Army Corps of Engineers (Civil).	Operation & Maintenance	Walter F George Lock and Dam, AL & GA; U.S. Army Corps of Engineers.	8,890	2,250	11,140	Shelby
Army Corps of Engineers (Civil).	Operation & Maintenance	Waterway Connecting Pamlico Sound and Beaufort Harbor, NC; U.S. Army Corps of Engineers.	.....	2,615	2,615	Burr
Army Corps of Engineers (Civil).	Operation & Maintenance	Wells Harbor, ME; U.S. Army Corps of Engineers	.....	1,000	1,000	Collins
Department of Energy	Energy Projects	Accelerating Hydrogen Research in NY to Support Deployment of Clean Energy and Clean Industry; University at Buffalo.	.....	250	250	Gillibrand, Schumer
Department of Energy	Energy Projects	Alaska Liquid Natural Gas Pipeline Front-End Engineering and Design (FEED); Alaska Gasline Development Corporation.	.....	4,000	4,000	Murkowski
Department of Energy	Energy Projects	Albuquerque Public Housing Electrification; Albuquerque Housing Authority.	.....	1,700	1,700	Heinrich
Department of Energy	Energy Projects	Ambler Tank Farm; City of Ambler	.....	650	650	Murkowski
Department of Energy	Energy Projects	BioGas Turbine Driven Blower; City of Flint	.....	1,000	1,000	Stabenow
Department of Energy	Energy Projects	Bluefield Battery Prototyping Laboratory—Phase 1; Center for Applied Research & Technology, Inc.	.....	328	328	Capito, Manchin
Department of Energy	Energy Projects	Brandon Senior Citizens Center Solar Project; Brandon Senior Citizens Center.	.....	7	7	Sanders
Department of Energy	Energy Projects	Brewer Recreational Facility Energy Modernization Project; Town of Brewer.	.....	232	232	Collins
Department of Energy	Energy Projects	Caliente—Advanced Metering Infrastructure; City of Caliente	.....	148	148	Cortez Masto, Rosen
Department of Energy	Energy Projects	California State Maritime Academy Academic Microgrid; California State University Maritime Academy.	.....	1,000	1,000	Feinstein, Padilla
Department of Energy	Energy Projects	Central Maine Community College—Renewable Energy Project; Central Maine Community College.	.....	500	500	King

Department of Energy	Energy Projects	Chicago Libraries Solar Power Project; City of Chicago		1,000	1,000	Durbin
Department of Energy	Energy Projects	City of Kenosha Solar Panels; City of Kenosha		3,000	3,000	Baldwin
Department of Energy	Energy Projects	City of Madison Truax Apartment Solar Project; City of Madison		1,500	1,500	Baldwin
Department of Energy	Energy Projects	City of Racine Storage Garage Site; City of Racine		1,235	1,235	Baldwin
Department of Energy	Energy Projects	City of Santa Clara—Fire Station Microgrid Project; City of Santa Clara.		500	500	Feinstein, Padilla
Department of Energy	Energy Projects	Clark County—Energy Efficiency; Clark County		1,000	1,000	Cortez Masto, Rosen
Department of Energy	Energy Projects	Clean Energy for Facilities Project; City of Northglenn, CO		800	800	Bennet, Hickenlooper
Department of Energy	Energy Projects	Clean Heat Homes; Vermont Energy Investment Corporation		8,500	8,500	Leahy
Department of Energy	Energy Projects	Combined Heat and Power System for One North Commercialization Hub; Our Katahdin.		2,500	2,500	Collins, King
Department of Energy	Energy Projects	Cyber-PERTT Technology; Louisiana State University		1,000	1,000	Cassidy
Department of Energy	Energy Projects	Cybersecurity Center for Offshore Wind energy; Old Dominion University.		1,000	1,000	Kaine, Warner
Department of Energy	Energy Projects	Cybersecurity Consortium for Innovation, University of Arkansas Little Rock; University of Arkansas at Little Rock.		5,000	5,000	Boozman
Department of Energy	Energy Projects	Decatur Police Department Energy Improvement Project; City of Decatur, Georgia.		500	500	Ossoff
Department of Energy	Energy Projects	Denver and Arapahoe Disposal Site Renewable Natural Gas; City and County of Denver.		150	150	Bennet
Department of Energy	Energy Projects	District Energy Solar and Geothermal Improvements in Rochester, MN; City of Rochester.		2,000	2,000	Klobuchar, Smith
Department of Energy	Energy Projects	Edward Fenn Elementary School Solar Project; Gorham Randolph Shelburne Cooperative School Dist.		100	100	Shaheen
Department of Energy	Energy Projects	El Paso County LED Retrofit Energy Efficiency Project; El Paso County.		445	445	Bennet, Hickenlooper
Department of Energy	Energy Projects	Electric Power Testbed to Secure the U.S. Power Grid against Cyber Attacks; University of Tulsa.		1,500	1,500	Inhofe
Department of Energy	Energy Projects	Electric Vehicle Automotive Certification Expansion; Southern Maine Community College.		750	750	Collins, King
Department of Energy	Energy Projects	Electrifying Homes in Low-Income Areas of Sante Fe; City of Sante Fe.		250	250	Heinrich
Department of Energy	Energy Projects	Emergency Shelter Improvements in Madison; Town of Madison		1,000	1,000	Blumenthal, Murphy
Department of Energy	Energy Projects	Energy Assessments for Low Income Neighborhoods and Disadvantaged Communities; City of Ithaca.		1,500	1,500	Schumer
Department of Energy	Energy Projects	Energy DELTA Lab—Project Oasis; Energy DELTA Lab		1,500	1,500	Kaine, Warner
Department of Energy	Energy Projects	Energy Efficient Retrofits; The Groden Network		250	250	Reed
Department of Energy	Energy Projects	Energy Efficient Upgrades; Providence Performing Arts Center		750	750	Reed
Department of Energy	Energy Projects	Energy Improvements for Rhode Island Public Buildings; Rhode Island Office of Energy Resources.		5,000	5,000	Reed

