

Fusion Energy Sciences is on pages: 150-151 for text, 183 for budget table,
 PPPL Infrastructure projects (\$16.15 M) on page: 186
 Inertial Confinement Fusion is on page: 162 for text, 194 for budget table

[FULL COMMITTEE PRINT]

117TH CONGRESS } <i>1st Session</i>	HOUSE OF REPRESENTATIVES	{ REPORT 117-XX
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ENERGY AND WATER DEVELOPMENT AND RELATED
 AGENCIES APPROPRIATIONS BILL, 2022

XXXXX, 2021.—Committed to the Committee of the Whole House on the State of
 the Union and ordered to be printed

Ms. KAPTUR, from the Committee on Appropriations,
 submitted the following

R E P O R T

[To accompany H.R. XXXX]

The Committee on Appropriations submits the following report in explanation of the accompanying bill making appropriations for energy and water development for the fiscal year ending September 30, 2022, and for other purposes.

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SUMMARY OF ESTIMATES AND RECOMMENDATIONS

The Committee has considered budget estimates, which are contained in the Budget of the United States Government, Fiscal Year 2022. The following table summarizes appropriations for fiscal year 2021, the budget estimates, and amounts recommended in the bill for fiscal year 2022.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
DISCRETIONARY RECAP BY TITLE					
Title I, Department of Defense - Civil.....	7,795,000	6,792,500	8,657,932	+862,932	+1,865,432
Title II, Department of the Interior.....	1,691,000	1,552,949	1,965,899	+274,899	+412,950
Title III, Department of Energy.....	39,625,025	46,646,300	45,126,500	+5,501,475	-1,519,800
Title IV, Independent Agencies.....	413,850	481,100	457,800	+43,950	-23,300
Subtotal.....	49,524,875	55,472,849	58,208,131	+6,683,256	+735,282
Scorekeeping adjustments.....	-72,875	-1,848,025	-2,982,131	-2,909,256	-1,134,106
Total.....	49,452,000	53,624,824	55,226,000	+3,774,000	-398,824

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INTRODUCTION

The Energy and Water Development and Related Agencies Appropriations bill for fiscal year 2022 totals \$53,226,000,000, \$1,474,000,000 above fiscal year 2021 amounts.

Title I of the bill provides \$8,657,932,000 for the Civil Works programs of the U.S. Army Corps of Engineers, \$862,932,000 above fiscal year 2021 and \$1,865,432,000 above the budget request. The bill makes use of the adjustments provided in Public Law 116–136 and Public Law 116–260 regarding the Harbor Maintenance Trust Fund and section 2106(c) of the Water Resources Reform and Development Act of 2014. Total funding activities eligible for reimbursement from the Harbor Maintenance Trust Fund (HMTF) are estimated at \$2,050,000,000, \$370,000,000 above fiscal year 2021 and \$424,114,000 above the budget request.

Title II provides \$1,965,899,000 for the Department of the Interior and the Bureau of Reclamation, \$274,899,000 above fiscal year 2021 and \$412,950,000 above the budget request. The Committee recommends \$1,945,866,000 for the Bureau of Reclamation, \$275,899,000 above fiscal year 2021 and \$412,950,000 above the budget request. The Committee recommends \$20,000,000 for the Central Utah Project, \$1,000,000 below fiscal year 2021 and equal to the budget request.

Title III provides \$45,126,500,000 for the Department of Energy, \$3,201,475,000 above fiscal year 2021 amounts. Funding for energy programs within the Department of Energy, which includes basic science research and the applied energy programs, is \$16,848,760,000. The Committee recommends \$7,320,000,000 for the Office of Science; \$3,768,000,000 for Energy Efficiency and Renewable Energy; \$177,000,000 for Cybersecurity, Energy Security, and Emergency Response; \$267,000,000 for Electricity; \$1,675,000,000 for Nuclear Energy; \$820,000,000 for Fossil Energy and Carbon Management; and \$600,000,000 for the Advanced Research Projects Agency—Energy.

Funding for the National Nuclear Security Administration (NNSA), which includes Weapons Activities, Defense Nuclear Non-proliferation, Naval Reactors, and Federal Salaries and Expenses, is \$20,155,000,000.

Environmental Management activities—Non-defense Environmental Cleanup, Uranium Enrichment Decontamination and Decommissioning, and Defense Environmental Cleanup—are funded at \$7,757,203,000.

The net amount appropriated for the Power Marketing Administrations is provided at the requested levels.

Title IV provides \$457,800,000 for several Independent Agencies, \$43,950,000 above fiscal year 2021. Net funding for the Nuclear Regulatory Commission is \$131,000,000, \$8,000,000 above fiscal year 2021 and equal to the budget request.

OVERVIEW OF THE RECOMMENDATION

The Committee recommendation prioritizes the most critical, inherently federal responsibilities of this bill: the national defense; energy innovation to increase economic prosperity while providing additional solutions for mitigating and adapting to climate change;

investing in infrastructure, including the maintenance of the nation's waterways; and the resilience and security of electricity infrastructure. Strong support is included for basic science programs, which provide the foundation for new energy technologies that are vital to maintaining global competitiveness and ensuring long-term prosperity but that are often too high-risk to receive the attention of the private sector. The recommendation provides strong support for applied energy research, development, and demonstration activities to improve and extend the performance of existing energy sources and accelerate the adoption of new clean energy technologies. The recommendation also recognizes the importance of the federal government's responsibility to clean up the legacy of five decades of nuclear weapons production and government-sponsored nuclear energy research, and the recommendation takes steps forward to address spent nuclear fuel.

NATIONAL ENERGY POLICY TO ADDRESS CLIMATE CHANGE

The Department of Energy and its national laboratory system have helped to lay the foundation for the technological advances to reduce greenhouse gas emissions to address climate change and drive today's the energy markets. Production breakthroughs for every energy generation source can trace their origins back to research and development supported by the Department. With the increased urgency to address climate change and as the energy market continues to transition to cleaner technologies, the Department's support for research, development, and demonstration in all clean energy sources remains critical. According to the International Energy Agency, reaching net-zero emissions by 2050 will not be achievable without a major acceleration in clean energy innovation. While it is imperative that the nation deploys clean energy technologies currently available on the market today, additional innovation is critical to ensuring the nation develops the technologies required for the coming decades to further reduce emissions.

The Committee provides funding in support of an energy strategy designed to mitigate and adapt to climate change, create jobs, and increase economic prosperity, and enhance energy security. Funding for renewable energy sources and energy efficiency technologies supports continued investments in research, development, and demonstration to advance technological innovations that save consumers money, reduce carbon pollution, and increase U.S. competitiveness for the energy sector of the future. Funding for fossil and nuclear sources is targeted to ensure the safe, efficient, and environmentally sound use of these energy sources.

The success of these technologies depends on a reliable and resilient electric grid infrastructure. The nation's electric grid was built to handle a different energy reality than the one we face today. Cyberattacks, frequent extreme weather events caused by climate change, and an increasing diversity of energy sources must be addressed to guarantee the continued operation of the electric grid. The Committee provides strong support to ensure the nation's electric grid remains secure, resilient, and ready to incorporate new technologies, particularly those that mitigate and adapt to climate change.

The Committee continues its long-standing support for the investment of taxpayer funds across the spectrum of all clean energy technologies. A national energy policy can only be successful if it maintains stability while planning for long-term strategic goals of energy security, building the future through science and clean energy, and economic prosperity for the nation. The Committee makes strategic choices, recommending a balanced approach to advance research, development, and demonstration in energy technologies that can address climate change, save money for consumers, and support a resilient electric grid.

INVESTMENTS IN INFRASTRUCTURE

America's ports, inland waterways, locks, and dams serve as economic lifelines for many communities across the nation. The water delivered to municipal, industrial, and agricultural users contributes to America's economy. The water resource infrastructure funded by the recommendation is a critical component of ensuring a robust national economy and supporting American competitiveness in international markets.

The agencies funded in this bill are also on the front lines of the federal response to climate change. A changing climate and increasing variability in weather patterns across the United States is already impacting water infrastructure, often with catastrophic results. The 2020 hurricane season had 30 named storms, the most ever recorded, while the West continued to experience exceptional drought and a record-breaking wildfire season. This recommendation represents a commitment to ensure that the nation's water resource infrastructure is resilient and able to meet the challenges posed by a changing climate.

The Committee believes that more needs to be done to increase the resiliency of infrastructure funded by this Act and that every new construction or major rehabilitation project must be constructed to the most current relevant standards. These projects should address the risk of structural failure or loss of use from natural hazards or natural disasters throughout the lifetime of each project. As a measure of responsible fiscal prudence, resilient construction and related project management practices should be integrated into all programs funded by this Act.

The U.S. Army Corps of Engineers (Corps) has been instrumental in reducing the risk of flooding for public safety, businesses, and much of this country's food-producing lands. The Bureau of Reclamation (Reclamation) supplies reliable water to approximately 10 percent of the country's population and to much of its fertile agricultural lands. Both agencies make significant contributions to national electricity production through hydropower facilities.

The U.S. marine transportation industry contributes over \$500,000,000,000 to the nation's gross domestic product and supports employment for 10 million people. As the agency responsible for the nation's federal waterways, the Corps maintains 1,072 harbors and 25,000 miles of commercial channels serving 45 states. The maintenance of these commercial waterways is directly tied to the ability of the nation to ship manufactured and bulk products, as well as to compete with the ports of neighboring countries for the business of ships arriving from around the world. As a primary

supporter of America's waterway infrastructure, the Corps ensures that the nation has the tools to maintain a competitive edge in the global market. This recommendation makes key changes to the budget request to ensure that the Corps has the resources to continue to support America's navigation infrastructure.

The flood protection infrastructure that the Corps builds or maintains reduces the risk of flooding to people, businesses, and other public infrastructure investments. In fact, the average annual damages prevented by Corps projects over fiscal years 2011 2020 was \$138,400,000,000. Between 1928 and 2020, each inflation-adjusted dollar invested in these projects prevented \$12.26 in damages. This infrastructure protects properties and investments by preventing the destruction of homes, businesses, and many valuable acres of cropland from flooding.

Reclamation's infrastructure is a critical component of the agricultural productivity of the nation and supplies water to more than 31 million people for municipal, rural, residential, and industrial uses. These facilities deliver water to one in every five western farmers resulting in more than 10 million acres of irrigated land that produces 60 percent of the nation's vegetables and 25 percent of its fruits and nuts. Without this infrastructure, American municipal and industrial users would face critical water shortages, and agricultural producers in the West would not be able to access reliable, safe water for their families and their businesses.