CONGRESSIONALLY DIRECTED SPENDING ITEMS—Continued

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Department of Energy	Energy Projects	Enhancing the Royal Oak Farmers Market as a Community Resiliency Hub; City of Royal Oak.		411	411	Peters
Department of Energy	Energy Projects	Euclid Microgrid; Cuyahoga County		1,500	1,500	Brown
Department of Energy	Energy Projects	Forging Oregon's Renewable Energy Source Transition Through Reimagining Education + Energy (FOREST TREE); Southern Oregon University.		2,000	2,000	Merkley, Wyden
Department of Energy	Energy Projects	Georgia Hydrogen Testing Consortium; Georgia Institute of Technology.		2,500	2,500	Ossoff, Warnock
Department of Energy	Energy Projects	Ground Mount Solar; Town of Stratford		67	67	Shaheen
Department of Energy	Energy Projects	Hardwood Cross Laminated Timbers for Energy Efficient Modular Homes; West Virginia University.		1,200	1,200	Capito, Manchin
Department of Energy	Energy Projects	Historic Colonial Theatre Clean Energy Solar Array; Bethlehem Redevelopment Association.		51	51	Shaheen
Department of Energy	Energy Projects	Ho'ahu Energy Cooperative Molokai's community-based renewable energy; Ho'ahu Energy Cooperative Molokai.		3,000	3,000	Hirono, Schatz
Department of Energy	Energy Projects	Hydrogen Infused Active Energy Emission Technology; Louisiana Tech University.		1,100	1,100	Cassidy
Department of Energy	Energy Projects	Hydrokinetic Power System; City of False Pass		1,250	1,250	Murkowski
Department of Energy	Energy Projects	Lincoln County Power District—Solar; Lincoln County Power District		1,750	1,750	Cortez Masto, Rosen
Department of Energy	Energy Projects	Low Income Housing Electrification and Indoor Air Quality Improvements; Montgomery County Maryland.		1,000	1,000	Cardin, Van Hollen
Department of Energy	Energy Projects	Lower Willow Creek Micro-Hydro Electric Generation Project; City of Creede.		425	425	Bennet, Hickenlooper
Department of Energy	Energy Projects	Luzerne County Transportation Authority Solar Panel Installation; Luzerne County Transportation Authority.		625	625	Casey
Department of Energy	Energy Projects	Marin Clean Energy Storage Program; Marin Clean Energy		500	500	Feinstein, Padilla
Department of Energy	Energy Projects	Marine Energy Feasibility Study for Remote Alaskan Villages; Alaska Village Electric Cooperative, Inc.		1,500	1,500	Murkowski
Department of Energy	Energy Projects	Mecca and North Shore Energy Infrastructure Resiliency Project; Imperial Irrigation District.		500	500	Feinstein, Padilla
Department of Energy	Energy Projects	Medford Irrigation District Community Solar; Medford Irrigation District.		1,120	1,120	Merkley, Wyden