The Corps and Reclamation are the nation's largest and second largest producers of hydropower, respectively. Combined, these federal hydropower facilities generate approximately 115 billion kilowatt-hours annually. Gross revenues from the sale of this power reach nearly \$2,500,000,000 annually.

NATIONAL DEFENSE PROGRAMS

The Committee considers the national defense programs of the National Nuclear Security Administration (NNSA) to be the Department of Energy's highest national security priority. The recommendation provides funding to sustain and modernize the nuclear weapons stockpile, prevent the proliferation of nuclear materials, and provide for the needs of the naval nuclear propulsion program. Additionally, the recommendation fully supports the environmental cleanup of multiple sites across the country, maintaining the federal government's responsibility to clean up the legacy of over five decades of nuclear weapons production and government-sponsored nuclear energy research and development.

CONGRESSIONAL DIRECTION

Program, Project, or Activity.—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, 2022 and the Committee report accompanying this Act.

Performance Measures.—The Committee directs each of the agencies funded by this Act to comply with title 31 of the United States Code, including the development of their organizational priority

goals and outcomes such as performance outcome measures, output measures, efficiency measures, and customer service measures.

Customer Service Measures.—The Committee directs each of the agencies funded by this Act to develop standards to improve customer service and incorporate the standards into the performance plans required under title 31 of the United States Code.

Offsetting Collections.—The Committee directs each of the agencies funded by this Act to continue to report any funds derived by the agency from non-federal sources, including user charges and fines that are authorized by law, to be retained and used by the agency or credited as an offset in annual budget submissions.

Federal Advertising.—The Committee directs each of the agencies funded by this Act to include the following information in its fiscal year 2023 budget justification: expenditures for fiscal year 2021 and expected expenditures for fiscal year 2022, respectively, for (1) all contracts for advertising services, and (2) contracts for the advertising services of all Small Business Administration-recognized socioeconomic subcategory-certified small businesses, as defined in the Small Business Act, and all minority-owned businesses.

Cost Allocation Studies.—The Committee encourages the Corps, Reclamation, and Bonneville Power Administration to continue to work together on cost allocation issues for projects within the Federal Columbia River Power System, including resolving policy discrepancies among the agencies. The agencies shall continue to brief the Committee not less than quarterly on the progress on resolving issues.

Federal Law Enforcement.—The Committee notes that the Commerce, Justice, Science, and Related Agencies Appropriations Act, 2022 directs the Attorney General to continue efforts to implement training programs to cover the use of force and de-escalation, racial profiling, implicit bias, and procedural justice, to include training on the duty of federal law enforcement officers to intervene in cases where another law enforcement officer is using excessive force, and make such training a requirement for federal law enforcement officers. The Committee further notes that certain Departments and agencies funded by this Act employ federal law enforcement officers and are Federal Law Enforcement Training Centers partner organizations. The Committee directs such Departments and agencies to adopt and follow the training programs implemented by the Attorney General and to make such training a requirement for its federal law enforcement officers. The Committee further directs such Departments and agencies to brief the Committee on their efforts relating to training not later than 90 days after enactment of this Act.

In addition, the Committee directs such Departments and agencies, to the extent that such Departments and agencies have not already done so, to submit their use of force data to the Federal Bureau of Investigation (FBI)'s National Use of Force Data Collection database. The Committee further directs such Departments and agencies to brief the Committee not later than 90 days after enactment of this Act on their current efforts to tabulate and submit its use of force data to the FBI.

TITLE I—CORPS OF ENGINEERS—CIVIL**DEPARTMENT OF THE ARMY****CORPS OF ENGINEERS—CIVIL****INTRODUCTION**

The Energy and Water Development and Related Agencies Appropriations Act funds the Civil Works missions of the U.S. Army Corps of Engineers (Corps). This program is responsible for activities in support of coastal and inland navigation, flood and coastal storm damage reduction, environmental protection and restoration, hydropower, recreation, water supply, and disaster preparedness and response. The Corps also performs regulatory oversight of navigable waters. Approximately 24,000 civilians and almost 300 military personnel located in eight Division offices and 38 District offices work to carry out the Civil Works program.

BUDGET STRUCTURE CHANGES

The fiscal year 2022 budget request for the Corps proposed numerous structural changes, including the creation of two new accounts (Harbor Maintenance Trust Fund and Inland Waterways Trust Fund); the shifting of various studies and projects among accounts and business lines; and the consolidation of certain remaining items. The Committee rejects all such proposed changes and instead funds all activities in the accounts in which funding has traditionally been provided. Unless expressly noted, all projects and studies remain at the levels proposed in the budget request but may be funded in different accounts. In particular:

- Projects proposed for funding in the Harbor Maintenance Trust Fund account in the budget request are funded in the Construction, Mississippi River and Tributaries, and Operation and Maintenance accounts, as appropriate;
- Dredge Material Management Plans, requested in the Investigations account, are funded in the Operation and Maintenance account;
- Disposition studies will continue to be funded under the remaining item Disposition of Completed Projects in the Investigations account;
- Tribal Partnership Studies will continue to be funded under the Tribal Partnership Program remaining item in the Investigations account, and these amounts may be used to cover necessary administrative expenses prior to agreement execution; and
- Inspection of Completed Works, Project Condition Surveys, Scheduling of Reservoir Operations and Surveillance of Northern Boundary Waters will continue to be funded under states instead of consolidated into a national program as requested in the Operation and Maintenance account.

For any fiscal year, if the Corps proposes budget structure changes, the budget proposal shall be accompanied by a display of the funding request in the traditional budget structure.

APPORTIONMENT UNDER A CONTINUING RESOLUTION

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 Harbor Maintenance Trust Fund monies could cause serious disruptions to the economic activity that depends on these navigation channels.

For these reasons, the Committee rejects 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 Committee remains mindful of the evolving infrastructure needs of the nation's ports. 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.

Investigation and construction of port projects, including the deepening of existing projects, are cost-shared between the federal government and non-federal sponsors, often local or regional port authorities. The operation and maintenance of these projects are federal responsibilities and are funded as reimbursements from the Harbor Maintenance Trust Fund (HMTF), which is supported by an *ad valorem* tax on the value of imported and domestic cargo. Expenditures from the trust fund are subject to annual appropriations. The balance in the HMTF at the beginning of fiscal year 2022 is estimated to be approximately \$11,183,000,000.

The CARES Act (Public Law 116–136) and the Water Resources Development Act (WRDA) of 2020 (Public Law 116–260) made certain changes to the methods by which funds from the HMTF are treated under discretionary budget rules. The Committee provides an estimated \$2,050,000,000 in accordance with these changes. This funding will enable the Corps to make significant progress on the backlog of dredging needs. Additionally, WRDA 2020 made certain changes to the methods by which funds for section 2106(c) of the Water Resources Reform and Development Act (WRRDA) of 2014 are treated under discretionary budget rules. The Committee provides \$50,000,000 for these purposes.

INLAND WATERWAYS SYSTEM

The nation's inland waterways system—consisting of approximately 12,000 miles of commercially navigable channels and 237 lock chambers—is also essential to supporting the national economy. Freight transported on the inland waterways system includes a significant portion of the nation's grain exports, domestic petroleum and petroleum products, and coal used in electricity generation. Much of the physical infrastructure of the system is aging, however, and in need of improvements. For example, commercial navigation locks typically have a design life of 50 years, yet nearly 70 percent of these locks in the United States are more than 50 years old, with the average age being 65 years old.

In accordance with WRDA 2020, capital improvements to the inland waterways system are generally funded 65 percent from the general fund of the Treasury and 35 percent from the Inland Waterways Trust Fund (IWTF), while operation and maintenance costs are funded 100 percent from the general fund of the Treasury. The IWTF is supported by a tax on barge fuel.

The Corps is directed to take the preparatory steps necessary to ensure that new construction projects can be initiated as soon as can be supported under a robust capital program (i.e., as ongoing projects approach completion). For fiscal year 2022, the Committee provides \$90,000,000 from the IWTF, \$37,850,000 above the budget request. The final program level will depend on project-specific allocations to be made by the Corps. The Committee recommends \$55,000,000 above the budget request for additional operation and maintenance activities on the inland waterways.

FORMAT OF FUNDING PRIORITIES

Since the 112th Congress, when congressional earmarks were prohibited, the Administration amassed enormous control of the direction of our nation's water resources infrastructure. In doing so, the Administration often ignored congressional directives, inserted its own policies in place of the law, and turned a blind eye toward many water resources needs at the local level.

Accordingly, this recommendation includes Community Project Funding requested by Members of Congress to meet urgent needs across the United States. Community Project Funding has been included in this recommendation in the Investigations, Construction, Mississippi River and Tributaries, and Operation and Maintenance accounts in a manner that adheres to the Rules of the House of Representatives and the increased transparency and accountability standards put in place by the Committee.

As in previous years, the Committee lists in report tables the studies, projects, and activities within each account requested by the President along with the Committee-recommended funding level. To advance its programmatic priorities, the Committee has included additional funding in some accounts for certain categories of projects. Project-specific allocations within these categories will be determined by the Corps based on further direction provided in this report.

ADDITIONAL FUNDING

The recommendation includes funding in addition to the budget request to ensure continued improvements to water resources infrastructure, including resiliency, that benefit our national economy, public safety, and environmental health. This funding is for additional work that either was not included in the budget request or was inadequately budgeted.

For additional funding, the executive branch retains discretion over project-specific allocation decisions within the additional funds provided, subject to only the direction here and under the heading “Additional Funding” or “Additional Funding for Ongoing Work” within each of the Investigations, Construction, Mississippi River and Tributaries, and Operation and Maintenance accounts. A study or project may not be excluded from consideration for funding for being “inconsistent with Administration policy.” The Administration is reminded that these funds are in addition to the budget request, and Administration budget metrics shall not be a reason to disqualify a study or project from being funded.

The Committee remains concerned that the Administration has implied, either implicitly or explicitly, to non-federal sponsors that chances of being included in a budget request or work plan increase with the amount of funding a non-federal sponsor can bring to a project. Therefore, the Administration is reminded that voluntary funding in excess of legally required cost shares for studies and projects is acceptable but shall not be used as a criterion for inclusion in the budget request, for allocating the additional funding provided.

It is expected that all the additional funding provided by this Act will be allocated to specific programs, projects, or activities. The focus of the allocation process shall favor the obligation, rather than expenditure, of funds. Additionally, the Administration shall consider the extent to which the Corps is able to obligate funds as it allocates the additional funding.

The Corps shall evaluate all studies and projects only within accounts and categories consistent with previous congressional funding.

A project or study shall be eligible for additional funding within the Investigations, Construction, and Mississippi River and Tributaries accounts if: (1) it has received funding, other than through a reprogramming, in at least one of the previous three fiscal years; or (2) it was previously funded and could reach a significant milestone, complete a discrete element of work, or produce significant outputs in fiscal year 2022. None of the additional funding in any account may be used for any item where funding was specifically denied or for projects in the Continuing Authorities Program. Funds shall be allocated consistent with statutory cost share requirements.

Work Plan.—Not later than 60 days after enactment of this Act, the Corps shall provide to the Committee a work plan including the following information: (1) a detailed description of the process and criteria 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 (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 2021 and the specific reasons each study or project was considered as being less competitive for an allocation of funds.

NEW STARTS

The passage of the WRDA 2020 presents the Committee with the challenge of considerable demand for new water resources projects. The Committee supports a move to a new generation of projects that address the challenges faced by local communities, although there remain many projects authorized prior to WRDA 2020 that have yet to receive funding. In recognition of this need, the Committee includes the seven new start Investigations projects and four new start Construction projects proposed in the budget request without change. The Committee also includes a limited number of additional new starts in the Investigations, Construction, and Mississippi River and Tributaries accounts. No further new starts are provided for in this Act.

While there remains significant need for new investments in water resources projects, decisions regarding the processes by which projects may be made eligible for funding or the manner in which projects are funded can only be made by the Committee on Appropriations.

There continues to be confusion regarding the executive branch's policies and guidelines regarding which studies and projects require new start designations. Therefore, the Corps is directed to notify the Committee at least seven days prior to execution of an agreement for construction of any project except environmental infrastructure projects and projects under the Continuing Authorities Program. Additionally, the Committee reiterates and clarifies previous congressional direction as follows. Neither study nor construction activities related to individual projects authorized under section 1037 of the WRRDA of 2014 shall require a new start or new investment decision; these activities shall be considered ongoing work. No new start or new investment decision shall be required when moving from feasibility to preconstruction engineering and design (PED). The initiation of construction of an individually authorized project funded within a programmatic line item may not require a new start designation provided that some amount of construction funding under such programmatic line item was appropriated and expended during the previous fiscal year. No new start or new investment decision shall be required to initiate work on a separable element of a project when construction of one or more separable elements of that project was initiated previously; it shall be considered ongoing work. A new construction start shall not be required for work undertaken to correct a design deficiency on an existing federal project; it shall be considered ongoing work.

During the budget formulation process, the Corps should give careful consideration to the out-year budget impacts of any studies selected as new starts and to whether there appears to be an identifiable non-federal sponsor that will be ready and able to provide, in a timely manner, the necessary cost share for the feasibility and PED phases. The Corps is reminded that the flood and storm dam-

age reduction and the environmental restoration mission areas can include instances where non-federal sponsors are seeking assistance with flood control and unauthorized discharges from permitted wastewater treatment facilities and that the navigation mission area includes work in remote and subsistence harbor areas.

During the budget formulation process, the Corps also shall consider the out-year budget impacts of any selected new starts and the non-federal sponsor's ability and willingness to promptly provide required cash contributions, if any, as well as required lands, easements, rights-of-way, relocations, and disposal areas. When considering new construction starts, the Corps should include only those that can execute a project cost sharing agreement during the upcoming fiscal year.

The Secretary is directed to submit to the Committee a realistic out-year budget scenario along with the budget request for any new start proposed in the budget request. It is understood that specific budget decisions are made on an annual basis and that this scenario is neither a request for nor a guarantee of future funding for any project. Nonetheless, this scenario shall include an estimate of annual funding for each new start utilizing a realistic funding scenario through completion of the project, as well as the specific impacts of that estimated funding on the ability of the Corps to make continued progress on each previously funded construction project, including impacts to the optimum timeline and funding requirements of the ongoing projects, and on the ability to consider initiating new projects in the future. The scenario shall assume Construction and Mississippi River and Tributaries account funding levels at the average of the past three budget requests.

INVASIVE CARP

The Great Lakes and Mississippi River Interbasin Study was authorized by Congress under section 3061(d) of WRDA 2007 (Public Law 110–114). The Committee notes that the Brandon Road Lock and Dam in Joliet, Illinois, is critical to keeping 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 appreciates that the project received a positive recommendation in the Report of the Chief of Engineers and that funding is included in the fiscal year 2022 budget request to continue work on PED.

As the Corps prioritizes projects, it shall consider critical projects to prevent the spread of invasive species. The Corps is directed to provide to the Committee quarterly updates 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 Congress; the development, consideration, and implementation of new technological and structural countermeasures; and progress on 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 Asian Carp Regional Coordinating Committee, including identifying navi-

gation 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 Committee. 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.

AGING WATERWAY INFRASTRUCTURE

The Committee recognizes the extraordinary implications to the local, regional, and national economy, as well as national security, due to aging waterway infrastructure. The Committee urges the Corps to continue to prioritize ongoing deep draft lock modernization or replacement projects.

CONGRESSIONAL DIRECTION AND REPROGRAMMING

To ensure that the expenditure of funds in fiscal year 2022 is consistent with congressional direction, to minimize the movement of funds, and to improve overall budget execution, the Act incorporates by reference the projects and direction identified in the report accompanying this Act into statute. Further, the Act carries a legislative provision outlining the circumstances under which the Corps may reprogram funds.

COMMITTEE RECOMMENDATION

The Committee recommends \$8,657,932,000 for the Corps, \$862,932,000 above fiscal year 2021 and \$1,865,432,000 above the budget request.

A table summarizing the fiscal year 2021 enacted appropriation, the fiscal year 2022 budget request, and the Committee-recommended levels is provided below:

(Dollars in thousands)

Account	FY 2021 enacted	FY 2022 request	Comte. rec.
Investigations	\$153,000	\$105,837	\$155,000
Construction	2,692,645	1,792,378	2,591,732
Mississippi River and Tributaries	380,000	269,688	370,000
Operation and Maintenance	3,849,655	2,502,901	4,817,000
Regulatory Program	210,000	204,400	212,000
FUSRAP	250,000	---	250,000
Flood Control and Coastal Emergencies	35,000	35,000	35,000
Expenses	206,000	199,000	208,000
Office of the Assistant Secretary of the Army for Civil Works	5,000	5,000	5,000
Rescission	---	---	---
Water Infrastructure Finance and Innovation Program	14,200	---	14,200
Harbor Maintenance Trust Fund	---	1,625,856	---
Inland Waterways Trust Fund	---	52,150	---
Total, Corps of Engineers—Civil	7,795,000	6,792,500	8,657,932

INVESTIGATIONS

Appropriation, 2021	\$153,000,000
Budget estimate, 2022	105,837,000
Recommended, 2022	155,000,000
Comparison:	
Appropriation, 2021	+2,000,000
Budget estimate, 2022	+49,163,000

This appropriation funds studies to determine the need for, the engineering and economic feasibility of, and the environmental and social suitability of solutions to water and related land resource problems; preconstruction engineering and design; data collection; interagency coordination; and research.

The budget request for this account and the approved Committee allowance are shown on the following table:

CORPS OF ENGINEERS - INVESTIGATIONS
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
ALABAMA		
CLAIRBORNE AND MILLERS FERRY LOCKS AND DAMS (FISH PASSAGE), LOWER ALABAMA RIVER, AL	600	600
ALASKA		
AKUTAN HARBOR NAVIGATIONAL IMPROVEMENTS, AK	100	---
ELIM SUBSISTENCE HARBOR, AK	2,000	2,000
LOWELL CREEK FLOOD DIVERSION, AK	---	3,000
ARIZONA		
LITTLE COLORADO RIVER, WINSLOW, AZ	---	500
CALIFORNIA		
LOS ANGELES COUNTY DRAINAGE AREA (CHANNELS), CA	565	---
LOS ANGELES RIVER ECOSYSTEM RESTORATION, CA	1,693	3,693
LOWER CACHE CREEK, CA	---	2,000
LOWER MISSION CREEK, CA (GENERAL REEVALUATION REPORT)	600	600
LOWER SAN JOAQUIN (LATHROP & MANTECA), CA	---	200
MURRIETA CREEK, CA (GENERAL REEVALUATION REPORT)	600	600
IMPERIAL STREAMS SALTON SEA, CA	---	200
SAN DIEGO COUNTY SHORELINE (OCEANSIDE), CA	---	750
SAN FRANCISCO WATERFRONT STORM DAMAGE REDUCTION STUDY, CA	---	3,000
SANTA PAULA CREEK, CA	---	900
SOUTH SAN FRANCISCO BAY SHORELINE (SANTA CLARA COUNTY), CA	---	1,600
CONNECTICUT		
HARTFORD, CT & EAST HARTFORD, CT	---	200
FLORIDA		
CENTRAL & SOUTHERN FLORIDA (C&SF) FLOOD RESILIENCY (SECTION 216) STUDY, FL	500	500
FORT PIERCE, ST. LUCIE COUNTY, FL	---	1,000
ST. AUGUSTINE BACK BAY, FL	---	200
TAMPA HARBOR, FL (GENERAL RE-EVALUATION REPORT)	---	800
HAWAII		
HONOLULU HARBOR MODIFICATION FEASIBILITY STUDY, HI	---	800
IDAHO		
BOISE RIVER, GARDEN CITY, ADA COUNTY, ID	500	500