Department of Energy	Energy Projects	Memorial Pool Energy Efficiency Retrofit; National September 11 Memorial & Museum.		700	700	Gillibrand, Schumer, Booker, Menendez
Department of Energy	Energy Projects	MultiCare Mary Bridge Hospital Electrical Infrastructure; MultiCare Mary Bridge Children's Hospital.		5,500	5,500	Cantwell, Murray
Department of Energy	Energy Projects	Net-Zero Emissions at Public Schools in Manchester; Town of Manchester.		1,900	1,900	Blumenthal, Murphy
Department of Energy	Energy Projects	New Mexico State University Agrivoltaics Research Program; New Mexico State University.		844	844	Heinrich, Luján
Department of Energy	Energy Projects	Northwestern Michigan College Campus Geothermal Project; Northwestern Michigan College.		2,700	2,700	Stabenow
Department of Energy	Energy Projects	Opportunity of Hope for Mental Health Solar Array; Monadnock Family Services.		397	397	Shaheen
Department of Energy	Energy Projects	Patrick Leahy; Leahy Center for Lake Champlain, Inc.		1,600	1,600	Leahy
Department of Energy	Energy Projects	Pinewood Springs Energy Resiliency Microgrid; Poudre Valley Rural Electric Association.		425	425	Bennet, Hickenlooper
Department of Energy	Energy Projects	Quincy Solar Farm Project; City of Quincy		1,400	1,400	Durbin
Department of Energy	Energy Projects	Resilient Power for Community Health Centers; Clean Energy Group, Inc.		500	500	Sanders
Department of Energy	Energy Projects	Rindge Recreation Light Replacement; Rindge Recreation Department.		138	138	Shaheen
Department of Energy	Energy Projects	Roof-Top Solar Array Gorham Public Works Garage; Town of Gorham		89	89	Shaheen
Department of Energy	Energy Projects	SmartFlower Solar Installation and Renewable Energy Programming; Girl Scouts of the Colonial Coast.		15	15	Kaine, Warner
Department of Energy	Energy Projects	Solar Array for Higher Education; Lake Washington Institute of Technology.		1,100	1,100	Murray
Department of Energy	Energy Projects	Solar at Capitol Market; Capitol Market Inc		713	713	Capito, Manchin
Department of Energy	Energy Projects	Solar Energy and Affordable Housing in Barrington and Keene; NH Community Loan Fund.		750	750	Shaheen
Department of Energy	Energy Projects	Solar Energy Demonstration Project for Public Libraries; South Hero Library Foundation.		57	57	Sanders
Department of Energy	Energy Projects	Solar Panel Installation at Department of Public Works Canopy; Township of Piscataway.		250	250	Booker, Menendez
Department of Energy	Energy Projects	Solar Panel Installation at Goucher College; Goucher College		750	750	Cardin, Van Hollen
Department of Energy	Energy Projects	Solar Panels at Childcare Center; Children's Community Development Center, Inc.		165	165	Blumenthal, Murphy
Department of Energy	Energy Projects	South Coast Air Quality Management District: Zero Emission Fuel Cell Locomotive; South Coast Air Quality Management District.		500	500	Feinstein, Padilla
Department of Energy	Energy Projects	St. Louis Park Electrify Community Cohort Grant Program; City of St. Louis Park.		1,000	1,000	Klobuchar
Department of Energy	Energy Projects	Stamford LED Streetlighting Project; City of Stamford		2,000	2,000	Blumenthal, Murphy

CONGRESSIONALLY DIRECTED SPENDING ITEMS—Continued

[In thousands of dollars]

Agency	Account	Project Name, Recipient	Budget Request	Additional Amount	Total Amount Provided	Requestor
Department of Energy	Energy Projects	Testbed for Clean Energy and Grid Modernization; New Mexico State University.		1,600	1,600	Heinrich
Department of Energy	Energy Projects	Tompkins County EV ARC; Tompkins County		128	128	Gillibrand, Schumer
Department of Energy	Energy Projects	Town Hall—Energy Efficiency Upgrades; Town of Lincoln		125	125	Whitehouse
Department of Energy	Energy Projects	Town of DeWitt Hydrogen Fueling Station; Town of DeWitt		280	280	Schumer
Department of Energy	Energy Projects	Town of Hamden Administrative Building Energy Efficiency Improvements; Town of Hamden.		600	600	Blumenthal, Murphy
Department of Energy	Energy Projects	Town of Wardensville Photovoltaic Solar Field; Town of Wardensville		375	375	Capito, Manchin
Department of Energy	Energy Projects	Unalaska Aging Infrastructure Replacement; City of Unalaska		2,500	2,500	Murkowski
Department of Energy	Energy Projects	University of Akron Research Foundation Managed Sustainable Electric Powered System for Summit County Multi-Unit Affordable Sustainable Housing; University of Akron Research Foundation.		1,125	1,125	Brown
Department of Energy	Energy Projects	University of Nevada, Reno—Lithium Characterization Analysis; University of Nevada, Reno.		1,600	1,600	Cortez Masto, Rosen
Department of Energy	Energy Projects	University of Tulsa CO2 Transportation and Storage; University of Tulsa.		1,250	1,250	Inhofe
Department of Energy	Energy Projects	University of Tulsa Produced Water Treatment using Compact Separator System; University of Tulsa.		1,500	1,500	Inhofe
Department of Energy	Energy Projects	University of Tulsa Utilization of Existing Pipelines in Hydrogen Transport; University of Tulsa.		1,250	1,250	Inhofe
Department of Energy	Energy Projects	West Virginia Regional Technology Park Energy Efficiency and Decarbonization Project; West Virginia Regional Technology Park Corporation.		328	328	Capito, Manchin
Department of Energy	Energy Projects	YMCA of Greater Nashua Solar Panel Installation; YMCA of Greater Nashua.		459	459	Shaheen
Department of Energy	Energy Projects	YWCA Kauai solar-plus-storage resilience project; YWCA Kauai		110	110	Schatz
Department of the Interior	Bureau of Reclamation, Water and Related Resources.	American River Basin Hydrologic Observatory Wireless Sensor Network Project, CA; Bureau of Reclamation.		875	875	Feinstein, Padilla
Department of the Interior	Bureau of Reclamation, Water and Related Resources.	Conejos Cooperative Project Reservoir, CO; Bureau of Reclamation		3,000	3,000	Bennet
Department of the Interior	Bureau of Reclamation, Water and Related Resources.	Crooked River Water Quality and Supply Study, OR; Bureau of Reclamation.		3,445	3,445	Merkley, Wyden

Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	Lewis & Clark Regional Water System, IA, MN, SD; Bureau of Reclamation.	6,601	12,000	18,601	Klobuchar, Rounds, Smith
Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	Robles Diversion Improvement Project, CA; Bureau of Reclamation	.....	1,500	1,500	Feinstein, Padilla
Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	Sacramento River Basin Flood Plain Reactivation, CA; Bureau of Reclamation.	.....	5,000	5,000	Feinstein, Padilla
Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	Sacramento River Fish Screen Program, CA; Bureau of Reclamation	.....	1,734	1,734	Feinstein, Padilla
Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	San Gabriel Basin Restoration Fund, CA; Bureau of Reclamation	.....	10,000	10,000	Feinstein, Padilla
Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	San Joaquin Valley Drought Relief, CA; Bureau of Reclamation	.....	6,095	6,095	Feinstein, Padilla
Department of the Interior ...	Bureau of Reclamation, Water and Related Resources.	San Joaquin Valley Water Collaborative Action Program, CA; Bureau of Reclamation.	.....	750	750	Feinstein, Padilla

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2022 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2023

[In thousands of dollars]

Item	2022 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or −)	
				2022 appropriation	Budget estimate
TITLE I—DEPARTMENT OF DEFENSE—CIVIL					
DEPARTMENT OF THE ARMY					
Corps of Engineers—Civil					
Investigations	143,000	105,910	165,668	+22,668	+59,758
Construction	2,492,800	1,221,288	2,159,642	−333,158	+938,354
Mississippi River and Tributaries	370,000	225,000	373,075	+3,075	+148,075
Operation and Maintenance	4,570,000	2,599,047	5,131,605	+561,605	+2,532,558
Regulatory Program	212,000	210,000	213,000	+1,000	+3,000
Formerly Utilized Sites Remedial Action Program (FUSRAP)	300,000	250,000	450,000	+150,000	+200,000
Flood Control and Coastal Emergencies	35,000	35,000	35,000	.....	.....
Expenses	208,000	200,000	215,000	+7,000	+15,000
Office of Assistant Secretary of the Army (Civil Works)	5,000	5,000	5,000	.....	.....
Water Infrastructure Finance and Innovation Program Account	7,200	10,000	10,000	+2,800	.....
Harbor Maintenance Trust Fund	.....	1,726,000	.....	.....	−1,726,000
Inland Waterways Trust Fund	.....	13,755	.....	.....	−13,755
Total, title I, Department of Defense—Civil	8,343,000	6,601,000	8,757,990	+414,990	+2,156,990
TITLE II—DEPARTMENT OF THE INTERIOR					
Central Utah Project					
Central Utah Project Completion Account	23,000	20,000	21,000	−2,000	+1,000
Bureau of Reclamation					
Water and Related Resources	1,747,101	1,270,376	1,784,900	+37,799	+514,524
Central Valley Project Restoration Fund	56,499	45,770	45,770	−10,729	.....
California Bay-Delta Restoration	33,000	33,000	33,000	.....	.....