CORPS OF ENGINEERS - INVESTIGATIONS (AMOUNTS IN THOUSANDS)		BUDGET REQUEST	HOUSE RECOMMENDED
KANSAS			
UPPER TURKEY CREEK BASIN DESIGN, MERRIAM, KS		---	500
KENTUCKY			
KENTUCKY RIVER, BEATYVILLE, KY		---	700
ILLINOIS			
CHICAGO SHORELINE, IL (GENERAL REEVALUATION REPORT)		500	500
GREAT LAKES COASTAL RESILIENCY STUDY, IL, IN, MI, MN, NY, OH, PA and WI		500	500
BRANDON ROAD LOCK AND DAM, AQUATIC NUISANCE CONTROL SPECIES BARRIER, IL (GREAT LAKES AND MISSISSIPPI RIVER INTERBASIN STUDY)		4,940	4,940
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVR PORTION), IL		700	---
KANSAS			
LOWER MISSOURI RIVER BASIN, KS, MO and IA		600	600
LOUISIANA			
HOUMA NAVIGATION CANAL, LA		---	350
PORT FOURCHON BELLE PASS CHANNEL, LA		---	1,500
PORT OF IBERIA, LA		---	1,200
MICHIGAN			
ALTAMAHA RIVER, OCONEE RIVER AND OCMULGEE RIVERS, BELLVILLE POINT HARBOR, DARIEN HARBOR, FANCY BLUFF CREEK, SAPELO HARBOR, SATILLA RIVER AND ST. MARYS RIVER WATERWAYS, MI		100	---
MINNESOTA			
LOWER ST. ANTHONY FALLS, MISSISSIPPI RIVER, MN		250	---
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVP PORTION), MN		1,650	---
MISSOURI			
LITTLE BLUE RIVER BASIN, JACKSON COUNTY, MO		600	600
LOWER MISSOURI BASIN - BRUNSWICK L-246, MO		---	500
LOWER MISSOURI BASIN - HOLT COUNTY, MO, DONIPHAN COUNTY, KS		---	300
LOWER MISSOURI BASIN - JEFFERSON CITY L-142, MO		---	300

CORPS OF ENGINEERS - INVESTIGATIONS
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
NEW JERSEY		
NEW JERSEY BACK BAYS, NJ	750	750
PECKMAN RIVER BASIN, NJ	---	500
NEW YORK		
NEW YORK - NEW JERSEY HARBOR AND TRIBUTARIES, NY and NJ	1,450	1,450
SPRING CREEK SOUTH, JAMAICA BAY (HOWARD BEACH), QUEENS, NY	500	500
NORTH CAROLINA		
WILMINGTON HARBOR NAVIGATION IMPROVEMENTS, NC	---	500
OHIO		
ASHTABULA HARBOR, OH	300	--- ^
CLEVELAND HARBOR, OH	300	--- ^
CONNEAUT HARBOR, OH	300	--- ^
FAIRPORT HARBOR, OH	300	--- ^
SANDUSKY HARBOR, OH	300	--- ^
OKLAHOMA		
OPTIMA LAKE, OK	200	--- ~
OREGON		
COLUMBIA RIVER TREATY 2024 IMPLEMENTATION, OR	10,000	--- ^
WILLAMETTE RIVER ENVIRONMENTAL DREDGING, OR	---	732
PUERTO RICO		
CAÑO MARTIN PEÑA ECOSYSTEM RESTORATION, PR	2,150	2,150
RHODE ISLAND		
LITTLE NARRAGANSETT BAY, RI	500	500
SOUTH CAROLINA		
PORT ROYAL HARBOR, SC	342	--- ~
WACCAMAW RIVER, HORRY COUNTY, SC	500	500
TENNESSEE		
HATCHIE/LOOSAHATCHIE, MISSISSIPPI RIVER MILE 775-736 HABITAT RESTORATION, TN & AR	600	600

CORPS OF ENGINEERS - INVESTIGATIONS
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
TEXAS		
ARKANSAS-RED RIVER CHLORIDE CONTROL, AREA VIII, TX	343	--- ~
CITY OF EL PASO, TX	600	600
ESTELLINE SPRINGS EXPERIMENTAL PROJECT, TX	200	--- ~
GIWW - BRAZOS RIVER FLOODGATES & COLORADO RIVER LOCKS, TX	6,932	6,932
LOWER RIO GRANDE VALLEY WATERSHED ASSESSMENT, TX	---	200
WESTSIDE CREEKS ECOSYSTEM RESTORATION, SAN ANTONIO, TX	2,340	2,340
VIRGIN ISLANDS		
SAVAN GUT PHASE II, ST. THOMAS, VI	3,777	3,777
VIRGINIA		
CITY OF NORFOLK, VA	---	650
WASHINGTON		
COLUMBIA RIVER TURNING BASIN NAVIGATION IMPROVEMENTS, WA & OR	---	200
WISCONSIN		
KEWAUNEE HARBOR, WI	300	--- ^
MANITOWOC HARBOR, WI	300	--- ^
OTTER CREEK WATERSHED WETLAND RESTORATION, WI	75	--- ~
WYOMING		
LITTLE GOOSE CREEK, SHERIDAN, WY	500	500
SUBTOTAL, PROJECTS LISTED UNDER STATES	50,857	59,514
REMAINING ITEMS		
ADDITIONAL FUNDING	---	8,281
ACCESS TO WATER DATA	325	325
AUTOMATED INFORMATION SYSTEMS SUPPORT Tri-CADD	250	250
COASTAL FIELD DATA COLLECTION	1,500	1,500
COORDINATION WITH OTHER WATER RESOURCES AGENCIES	450	1,000
DISPOSITION OF COMPLETED PROJECTS	---	2,000
ENVIRONMENTAL DATA STUDIES	80	80
FERC LICENSING	100	100
FLOOD DAMAGE DATA	275	275
FLOOD PLAIN MANAGEMENT SERVICES	15,400	15,400
HYDROLOGIC STUDIES	500	500
INTERAGENCY WATER RESOURCES DEVELOPMENT	75	75
INVENTORY OF DAMS	400	400

CORPS OF ENGINEERS - INVESTIGATIONS
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
NATIONAL FLOOD RISK MANAGEMENT PROGRAM	6,500	6,500
NATIONAL SHORELINE MANAGEMENT STUDY	---	1,500
PLANNING ASSISTANCE TO STATES	7,000	10,000
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	1,500	1,500
TRANSPORTATION SYSTEMS	1,000	1,000
TRIBAL PARTNERSHIP PROGRAM	---	5,175 *
SUBTOTAL, REMAINING ITEMS	54,980	95,486
TOTAL, INVESTIGATIONS	105,837	155,000

^Funded in a remaining item in another account.

~Funded in remaining items.

**Includes funds requested in Projects Listed Under States within this account.*

Additional Funding.—The Corps is expected to allocate the additional funding provided in this account primarily to specific feasibility and preconstruction engineering and design (PED) phases, rather than to remaining items line items as has been the case in previous work plans. When allocating the additional funding provided in this account, the Corps shall consider giving priority to completing or accelerating ongoing studies that will enhance the nation's economic development, job growth, and international competitiveness; are for projects located in areas that have suffered recent natural disasters; are for projects that protect life and property; or are for projects to address legal requirements. The recommendation includes sufficient additional funding to undertake a significant amount of feasibility and PED work. The Administration is reminded that a project study is not complete until the PED phase is complete and that no new start or new investment decision shall be required when moving from feasibility to PED.

Ala Wai Canal, Hawaii.—The Corps is directed to provide to the Committee not later than 180 days after enactment of this Act a briefing on this project. The Committee expects such a briefing to address the merits of the overall project, improvements to the modeling used to assess the project, efforts to engage with the local community, and steps that can be taken to ensure the viability of the project.

Chacon Creek, Texas.—The Corps is encouraged to include appropriate funding for this project in future budget submissions.

Coordination with Other Water Resource Agencies.—Additional funds are included for continued collaboration with other federal agencies and stakeholders on invasive species challenges.

Disposition of Completed Projects.—The Committee appreciates the Corps working to complete disposition studies pursuant to facilities that closed as a result of Public Law 113–121. The Corps is directed to provide to the Committee copies of disposition studies upon completion. For Corps facilities that are deemed as excess, the Committee supports the disposal of those facilities through the appropriate General Services Administration process.

Economically Disadvantaged Communities.—The Committee is aware that economically-disadvantaged communities, such as the Rio Grande Valley in Texas, face extra burdens in addressing complex flood control issues. Without federal attention, many of these challenges may not be recognized and addressed in a timely manner, possibly resulting in additional damages to property and life. The Corps is encouraged in future budget requests to take into account economically disadvantaged communities that are prone to hurricane storm damage and flooding when proposing new starts.

Fort Bend County, Texas.—The Corps is encouraged to continue to work with the non-federal sponsor on plans to reduce flooding along Mustang Bayou, including an evaluation of the Mustang Bayou Flood and Drainage Control Project if requested. The Corps is directed to provide to the Committee not later than 180 days after enactment of this Act a briefing on the status of this project. The Committee also notes that there is a threat of flooding from high volumes of stormwater draining into Barker Reservoir. The Corps is directed to provide to the Committee not later than 180

days after enactment of this Act a briefing on the status of its efforts to engage with Fort Bend County to address this issue.

Hartford and East Hartford, Connecticut.—The Committee understands that the Corps is completing initial appraisal reports under section 216 of the Flood Control Act of 1970 and reminds the Corps that WRDA 2018 directed expedited completion of feasibility studies for flood risk management projects in Hartford and East Hartford, Connecticut.

Kauai, Hawaii.—The Committee is aware that river levels on the Island of Kauai continue to rise in response to more frequent extreme weather and have contributed to record high flooding and mudslides across the island. The Corps is directed to provide to the Committee not later than 180 days after enactment of this Act a briefing on efforts to address these issues, including any authorized studies, timelines, challenges, and other related projects that are required to be expedited to mitigate flood risks on the Island of Kauai.

Lake Cypress, Florida.—The Committee continues to be aware that high rain totals have created significant sediment flow through the Kissimmee Chain of Lakes, resulting in a shoal that has expanded in recent years, located at the end of the C-35 canal in Lake Cypress, Florida. The Committee is concerned over reports that the shoal has become a danger to navigation and strongly encourages the Corps to coordinate with state and local officials on this issue.

Long Beach, Mississippi.—The Corps is reminded that the Long Beach, Bay St. Louis and Mississippi Sound, Mississippi hurricane and storm damage risk reduction and flood risk management feasibility study was authorized in section 201 of WRDA 2020. This study would establish the scope and identify and prioritize structural and non-structural measures for a sustainable, regional solution to hurricane, storm, and flood risks that protects lives and property and promotes long-term economic growth in Mississippi's largely rural western Gulf Coast.

Louisiana Coastal Area Task Force.—The Corps is encouraged, as appropriate, to establish the Task Force authorized by section 7004 of WRDA 2007 to improve coordination of ecosystem restoration in the Louisiana Coastal Area and is reminded of the reporting requirement in section 212 of WRDA 2020 (Public Law 116-260).