Policy and Administration	64,400	65,079	65,079	+679	.....
Total, Bureau of Reclamation	1,901,000	1,414,225	1,928,749	+27,749	+514,524
Total, title II, Department of the Interior	1,924,000	1,434,225	1,949,749	+25,749	+515,524
TITLE III—DEPARTMENT OF ENERGY					
Energy Programs					
Defense Production Act Domestic Clean Energy Accelerator	.....	.....	500,000	+500,000	+500,000
Energy Efficiency and Renewable Energy	3,200,000	4,018,885	3,799,000	+599,000	−219,885
State and Community Energy Programs	.....	726,897	.....	.....	−726,897
Manufacturing and Energy Supply Chains	.....	27,424	.....	.....	−27,424
Federal Energy Management Program	.....	169,661	.....	.....	−169,661
Cybersecurity, Energy Security, and Emergency Response	185,804	202,143	202,143	+16,339	.....
Electricity	277,000	297,386	362,000	+85,000	+64,614
Grid Deployment	.....	90,221	.....	.....	−90,221
Acquiring and Condemning Property	.....	150,000	.....	.....	−150,000
Subtotal	.....	240,221	.....	.....	−240,221
Nuclear Energy	1,505,000	1,518,460	1,609,000	+104,000	+90,540
Defense function	149,800	156,600	156,600	+6,800	.....
Subtotal	1,654,800	1,675,060	1,765,600	+110,800	+90,540
Fossil Energy and Carbon Management	825,000	893,160	880,000	+55,000	−13,160
Energy Projects	.....	.....	109,767	+109,767	+109,767
Naval Petroleum and Oil Shale Reserves	13,650	13,004	13,004	−646	.....
Strategic Petroleum Reserve	219,000	214,175	192,460	−26,540	−21,715
Sale of gas reserves	.....	.....	−140,000	−140,000	−140,000
Subtotal	219,000	214,175	52,460	−166,540	−161,715
SPR Petroleum Account	7,350	8,000	8,000	+650	.....
Northeast Home Heating Oil Reserve	6,500	7,000	7,000	+500	.....
Energy Information Administration	129,087	144,480	144,000	+14,913	−480
Non-defense Environmental Cleanup	333,863	323,249	373,583	+39,720	+50,334
Uranium Enrichment Decontamination and Decommissioning Fund	860,000	822,421	869,000	+9,000	+46,579
Science	7,475,000	7,799,211	8,100,000	+625,000	+300,789
Nuclear Waste Disposal	27,500	10,205	10,205	−17,295	.....

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2022 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2023—Continued

[In thousands of dollars]

Item	2022 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or −)	
				2022 appropriation	Budget estimate
Technology Transitions	19,470	21,558	21,558	+2,088	.....
Clean Energy Demonstrations	20,000	214,052	150,000	+130,000	−64,052
Defense Production Act Domestic Clean Energy Accelerator	.....	.....	.....	.....	.....
Advanced Research Projects Agency-Energy	450,000	700,150	570,364	+120,364	−129,786
Title 17 Innovative Technology Loan Guarantee Program:					
Guaranteed loan subsidy	.....	150,000	.....	.....	−150,000
New Loan Authority	.....	25,000	.....	.....	−25,000
Administrative costs	32,000	66,206	66,206	+34,206	.....
Offsetting collections	−3,000	−35,000	−35,000	−32,000	.....
Guaranteed Loan Subsidy (rescission)	.....	.....	−150,000	−150,000	−150,000
New Loan Authority	.....	.....	150,000	+150,000	+150,000
Subtotal	29,000	206,206	31,206	+2,206	−175,000
Advanced Technology Vehicles Manufacturing Loan Program	5,000	9,800	9,800	+4,800	.....
Tribal Energy Loan Guarantee Program	2,000	1,860	.....	−2,000	−1,860
Guaranteed loan subsidy	.....	.....	8,000	+8,000	+8,000
Administrative costs	.....	.....	2,000	+2,000	+2,000
Subtotal	.....	.....	10,000	+10,000	+10,000
Indian Energy Policy and Programs	58,000	150,039	110,000	+52,000	−40,039
Departmental Administration	340,578	497,781	357,906	+17,328	−139,875
Miscellaneous revenues	−100,578	−100,578	−100,578	.....	.....
Net appropriation	240,000	397,203	257,328	+17,328	−139,875
Office of the Inspector General	78,000	106,808	92,000	+14,000	−14,808
Total, Energy programs	16,116,024	19,400,258	18,448,018	+2,331,994	−952,240

Atomic Energy Defense Activities					
National Nuclear Security Administration					
Weapons Activities	15,920,000	16,486,298	16,986,298	+1,066,298	+500,000
Defense Nuclear Nonproliferation	2,354,000	2,346,257	2,538,000	+184,000	+191,743
Naval Reactors	1,918,000	2,081,445	2,081,445	+163,445	.....
Federal Salaries and Expenses	464,000	496,400	496,400	+32,400	.....
Total, National Nuclear Security Administration	20,656,000	21,410,400	22,102,143	+1,446,143	+691,743
Environmental and Other Defense Activities					
Defense Environmental Cleanup	6,710,000	7,105,863	7,064,084	+354,084	−41,779
Subtotal	6,710,000	7,105,863	7,064,084	+354,084	−41,779
Defense UED&D	573,333	.....	579,000	+5,667	+579,000
Other Defense Activities	985,000	978,351	1,040,237	+55,237	+61,886
Subtotal	985,000	978,351	1,040,237	+55,237	+61,886
Total, Environmental and Other Defense Activities	8,268,333	8,084,214	8,683,321	+414,988	+599,107
Total, Atomic Energy Defense Activities	28,924,333	29,494,614	30,785,464	+1,861,131	+1,290,850
Power Marketing Administrations [1]					
Operation and maintenance, Southeastern Power:					
Administration	7,184	8,173	8,173	+989	.....
Offsetting collections	−7,184	−8,173	−8,173	−989	.....
Subtotal	.....	.....	.....	.....	.....
Operation and maintenance, Southwestern Power:					
Administration	48,324	53,488	53,488	+5,164	.....
Offsetting collections	−37,924	−42,880	−42,880	−4,956	.....
Subtotal	10,400	10,608	10,608	+208	.....
Construction Rehabilitation, Operation and Maintenance, Western Area Power Administration	285,237	299,573	299,573	+14,336	.....
Offsetting collections	−194,465	−200,841	−200,841	−6,376	.....

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2022 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2023—Continued

[In thousands of dollars]

Item	2022 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or −)	
				2022 appropriation	Budget estimate
Subtotal	90,772	98,732	98,732	+7,960	
Falcon and Amistad Operating and Maintenance Fund	5,808	6,330	6,330	+522	
Offsetting collections	−5,580	−6,102	−6,102	−522	
Subtotal	228	228	228		
Total, Power Marketing Administrations	101,400	109,568	109,568	+8,168	
Federal Energy Regulatory Commission					
Salaries and expenses	466,426	508,400	508,400	+41,974	
Revenues applied	−466,426	−508,400	−508,400	−41,974	
Subtotal					
General Provision—Department of Energy					
Colorado River Basin Fund (sec305(b))	2,000		2,000		+2,000
Defense Nuclear Nonproliferation Construction Project 99–D–143 Rescission	−282,133			+282,133	
Naval Reactors Rescission	−6,000			+6,000	
Guaranteed Loan Subsidy Rescission (sec 309)					
New Loan Authority (sec 309)					
Total, General Provisions	−286,133		2,000	+288,133	+2,000
Total, title III, Department of Energy	44,855,624	49,004,440	49,345,050	+4,489,426	+340,610
Appropriations	(45,143,757)	(49,004,440)	(49,495,050)	(+4,351,293)	(+490,610)
Rescissions	(−288,133)		(−150,000)	(+138,133)	(−150,000)
Emergency appropriations					

Rescissions of emergency funding	.....	.....	.....	.....	.....
TITLE IV—INDEPENDENT AGENCIES					
Appalachian Regional Commission	195,000	235,000	200,000	+5,000	−35,000
Defense Nuclear Facilities Safety Board	36,000	41,401	41,936	+5,936	+535
Subtotal	36,000	41,401	41,936	+5,936	+535
Delta Regional Authority	30,100	30,100	30,100	.....	.....
Denali Commission	15,100	15,100	17,000	+1,900	+1,900
Northern Border Regional Commission	35,000	36,000	40,000	+5,000	+4,000
Southeast Crescent Regional Commission	5,000	7,000	7,000	+2,000	.....
Southwest Border Regional Commission	2,500	2,500	5,000	+2,500	+2,500
Nuclear Regulatory Commission:					
Salaries and expenses	873,901	911,384	911,384	+37,483	.....
Revenues	−745,258	−777,498	−777,498	−32,240	.....
Subtotal	128,643	133,886	133,886	+5,243	.....
Office of Inspector General	13,799	17,769	15,769	+1,970	−2,000
Revenues	−11,442	−14,655	−12,655	−1,213	+2,000
Subtotal	2,357	3,114	3,114	+757	.....
Total, Nuclear Regulatory Commission	131,000	137,000	137,000	+6,000	.....
Nuclear Waste Technical Review Board	3,800	3,945	3,945	+145	.....
Total, title IV, Independent agencies	453,500	508,046	481,981	+28,481	−26,065
OTHER APPROPRIATIONS					
EXTENDING GOVERNMENT FUNDING AND DELIVERING EMERGENCY ASSISTANCT ACT, 2021 (PUBLIC LAW 117–43)					
DIVISION B—DISASTER RELIEF SUPPLEMENTAL APPROPRIATIONS ACT, 2022					
DEPARTMENT OF THE ARMY					
Corps of Engineers—Civil					
Investigations (emergency)	100,000	.....	.....	−100,000	.....
Construction (emergency)	3,000,000	.....	.....	−3,000,000	.....