Murrieta Creek, California.—The non-federal sponsor is prepared to work with the Corps during the General Reevaluation Report (GRR) to develop the conceptual design for the multi-purpose basin in order to optimize costs and benefits and facilitate interim uses of the property. Once the GRR is complete, the Committee understands that the non-federal sponsor will complete the design of the basin and plans to seek to enter into an agreement for credit for this project work. The non-federal sponsor is also working closely with the Corps to update the economic analysis and include the full range of benefits for this project in order to identify the best return on investment for the federal government. The Corps is encouraged to focus the GRR on identifying and optimizing the remaining features for construction completion. The Corps is encouraged to include appropriate funding for this project in future budget submis-

sions and to work with the non-federal sponsor to advance the project to the next phase at the earliest practicable opportunity.

New York-New Jersey Harbor and Tributaries.—The Committee appreciates that the budget request includes \$1,450,000 to continue this study. The Committee continues to expect the Corps to make all necessary efforts to engage community groups and incorporate impacts of low-frequency precipitation and sea level rise in the study. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on the status of this study.

Non-Contiguous Regional Sediment Study.—The Committee is aware of the effects of rising sea levels on states and territories due to climate change. The quantification of sediment resources and pathways can provide the engineering design guidance necessary to restore these vital coastal resources in the most cost-effective manner. Additionally, a study of shorelines could assist state and local authorities in documenting the historical shift of island shorelines, can help in understanding areas of vulnerability, and could be used to prioritize areas of interest. Therefore, the Committee directs the Corps, within available funds in the National Shoreline Management Study remaining item, to conduct a study and provide a report not later than one year after enactment of this Act on how beneficial uses of dredged material for non-contiguous states and territories can be applied to mitigate rising sea levels, including impacts on sensitive shoreline areas.

North Branch Ecorse Creek Watershed, Michigan.—The Committee is aware that flooding is a consistent, recurring issue in the project area, North Branch Ecorse Creek Watershed, which has flooded at least four times in the last four years. The repetitive flooding is causing extensive property damage, bank instability and erosion, sediment and nutrient loading, trash and debris loading, in-stream habitat degradation, and loss of aesthetic and recreational value.

Planning Assistance to States, Vulnerable Coastal Communities.—The Committee notes the important role the Corps plays in managing flood risk and threats from coastal hazards and that the Planning Assistance to States program provides in assisting with comprehensive plans and technical assistance to eligible state, tribal, or U.S. territory partners. Accordingly, the recommendation provides \$10,000,000 for the program. Within the funds provided, the Corps is directed to prioritize providing planning-level technical assistance to coastal federally recognized tribal communities that are actively working to relocate homes and other critical infrastructure to higher ground to mitigate the impacts of climate change. The Corps is directed to provide to the Committee not later than 45 days after enactment of this Act a briefing on its efforts to comply with this directive, how the Corps's existing authorities can provide assistance to coastal federally recognized tribal communities actively working to relocate their homes, and how these authorities could be modernized to better assist these communities.

Additionally, the Committee encourages the Corps to continue building capacity to provide this assistance to vulnerable coastal communities, including tribal, Alaskan Native, and Native Hawaiian communities. The Committee encourages the Corps to consider

the effects of sea level rise and storm surge on locations of significance for communities that have limited options for relocation or retreat from the coastal flood zone, including remote, coastal, or small watershed areas when considering feasibility studies for flood and storm damage reduction.

Principles, Requirements & Guidelines.—The Committee understands that the Corps is developing Agency Specific Procedures to implement the Principles, Requirements and Guidelines for Federal Investments in Water Resources (PR&G) released in March 2013 and the Final Interagency Guidelines released in December 2014. The Corps is reminded that Congress, through section 110 of WRDA 2020, required the Corps to issue final Agency Specific Procedures originally enacted by section 2031 of WRDA 2007. This section established a national policy for water resources projects to maximize sustainable development, to avoid unwise use of floodplains and flood-prone areas, and to protect and restore, and where necessary mitigate unavoidable impacts to, natural systems. This section also directed the Secretary to update the PR&G to incorporate modern advancements in economic and analytical techniques and to incorporate efforts to address public safety, low-income communities, nonstructural approaches to water resource development and management, and integrative, adaptive and watershed approaches. The Corps is directed to fully implement the WRDA 2020 requirement and to brief the Committee not later than 45 days of enactment of this Act on its efforts to update the Agency Specific Procedures and again prior to finalizing the Agency Specific Procedures.

Research and Development.—The Committee encourages the Corps to engage in monitored field trials of coastal restoration optimized for blue carbon CO₂ sequestration. The Corps is directed to provide to the Committee not later than 180 days after enactment of this Act a briefing on such efforts and how the Corps collaborates with other federal and state agencies on these issues. The Committee also encourages the Corps to collaborate with university partners to improve the capabilities for improving the integrity and performance of the nation's levee systems. The recommendation provides \$4,000,000 to modernize existing Corps coastal and hydraulics models and integrate them to make them accessible for use by other agencies, universities, and the public. The Committee directs the Corps to investigate the presence, geochemistry, and potential recovery of rare earth elements in dredged materials.

Research and Development, Biopolymers.—The Committee notes the importance of earthen infrastructure such as dams and levees to support safety, flood control, and water distribution systems and notes the value of research into the use of biopolymers to rehabilitate these deteriorating structures, reduce rehabilitation and maintenance costs, and increase resiliency against potential threats. The recommendation includes \$6,000,000 to continue research activities.

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 encourages the Corps to utilize partnerships to research

and develop advanced technology 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.

Research and Development, Freshwater Intrusions.—The Committee recognizes the need to develop tools to assess, forecast, and proactively manage the hydrodynamic and environmental impacts of large-scale freshwater intrusion into the Mississippi Sound and surrounding waters. These consistent freshwater intrusions have been detrimental to the Mississippi Sound and the U.S. blue economy. The Corps is encouraged to partner with academia with expertise in coastal processes and ocean and hydrodynamic modeling to develop these tools.

Research and Development, Manage Emerging Threats and Resilience for Flood Control Structures.—The Corps is encouraged to research, test, and refine the use of rapid, repeatable, and remote methods for long-term monitoring of critical water infrastructure and to partner with academia to research and manage emerging threats and attain resilience for flood control structures.

Research and Development, Modeling.—Rising sea levels, climate change, and human activities continue to impact coastlines, rivers, and related habitats. The recommendation provides \$4,000,000 to support ongoing research into geochemical, geophysical, and sedimentological analysis and modeling which will help the Corps assess strategies to mitigate these changes and to detect and prevent adverse consequences of engineering solutions.

Research and Development, Ecohydraulics.—The Corps is encouraged to consider advancement and implementation of capabilities regarding ecohydraulic data and models to support project planning and engineering models for decision making and advance ecohydraulics tools.

Research and Development, Oyster Reef 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. Accordingly, the recommendation provides \$3,000,000 for these activities. The Corps is encouraged to develop partnerships with research universities to leverage their expertise to enhance these activities.

Research and Development, Urban Flood Damage Reduction.—The recommendation includes \$3,000,000 for the Corps to continue its focus on the management of water resources infrastructure and projects that promote public safety, reduce risk, improve operational efficiencies, reduce flood damage, and sustain the environment. Work should focus on unique western U.S. issues like wild-fire, rain-on-snow, atmospheric rivers effects on flood risk management, and bridging the connection between climate change science and engineering application for flood risk management, emergency management, and ecosystem management. The tools and technologies developed under this program should also be applicable to other parts of the country.

Rio Inabón, Ponce, Puerto Rico.—The Committee acknowledges the interest of local and federal parties in the flood risk management project for Río Inabón, Ponce, Puerto Rico, to protect the Ponce Mercedita Airport, one of the three main passenger gateways to Puerto Rico. The Committee encourages the Corps to continue working with the Puerto Rico Ports Authority and the Municipality of Ponce to evaluate current needs and to expeditiously move forward with the necessary feasibility studies to determine a course of action.

Salton Sea, California.—The Committee recognizes the role that the Corps plays in the restoration of the Salton Sea and encourages the Corps to be an active participant in restoration efforts involving federal participation, including the California Natural Resources Agency's Salton Sea Management Plan. The Committee notes the Senate Environment and Public Works Committee Resolution dated April 25, 2016, authorizing the Imperial Stream Salton Sea study, an aquatic ecosystem restoration study on an inland lake with associated public health risks, and reminds the Corps that this study is eligible to compete for a new start as provided in this Act.

San Francisco Waterfront Storm Damage Reduction Project, California.—The century-old Embarcadero Seawall underpins approximately \$140,000,000,000 in public and private assets and economic activity. The Seawall is now in urgent need of repair as it stands vulnerable to seismic risks and increasing flood risks. The Committee urges the Corps to expedite approval of the non-federal sponsor's exemption request and encourages timely implementation of sections 113 and 152 of WRDA 2020.

Six-State High Plains Ogallala Aquifer Area Study.—The Committee recognizes the importance of the 1982 Six-State High Plains Ogallala Aquifer Regional Resources Study and associated water projects and encourages the Corps to include appropriate funding for this study in future budget submissions.

Southeast Michigan Flooding.—The Committee is aware of the long and persist issue of severe flooding events across the Southeast Michigan region. Within its existing authorities, the Corps is encouraged to closely coordinate with affected communities in this region and the State of Michigan to identify the source of these flooding events and to help these communities mitigate future flood disasters in this area.

Tampa Harbor, Florida.—The Committee maintains interest in the dramatic increase in global post-Panamax vessels utilizing Tampa Harbor. Port Tampa Bay is strategically positioned to maximize supply chain efficiencies for global maritime goods movement and achieve significant environment and safety benefits associated with reductions in truck miles, highway congestion, and freight carbon pollution. The Committee commends the Corps for its decision to resume the Tampa Harbor General Reevaluation Report (GRR), which will identify long-term channel needs, and encourages the Corps to move forward expeditiously.

Tittabawassee River Watershed.—The Committee recognizes the benefits of environment-based mitigation measures such as the creation of wetlands, conservation easements, and natural floodplains to slow the flow rate of rivers, creeks, and streams to mitigate the

severity of future floods. The Committee encourages the Corps to participate and coordinate as a federal stakeholder with the Department of Agriculture, Environmental Protection Agency, Federal Emergency Management Agency, and National Oceanic and Atmospheric Administration, as well as state, local, and tribal governments, and business and non-profit stakeholders, on developing and supporting conservation and environment-based flood mitigation measures to reduce the impact of floods on communities, lives and livelihoods within the Tittabawassee River Watershed in the Great Lakes Bay Region.