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2022 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2023—Continued

[In thousands of dollars]

Item	2022 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or −)	
				2022 appropriation	Budget estimate
Mississippi Rivers and Tributaries (emergency)	868,000			−868,000	
Operation and Maintenance (emergency)	887,000			−887,000	
Flood Control and Coastal Emergencies (emergency)	826,000			−826,000	
Expenses (emergency)	30,000			−30,000	
Total, Corps of Engineers—Civil	5,711,000			−5,711,000	
DEPARTMENT OF THE INTERIOR					
Central Utah Project					
Central Utah Project Completion Account (emergency)	10,000			−10,000	
Bureau of Reclamation					
Water and Related Resources (emergency)	210,000			−210,000	
Total, Department of the Interior	220,000			−220,000	
DEPARTMENT OF ENERGY					
Energy Programs					
Strategic Petroleum Reserve(emergency)	43,300			−43,300	
Total, Department of Energy	43,300			−43,300	
Total, Extending Government Funding and Delivering Emergency Assistance Act, 2021	5,974,300			−5,974,300	

THE INFRASTRUCTURE INVESTMENT AND JOBS ACT (PUBLIC LAW 117–58)					
DIVISION J—APPROPRIATIONS					
DEPARTMENT OF THE ARMY					
Corps of Engineers—Civil					
Investigations (emergency)	120,000			−120,000	
Appropriations available from prior year advances (emergency)		30,000	30,000	+30,000	
Advance appropriations FY 2023 (emergency)	30,000			−30,000	
Total	150,000	30,000	30,000	−120,000	
Construction (emergency)	11,515,000			−11,515,000	
Appropriations available from prior year advances (emergency)		50,000	50,000	+50,000	
Advance appropriations FY 2023 (emergency)	50,000			−50,000	
Advance appropriations FY 2024 (emergency)	50,000			−50,000	
Total	11,615,000	50,000	50,000	−11,565,000	
Mississippi River and Tributaries (emergency)	808,000			−808,000	
Operations and maintenance (emergency)	2,000,000			−2,000,000	
Appropriations available from prior year advances (emergency)		1,000,000	1,000,000	+1,000,000	
Advance appropriations FY 2023 (emergency)	1,000,000			−1,000,000	
Advance appropriations FY 2024 (emergency)	1,000,000			−1,000,000	
Total	4,000,000	1,000,000	1,000,000	−3,000,000	
Regulatory Program (emergency)	160,000			−160,000	
Flood control and coastal emergencies (emergency)	251,000			−251,000	
Expenses (emergency)	40,000			−40,000	
Water Infrastructure Finance and Innovation Program Account (emergency)	75,000			−75,000	
Total, Corps of Engineers—Civil	17,099,000	1,080,000	1,080,000	−16,019,000	
DEPARTMENT OF THE INTERIOR					
Central Utah Project					
Central Utah Project Completion Account (emergency)	50,000			−50,000	
Water and Related Resources (emergency)	1,660,000			−1,660,000	
Appropriations available from prior year advances (emergency)		1,660,000	1,660,000	+1,660,000	

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2022 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2023—Continued

[In thousands of dollars]

Item	2022 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or −)	
				2022 appropriation	Budget estimate
Advance appropriations FY 2023 (emergency)	1,660,000			−1,660,000	
Advance appropriations FY24–26 (emergency)	4,980,000			−4,980,000	
Total	8,300,000	1,660,000	1,660,000	−6,640,000	
Total, Department of the Interior	8,350,000	1,660,000	1,660,000	−6,690,000	
DEPARTMENT OF ENERGY					
Energy Programs					
Energy Efficiency and Renewable Energy (emergency)	8,207,200			−8,207,200	
Appropriations available from prior year advances (emergency)		2,221,800	2,221,800	+2,221,800	
Advance appropriations FY 2023 (emergency)	2,221,800			−2,221,800	
Advance appropriations FY24–26 (emergency)	5,835,000			−5,835,000	
Total	16,264,000	2,221,800	2,221,800	−14,042,200	
Cybersecurity, Energy Security, and Emergency Response (emergency)	150,000			−150,000	
Appropriations available from prior year advances (emergency)		100,000	100,000	+100,000	
Advance appropriations FY 2023 (emergency)	100,000			−100,000	
Advance appropriations FY24–26 (emergency)	300,000			−300,000	
Total	550,000	100,000	100,000	−450,000	
Electricity (emergency)	1,660,000			−1,660,000	
Appropriations available from prior year advances (emergency)		1,610,000	1,610,000	+1,610,000	
Advance appropriations FY 2023 (emergency)	1,610,000			−1,610,000	
Advance appropriations FY24–26 (emergency)	4,830,000			−4,830,000	