Upper Des Plaines River and Tributaries Project, Illinois and Wisconsin.—The Committee is aware that the project area was flooded with record high crests overflowing the Des Plaines River, resulting in damage to more than 3,200 residences. The Committee urges the Corps to cooperate with the non-federal sponsor as it prepares advance work on a number of flood features under section 204 of WRDA 1986.

CONSTRUCTION

Appropriation, 2021	\$2,692,645,000
Budget estimate, 2022	1,792,378,000
Recommended, 2022	2,591,732,000
Comparison:	
Appropriation, 2021	- 100,913,000
Budget estimate, 2022	+799,354,000

This appropriation funds construction, major rehabilitation, and related activities for water resource projects whose principal purpose is to provide commercial navigation, flood and storm damage reduction, or aquatic ecosystem restoration benefits to the nation. Portions of this account are funded from the Harbor Maintenance Trust Fund and the Inland Waterways Trust Fund.

The budget request for this account and the approved Committee allowance are shown on the following table:

CORPS OF ENGINEERS - CONSTRUCTION
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
ARKANSAS		
MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM, THREE RIVERS, AR	96,850	149,000 *
ARIZONA		
ARIZONA ENVIRONMENTAL INFRASTRUCTURE, AZ	---	4,000
ARIZONA ENVIRONMENTAL INFRASTRUCTURE (CITY OF TOLLESON), AZ	---	638
TRES RIOS, AZ	---	1,841
CALIFORNIA		
AMERICAN RIVER COMMON FEATURES, NATOMAS BASIN, CA	156,915	156,915
HARBOR/SOUTH BAY, LOS ANGELES, CA	---	3,790
NEW RIVER, IMPERIAL COUNTY, CA	---	500
SACRAMENTO AREA ENVIRONMENTAL INFRASTRUCTURE (CITY OF FOLSOM), CA	---	75
SACRAMENTO AREA ENVIRONMENTAL INFRASTRUCTURE (ORANGEVALE), CA	---	75
SAN CLEMENTE SHORELINE, CA	---	9,306
SAN JOAQUIN RIVER BASIN, LOWER SAN JOAQUIN, CA	15,000	15,000
SURFSIDE-SUNSET-NEWPORT BEACH, CA	---	15,500
WEST SACRAMENTO, CA	17,900	17,900
WHITTIER NARROWS, CA (DAM SAFETY)	219,591	219,591
FLORIDA		
FLORIDA KEYS WATER QUALITY IMPROVEMENT PROJECT, FL	---	6,000
FORT PIERCE, FL	---	10,549
PINELLAS COUNTY, FL	---	900
SOUTH FLORIDA ECOSYSTEM RESTORATION, FL	350,000	350,000
GEORGIA		
SAVANNAH HARBOR EXPANSION, GA	24,000	24,000
ILLINOIS		
CALUMET HARBOR AND RIVER, IL and IN	---	9,100 *
UPPER MISSISSIPPI RIVER - ILLINOIS WW SYSTEM, IL, IA, MN, MO & WI	---	22,500
UPPER MISSISSIPPI RIVER RESTORATION, IL, IA, MN, MO and WI	33,170	33,170
INDIANA		
CALUMET REGION, IN	---	10,000
INDIANA HARBOR, CONFINED DISPOSAL FACILITY, IN	---	18,395 *
INDIANA SHORELINE, IN	---	2,700

CORPS OF ENGINEERS - CONSTRUCTION
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
IOWA		
MISSOURI RIVER FISH AND WILDLIFE RECOVERY, IA, KS, MO, MT, NE, ND and SD	8,075	8,075
KANSAS		
FAIRFAX JERSEY CREEK, KS	---	4,000
KENTUCKY		
SOUTHERN AND EASTERN KENTUCKY, KY (MARTIN COUNTY)	---	1,500
LOUISIANA		
CALCASIEU RIVER AND PASS, LA	---	9,000 *
J BENNETT JOHNSTON WATERWAY, LA	---	2,250
LOUISIANA COASTAL AREA ECOSYSTEM RESTORATION, LA	6,000	6,000
SOUTHWEST COASTAL LOUISIANA HURRICANE PROTECTION, LA	---	12,700
MARYLAND		
ANACOSTIA WATERSHED RESTORATION, PRINCE GEORGE'S COUNTY, MD	30,000	30,000
ASSATEAGUE ISLAND, MD	---	600 *
CHESAPEAKE BAY OYSTER RECOVERY, MD and VA	3,880	3,880
POPLAR ISLAND, MD	---	4,200 *
MICHIGAN		
ECORSE CREEK, WAYNE COUNTY, MI	---	1,675
SAULT SAINTE MARIE (NEW SOO LOCK), MI	480,000	480,000
NEW JERSEY		
RARITAN RIVER BASIN, GREEN BROOK SUB-BASIN, NJ	30,000	30,000
TOWNSENDS INLET TO CAPE MAY INLET, NJ	---	15,500
NORTH CAROLINA		
CAROLINA BEACH AND VICINITY, NC	---	11,550
WILMINGTON HARBOR, NC	---	22,000 *
WRIGHTSVILLE BEACH, NC	---	10,080
NORTH DAKOTA		
PIPESTEM LAKE, ND	136,496	136,496

CORPS OF ENGINEERS - CONSTRUCTION
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
OHIO		
CITY OF LORAIN ENVIRONMENTAL INFRASTRUCTURE SEWER PROJECT, OH	---	3,375
OKLAHOMA		
MIDWEST CITY, OK	---	5,000
OREGON		
COLUMBIA RIVER AT THE MOUTH, OR and WA	25,609	25,609
WILLAMETTE RIVER AT WILLAMETTE FALLS, OR	---	6,200
PENNSYLVANIA		
SOUTH CENTRAL PENNSYLVANIA ENVIRONMENTAL IMPROVEMENT (CONFLUENCE BOROUGH MUNICIPAL AUTHORITY WATER QUALITY PROJECT), PA	---	3,246
SOUTH CAROLINA		
LAKES MARION AND MOULTRIE, SC	---	19,785
VIRGINIA		
NORFOLK HARBOR AND CHANNELS, VA (DEEPENING)	83,700	83,700
WASHINGTON		
COLUMBIA RIVER FISH MITIGATION, WA, OR and ID (CRFM)	3,575	3,575
MOUNT ST. HELENS SEDIMENT CONTROL, WA	29,749	29,749
SUBTOTAL, PROJECTS LISTED UNDER STATES	1,750,510	2,051,190
REMAINING ITEMS		
ADDITIONAL FUNDING		
FLOOD AND STORM DAMAGE REDUCTION	---	80,000
FLOOD CONTROL	---	20,000
SHORE PROTECTION	---	20,000
NAVIGATION	---	140,000
INLAND WATERWAYS TRUST FUND REVENUES	---	33,125
OTHER AUTHORIZED PROJECT PURPOSES	---	20,000
ENVIRONMENTAL RESTORATION OR COMPLIANCE	---	73,632
ENVIRONMENTAL INFRASTRUCTURE	---	20,000
AQUATIC PLANT CONTROL PROGRAM	---	30,000
BENEFICIAL USE OF DREDGED MATERIAL PILOT PROGRAM	---	4,300

CORPS OF ENGINEERS - CONSTRUCTION
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
CONTINUING AUTHORITIES PROGRAM		
AQUATIC ECOSYSTEM RESTORATION (SECTION 206)	1,000	11,000
BENEFICIAL USES DREDGED MATERIAL (SECTION 204)	1,000	10,000 *
EMERGENCY STREAMBANK AND SHORELINE PROTECTION (SECTION 14)	—	8,000
CHICKASAW PARK LOUISVILLE/JEFFERSON CO. KY 14, KY	—	(100)
FLOOD CONTROL PROJECTS (SECTION 205)	1,000	15,000
MCCORMICK WASH, GLOBE, AZ	—	(100)
ROSE AND PALM GARDEN WASHES FLOOD CONTROL PROJECT, AZ	—	(100)
SALMON RIVER, NY	—	(50)
MITIGATION OF SHORE DAMAGES (SECTION 111)	—	2,500
NAVIGATION PROGRAM (SECTION 107)	—	2,500
LAKE MONTAUK HARBOR, NY	—	(1000)
LOWER ST. CROIX RIVER, MN	—	(50)
PROJECT MODIFICATIONS FOR IMPROVEMENT OF THE ENVIRONMENT (SECTION 1135)	1,533	10,000
OSAGE RIVER ECOSYSTEM RESTORATION, TUSCUMBIA, MO & MILLER COUNTY, MO	—	(300)
SHORE PROTECTION (SECTION 103)	—	2,000
REEL POINT PRESERVE, TOWN OF SHELTER ISLAND, NY	—	(50)
WADING RIVER CREEK, TOWN OF RIVERHEAD, NY	—	(50)
DAM SAFETY AND SEEPAGE/STABILITY CORRECTION PROGRAM	13,000	13,000
EMPLOYEES' COMPENSATION	15,000	15,000
INLAND WATERWAYS USERS BOARD - BOARD EXPENSE	60	60
INLAND WATERWAYS USERS BOARD - CORPS EXPENSE	275	275
TRIBAL PARTNERSHIP PROGRAM	—	10,150
INNOVATIVE FUNDING PARTNERSHIPS	10,000	—
SUBTOTAL, REMAINING ITEMS	42,868	540,542
TOTAL, CONSTRUCTION	1,793,378	2,591,732

*Includes funds requested in other accounts.

Additional Funding.—The recommendation includes additional funds for projects and activities to enhance the nation’s economic growth and international competitiveness.

Of the additional funding provided in this account for environmental restoration or compliance and other authorized project purposes, the Corps shall allocate not less than \$13,530,000 for execution of comprehensive restoration plans developed by the Corps for major bodies of water.

Of the additional funds provided in this account, the Corps shall allocate not less than \$40,000,000 to projects with riverfront development components.

Of the additional funding provided in this account for flood and storm damage reduction and flood control, the Corps shall allocate not less than \$40,000,000 to continue construction of projects that principally address drainage in urban areas.

Public Law 115–123 and Public Law 116–20 included funding within the Flood Control and Coastal Emergencies account to restore authorized shore protection projects to full project profile. That funding is expected to address some of the current year capability. The recommendation includes \$20,000,000 for construction of shore protection projects. The Corps is reminded that if additional work can be done, these projects are also eligible to compete for additional funding for flood and storm damage reduction.

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 and supported in the supply chain by the funded activity;
- significance to national security, including the strategic significance of commodities;
- ability to obligate the funds allocated within the fiscal 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, economic activity, or public infrastructure at risk, as appropriate; and
 - the severity of risk of flooding or the frequency with which an area has experienced flooding;
- for shore protection projects, projects in areas that have suffered severe beach erosion requiring additional sand placement outside of the normal beach renourishment cycle or in which the normal beach renourishment cycle has been delayed, and projects in areas where there is risk of environmental contamination;

- for mitigation projects, projects with the purpose to address the safety concerns of coastal communities impacted by federal flood control, navigation, and defense projects;
- 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 projects cost shared with the Inland Waterways Trust Fund (IWTF), the economic impact on the local, regional, and national economy if the project is not funded, as well as discrete elements of work that can be completed within the funding provided in this line item;
- for other authorized project purposes and environmental restoration or compliance projects, to include the beneficial use of dredged material; and
- for environmental infrastructure projects, projects with the greater economic impact, projects in rural communities, projects in communities with significant shoreline and instances of runoff, projects in or that benefit counties or parishes with high poverty rates, projects in financially distressed municipalities, projects that improve stormwater capture capabilities, and projects that will provide substantial benefits to water quality improvements.

The recommendation provides a total of \$90,000,000 of estimated annual revenues in the IWTF, including those projects listed in the “Projects Listed Under States” table. The Corps shall allocate all funds provided in the IWTF Revenues line item along with the statutory cost share from funds provided in the Navigation line item prior to allocating the remainder of funds in the Navigation line item.

Aquatic Plant Control Program.—Of the additional funding provided for the Aquatic Plant Control Program, \$17,000,000 shall be for watercraft inspection stations, as authorized in section 104 of the River and Harbor Act of 1958, equally distributed to carry out subsections (d)(1)(A)(i), (d)(1)(A)(ii), and (d)(1)(A)(iii), and \$3,000,000 shall be for related monitoring, as authorized by section 1170 of the America’s Water Infrastructure Act of 2018. Additional funding is also provided for nationwide research and development to address invasive aquatic plants, and activities for monitoring, surveys, and control of flowering rush and hydrilla verticillate. The recommendation also provides \$150,000 to commence activities authorized under section 509 of WRDA 2020, and the Corps is directed to provide to the Committee prior to the obligation of any funds for this purpose a briefing on how it will implement this program. Lastly, the recommendation provides additional funding for activities authorized by section 505 of WRDA 2020, and the Corps is directed to provide to the Committee prior to the obligation of any funds a briefing on how it will implement this program.

Beneficial Use of Dredged Material Pilot Program.—The Committee provides \$4,300,000 to continue the pilot projects to demonstrate the economic benefits and impacts of environmentally sustainable maintenance dredging methods that provide for ecosystem restoration and resilient protective measures. Cost sharing for these projects shall be in accordance with subsection (e) of section 1122 of the Water Infrastructure Improvements for the Nation

(WIIN) Act of 2016 (Public Law 114–322). The Committee continues to support the pilot program to carry out beneficial use of dredged sediment and notes the selection of the Resilient San Francisco Bay Pilot Project. The Committee is aware of the non-federal sponsor's desire to proceed with the full proposal phased over a number of years. The Committee urges the Corps to include appropriate funding in future budget requests for these efforts.

Calaveras County, California.—The Corps is reminded that the wastewater treatment facility within the Calaveras County Water District is a critical health and safety need in this rural, mountainous, and underserved community.

Caño Martín Peña, Puerto Rico.—The Committee notes the environmental degradation and persistent flooding that disadvantages communities abutting the channel, as evidenced by Hurricanes Irma and Maria, and appreciates that the budget request included \$2,150,000 for this project. The Committee continues to recognize the significance of the project and its importance for economic revitalization, public health, incidental flood protection, and in restoring a critical watershed and the natural functioning of the tidal system in the San Jose Lagoon and the San Juan Bay Estuary. The Committee notes the substantial time and effort dedicated to advance the project and encourages the Corps to include appropriate funding for this project in future budget submissions and to work with the non-federal sponsor in support of this project. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act an update on the status of this project.

Chesapeake Bay Comprehensive Water Resources and Restoration Plan.—The Committee is supportive of the Chesapeake Bay Comprehensive Water Resources and Restoration Plan.

Chesapeake Bay Oyster Recovery, Maryland and Virginia.—The Committee is supportive of the Corps' work on the Chesapeake Bay Oyster Recovery program and urges the Corps to include appropriate funding in future budget requests for these efforts.

Continuing Authorities Program (CAP).—The Committee continues to support all sections of the Continuing Authorities Program. Funding is provided for eight CAP sections at a total of \$61,000,000. This program provides a useful tool for the Corps to undertake small localized projects without the lengthy study and authorization process typical of larger Corps projects. The management of CAP should continue consistent with direction provided in previous fiscal years. Within the section 1135 CAP authority, and to the extent already authorized by law, the Corps is reminded that projects that restore degraded wetland habitat and stream habitats impacted by construction of Corps levees or channels and projects that will divert significant pollutant nutrient runoff from entering wetland habitats are eligible to compete for funding.

Continuing Contracts.—The Corps is authorized by section 621 of title 33, United States Code to execute its Civil Works projects through the use of a Special Continuing Contract Clause as described in Engineering Circulars 11–2–221 and 11–2–222. 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 resume using its existing continuing contract authorities to the fullest extent and in accordance with the general provisions in this Act as an efficient approach to managing large, multi-year projects.

Everglades Agricultural Area.—The Committee recognizes the importance of the Everglades Agricultural Area Storage Reservoir to South Florida ecosystem restoration and efforts to combat harmful algal blooms in the greater Everglades region. The Committee urges the Corps to complete this project in a timely manner.

Howard Hanson Dam, Washington.—The Committee notes that \$3,000,000 was included in the fiscal year 2020 work plan to begin the design and cost update needed to resume work on the construction of a downstream fish passage facility as mandated by the 2019 Biological Opinion. The Committee supports these efforts and is pleased that the Corps and the project sponsor continue to make progress. The Committee directs the Corps to continue to work expeditiously on this project in order to meet the 2030 deadline established in the Biological Opinion.

Hudson Raritan Estuary, New Jersey.—The Committee recognizes the importance of the Hackensack Meadowlands, New Jersey Ecosystem Restoration Project within the Hudson Raritan Estuary and encourages the Corps to closely collaborate with the non-federal partners to ensure the required match is available to advance this project.

Lakes Marion and Moultrie, South Carolina.—The Committee recognizes the importance of continued progress on the Lakes Marion and Moultrie regional water supply project and encourages the Corps to include appropriate funding in future budget submissions.

Lake Isabella, California.—The Committee is aware the Corps, in conjunction with the U.S. Forest Service (USFS), is in the process of building a replacement USFS visitor center at Lake Isabella, California, as part of the Isabella Lake Dam Safety Modification Project. In April 2021, the Corps established a schedule, in conjunction with the USFS, that included commencing construction by March 31, 2023. The Committee commends the Corps for completing environmental reviews for this project on schedule but remains concerned about the long delay with this project overall. Accordingly, the Committee directs the Corps to adhere to its own established schedule to the maximum extent practicable and to work with the USFS to ensure engagement of local community stakeholders throughout the design phase of the project.

New Program Requested in the Budget Proposal.—The budget request includes \$10,000,000 for an Innovative Funding Partnerships Program to be used along with funds from non-federal interests “in excess of the non-federal sponsor’s statutory cost share requirements” to accelerate certain authorized projects. The Committee is disturbed by this blatant attempt to require funding in excess of legally required cost share as a criterion for funding decisions, which is contrary to long-standing congressional direction. The Committee provides 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.

New Savannah Bluff Lock and Dam, Georgia and South Carolina.—The Committee maintains interest in the New Savannah Bluff Lock and Dam and encourages the Corps to work expeditiously toward a resolution that will ensure existing water levels are maintained, as required in section 1319 of the WIIN Act of 2016.

Non-Federal Implementation Pilot Program.—The Committee recognizes that section 1043 of WRRDA 2014 (Public Law 113–121) was reauthorized and amended in WRDA 2020. The Committee remains concerned about this pilot program and directs the Corps to provide to the Committee not later than 45 days after enactment of this Act a briefing on the status of the implementation guidance and the path forward for this program.

North Canadian River, Oklahoma.—The Committee notes that periodic flooding along the North Canadian River in Jones, Oklahoma, has caused significant erosion that has forced the closure of the North Triple X Road bridge. The Committee encourages the Corps to work collaboratively with the City of Jones and Oklahoma County should a request be made regarding work to mitigate river-bank erosion.

Pinellas County, Florida.—The Committee notes the importance of periodic shoreline restoration and its significance for the protection of public safety, public infrastructure, native vegetation and wildlife, and the local economy. The Committee is aware of the concerns regarding perpetual easements along the entire expanse of this project. The Committee encourages the Corps to work with local governments to incorporate flexibility that allows for incremental acquisition of easements necessary for the construction of the scheduled nourishment.

Port of Brownsville Deepening Project, Texas.—The Port of Brownsville, Texas, is undergoing a project to deepen the channel from 42 to 52 feet. The Committee recognizes that the project has a high benefit to cost ratio and an enthusiastic non-federal sponsor. The Corps is encouraged to include appropriate funding for this project in future budget submissions.

Public Law 115–123 (LERRDs).—The Corps has authority to perform acquisition of required lands, easements, rights-of-ways, relocations, and disposal areas (LERRDs) on behalf of a non-federal sponsor under certain circumstances. The Committee strongly encourages the Corps to evaluate such requests from non-federal sponsors of projects funded under Public Law 115–123.

Sacramento Region, California.—The Corps is encouraged to work expeditiously toward Title I of Public Law 115–270 and Division AA of Public Law 116–260, which directed the Corps to expedite levee construction projects and completion of feasibility studies in the greater Sacramento region to improve levee integrity and flood protection and build greater system resiliency. The Committee expects that the Corps will recognize the continued flooding threat within the greater Sacramento region and encourages the Corps to include appropriate funding for design and construction activities for flood risk management projects, including the initiation of new construction where appropriate, in future budget submissions.

Salton Sea, California.—The Committee encourages the Corps to expeditiously move forward to carry out section 3032 of Public Law 110–114.

San Juan Harbor, Puerto Rico.—The Committee notes the importance of this project for the economic and social recovery of Puerto Rico. The project would address deepening and widening the channels, accommodate existing and future vessel movement, resolve navigation restriction problems, and allow opportunities for economic development. The Committee encourages the Corps to continue working with the non-federal sponsor to advance the project at the earliest practicable opportunity. The Committee further encourages the Corps to include appropriate funding in future budget submissions.