Total	8,100,000	1,610,000	1,610,000	−6,490,000	
Nuclear Energy (emergency)	1,200,000			−1,200,000	
Appropriations available from prior year advances (emergency)		1,200,000	1,200,000	+1,200,000	
Advance appropriations FY 2023 (emergency)	1,200,000			−1,200,000	
Advance appropriations FY24–26 (emergency)	3,600,000			−3,600,000	
Total	6,000,000	1,200,000	1,200,000	−4,800,000	
Fossil Energy and Carbon Management (emergency)	1,839,000			−1,839,000	
Appropriations available from prior year advances (emergency)		1,444,450	1,444,450	+1,444,450	
Advance appropriations FY 2023 (emergency)	1,444,450			−1,444,450	
Advance appropriations FY24–26 (emergency)	4,213,691			−4,213,691	
Total	7,497,141	1,444,450	1,444,450	−6,052,691	
Carbon Dioxide Transportation Infrastructure Finance and Innovation Program Account (emergency)	3,000			−3,000	
Appropriations available from prior year advances (emergency)		2,097,000	2,097,000	+2,097,000	
Advance appropriations FY 2023 (emergency)	2,097,000			−2,097,000	
Additional costs, FY 2023 (Sec 40304) (emergency)	500,000			−500,000	
Total	2,600,000	2,097,000	2,097,000	−503,000	
Office of Clean Energy Demonstrations (emergency)	5,127,250			−5,127,250	
Appropriations available from prior year advances (emergency)		4,426,250	4,426,250	+4,426,250	
Advance appropriations FY 2023 (emergency)	4,426,250			−4,426,250	
Advance appropriations FY24–26 (emergency)	11,902,500			−11,902,500	
Total	21,456,000	4,426,250	4,426,250	−17,029,750	
Total, Energy Programs	62,467,141	13,099,500	13,099,500	−49,367,641	
Power Marketing Administration					
Construction, Rehabilitation, Operation and Maintenance, Western Area Power Administration (emergency)	500,000			−500,000	
Offsetting collections (FY 2025–2026) (emergency)	−60,000			+60,000	
General Provisions					
DOE IG (Sec 303) (by transfer)	(18,000)	(12,000)	(12,000)	(−6,000)	

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2022 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2023—Continued

[In thousands of dollars]

Item	2022 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or −)	
				2022 appropriation	Budget estimate
Total, Department of Energy	62,907,141	13,099,500	13,099,500	−49,807,641	
INDEPENDENT AGENCIES					
Appalachian Regional Commission (emergency)	200,000			−200,000	
Appropriations available from prior year advances (emergency)		200,000	200,000	+200,000	
Advance appropriations FY 2023 (emergency)	200,000			−200,000	
Advance appropriations FY24–26 (emergency)	600,000			−600,000	
Total, Appalachian Regional Commission	1,000,000	200,000	200,000	−800,000	
Delta Regional Authority (emergency)	150,000			−150,000	
Denali Commission (emergency)	75,000			−75,000	
Northern Border Regional Commission (emergency)	150,000			−150,000	
Southeast Crescent Regional Commission (emergency)	5,000			−5,000	
Southwest Border Regional Commission (emergency)	1,250			−1,250	
Total, Independent Agencies	1,381,250	200,000	200,000	−1,181,250	
Total, Infrastructure Investment and Jobs Act	89,737,391	16,039,500	16,039,500	−73,697,891	
less prior year appropriations (emergency)		−16,039,500	−16,039,500	−16,039,500	
UKRAINE SUPPLEMENTAL APPROPRIATIONS ACT, 2022 (PUBLIC LAW 117–103)					
Department of Energy					
Departmental Administration (emergency)	30,000			−30,000	
Total, DIVISION N—UKRAINE SUPPLEMENTAL APPROPRIATIONS ACT, 2022	30,000			−30,000	

DIVISION N—ADDITIONAL UKRAINE SUPPLEMENTAL APPROPRIATIONS ACT, 2022 (PUBLIC LAW 117–128)					
Nuclear Regulatory Commission					
Salaries and expenses (emergency)	2,000			−2,000	
Total, DIVISION N—UKRAINE SUPPLEMENTAL APPROPRIATIONS ACT, 2022	2,000			−2,000	
Total, Other Appropriations	95,743,691			−95,743,691	
(FY 2022)	41,953,000			−41,953,000	
(FY 2023)	16,539,500			−16,539,500	
(FY 2024—FY 2026)	37,311,191			−37,311,191	
Grand total	151,319,815	57,547,711	60,534,770	−90,785,045	+2,987,059
Appropriations	(55,864,257)	(57,547,711)	(60,684,770)	(+4,820,513)	(+3,137,059)
Emergency appropriations	(41,953,000)			(−41,953,000)	
Emergency advance appropriations	(53,850,691)			(−53,850,691)	
Rescissions	(−288,133)		(−150,000)	(+138,133)	(−150,000)
Rescissions of emergency funding					
Emergency offsetting collections (FY2025–2026)	(−60,000)			(+60,000)	
Grand total less emergencies	55,576,124	57,547,711	60,534,770	+4,958,646	+2,987,059

[1] Totals adjusted to net out alternative financing costs, reimbursable agreement funding, and power purchase and wheeling expenditures Offsetting collection totals only reflect funds collected for annual expenses, excluding power purchase wheeling.