Soo Locks, Sault Ste. Marie, Michigan.—The Committee recognizes that the Soo Locks on the St. Mary’s River at Sault Ste. Marie, Michigan, are the only waterway connection from Lake Superior to the rest of the Lower Great Lakes and the St. Lawrence Seaway. The Committee understands that a failure at the Soo Locks could have a significant impact on national security. The Committee supports the ongoing construction of a second 1,200-foot lock and believes such a lock is necessary to maintain redundancy and resiliency at the Soo Locks and further protects our national defense priorities. The Committee supports the budget request for construction of the new lock.

South Florida Ecosystem Restoration, Florida.—As in previous years, the Committee provides funding for all study and construction authorities related to Everglades restoration under the line item titled “South Florida Ecosystem Restoration, Florida.” This single line item allows the Corps flexibility in implementing the numerous activities underway in any given fiscal year.

United States Virgin Islands.—The Committee notes that persistent flooding has harmed communities and infrastructure in the territory, as evidenced by Hurricanes Irma and Maria. The Committee is disappointed that none of the supplemental appropriations made available under Public Law 115–123 were allocated for flood risk management projects in the U.S. Virgin Islands. The Corps is reminded that it may fund such projects out of remaining construction funds provided under Public Law 115–123, in a work plan, or in future budget requests.

MISSISSIPPI RIVER AND TRIBUTARIES

Appropriation, 2021	\$380,000,000
Budget estimate, 2022	269,688,000
Recommended, 2022	370,000,000
Comparison:	
Appropriation, 2021	– 10,000,000
Budget estimate, 2022	+100,312,000

This appropriation funds planning, construction, and operation and maintenance activities associated with projects to reduce flood damage in the lower Mississippi River alluvial valley below Cape Girardeau, Missouri.

The budget request for this account and the approved Committee allowance are shown on the following table:

CORPS OF ENGINEERS - MISSISSIPPI RIVER AND TRIBUTARIES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
INVESTIGATIONS		
LOWER MISSISSIPPI RIVER COMPREHENSIVE MANAGEMENT STUDY	---	5,000
RUNNING REELFOOT BAYOU, TN	600	600
CONSTRUCTION		
LOWER MISSISSIPPI RIVER MAIN STEM (LMRMS)	800	800
CHANNEL IMPROVEMENT, AR, IL, KY, LA, MS, MO & TN	14,300	17,300
CHANNEL IMPROVEMENT, AR, IL, KY, LA, MS, MO & TN (TOM LEE PARK)	---	(3,000)
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO and TN	17,450	17,450
MORGANZA TO THE GULF, LA	---	19,333
OPERATION & MAINTENANCE		
LOWER MISSISSIPPI RIVER MAIN STEM (LMRMS)	30,922	30,922
CHANNEL IMPROVEMENT, AR, IL, KY, LA, MS, MO and TN	77,500	77,500
MISSISSIPPI RIVER LEVEES, AR, IL, KY, LA, MS, MO and TN	11,593	11,593
HELENA HARBOR, PHILLIPS COUNTY, AR	---	540 *
INSPECTION OF COMPLETED WORKS, AR	---	252 ~
LOWER ARKANSAS RIVER, NORTH BANK, AR	75	75
LOWER ARKANSAS RIVER, SOUTH BANK, AR	40	40
RED-OUACHITA RIVER BASIN LEVEES, AR and LA	87	87
ST. FRANCIS BASIN, AR and MO	9,600	9,600
TENSAS BASIN, BOEUF AND TENSAS RIVER, AR and LA	2,455	2,455
WHITE RIVER BACKWATER, AR	1,100	1,100
INSPECTION OF COMPLETED WORKS, IL	---	20 ~
INSPECTION OF COMPLETED WORKS, KY	---	35 ~
BATON ROUGE HARBOR, DEVILS SWAMP, LA	---	560 *
BAYOU COCODRIE AND TRIBUTARIES, LA	48	48
INSPECTION OF COMPLETED WORKS, LA	---	3,952 ~
LOWER RED RIVER, SOUTH BANK LEVEES, LA	140	140
MISSISSIPPI DELTA REGION, LA	1,940	1,940
OLD RIVER, LA	52,020	52,020
TENSAS BASIN, RED RIVER BACKWATER, LA	2,990	2,990
GREENVILLE HARBOR, MS	---	932 *
INSPECTION OF COMPLETED WORKS, MS	---	202 ~
VICKSBURG HARBOR, MS	---	942 *
YAZOO BASIN, ARKABUTLA LAKE, MS	6,070	6,070
YAZOO BASIN, BIG SUNFLOWER RIVER, MS	224	224
YAZOO BASIN, ENID LAKE, MS	5,362	5,362
YAZOO BASIN, GREENWOOD, MS	365	365
YAZOO BASIN, GRENADA LAKE, MS	5,482	5,482
YAZOO BASIN, MAIN STEM, MS	900	900
YAZOO BASIN, SARDIS LAKE, MS	7,632	7,632
YAZOO BASIN, TRIBUTARIES, MS	450	450
YAZOO BASIN, WILL M. WHITTINGTON AUXILIARY CHANNEL, MS	290	290
YAZOO BASIN, YAZOO BACKWATER AREA, MS	727	727
YAZOO BASIN, YAZOO CITY, MS	450	450
INSPECTION OF COMPLETED WORKS, MO	---	136 ~
WAPPAPELLO LAKE, MO	6,863	6,863
INSPECTION OF COMPLETED WORKS, TN	---	28 ~
MEMPHIS HARBOR, MCKELLAR LAKE, MEMPHIS, TN	---	2,338 *
SUBTOTAL, PROJECTS LISTED UNDER STATES	258,475	295,745

CORPS OF ENGINEERS - MISSISSIPPI RIVER AND TRIBUTARIES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
REMAINING ITEMS		
ADDITIONAL FUNDING		
DREDGING	---	5,000
FLOOD CONTROL	---	44,839
OTHER AUTHORIZED PROJECT PURPOSES	---	17,918
COLLECTION AND STUDY OF BASIC DATA (INVESTIGATIONS)	6,498	6,498
MISSISSIPPI RIVER COMMISSION	90	---
INSPECTION OF COMPLETED WORKS (OPERATION)	4,625	---
SUBTOTAL, REMAINING ITEMS	11,213	74,255
TOTAL, MISSISSIPPI RIVER AND TRIBUTARIES	269,688	370,000

**Includes funds requested in other accounts.*

~Includes funds requested in remaining items.

Additional Funding.—When allocating the additional funding provided in this account, the Corps shall consider giving priority to completing or accelerating work that will enhance the nation’s economic development, job growth, and international competitiveness or are for studies or projects located in areas that have suffered recent natural disasters. While this funding is shown under remaining items, the Corps shall use these funds in Investigations, Construction, and Operation and Maintenance, as applicable.

Comprehensive Watershed Management Studies.—The Committee notes the authorization of studies that modernize multi-state watershed management regimes, such as the study described in section 213 of the WRDA 2020 (P.L. 116–260), to optimize operational procedures for Corps assets and holistically manage multiple mission sets.

Lower Mississippi River Main Stem.—The budget request proposes to consolidate several activities across multiple states into one line item. The Committee does not support this change and instead continues to fund these activities as separate line items.

Mississippi River Commission.—No funding is provided for this new line item. The Corps is directed to continue funding the costs of the commission from within the funds provided for activities within the Mississippi River and Tributaries project.

OPERATION AND MAINTENANCE

Appropriation, 2021	\$3,849,655,000
Budget estimate, 2022	2,502,901,000
Recommended, 2022	4,817,000,000
Comparison:	
Appropriation, 2021	+967,345,000
Budget estimate, 2022	+2,314,099,000

This appropriation funds operation, maintenance, and related activities at water resource projects the Corps operates and maintains. Work to be accomplished consists of dredging, repair, and operation of structures and other facilities as authorized in various River and Harbor, Flood Control, and Water Resources Development Acts. Related activities include aquatic nuisance control, monitoring of completed projects, removal of sunken vessels, and the collection of domestic, waterborne commerce statistics. Portions of this account are financed through the Harbor Maintenance Trust Fund.

The budget request for this account and the approved Committee allowance are shown on the following table:

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
ALABAMA		
ALABAMA RIVER LAKES, AL	15,252	15,252
BAYOU LA BATRE, AL	—	36 *
BLACK WARRIOR AND TOMBIGBEE (BWT) RIVERS, AL	24,652	24,652
DAUPHIN ISLAND BAY, LA	—	3,023
GULF INTRACOASTAL WATERWAY (GIWW), AL	6,745	6,745
INSPECTION OF COMPLETED WORKS, AL	—	180 ~
MOBILE HARBOR, AL	—	30,212 *
PROJECT CONDITION SURVEYS, AL	—	150 *
SCHEDULING RESERVOIR OPERATIONS, AL	—	85 ~
TENNESSEE - TOMBIGBEE WATERWAY - WILDLIFE MITIGATION, AL and MS	1,800	1,800
TENNESSEE - TOMBIGBEE WATERWAY (TTWW), AL and MS	28,986	28,986
WALTER F. GEORGE LOCK AND DAM, AL and GA	10,676	10,676
WATER/ENVIRONMENTAL CERTIFICATION, AL	—	90 *
ALASKA		
ANCHORAGE HARBOR, AK	—	11,370 *
CHENA RIVER LAKES FLOOD CONTROL PROJECT, NORTH POLE, AK	6,921	6,921
DILLINGHAM HARBOR, AK	—	1,055 *
ELFIN COVE, AK	—	2,660 *
HOMER HARBOR, AK	—	785 *
INSPECTION OF COMPLETED WORKS, AK	—	200 ~
LOWELL CREEK TUNNELL (SEWARD), AK	75	75
NINILCHIK HARBOR, AK	—	665 *
NOME HARBOR, AK	—	2,434 *
PROJECT CONDITION SURVEYS, AK	—	750 *
AMERICAN SAMOA		
ANUU HARBOR, AS	—	2,921 *
ARIZONA		
ALAMO LAKE, AZ	1,600	1,600
INSPECTION OF COMPLETED WORKS, AZ	—	175 ~
PAINTED ROCK DAM, AZ	1,936	1,936
SCHEDULING RESERVOIR OPERATIONS, AZ	—	112 ~
WHITLOW RANCH DAM, AZ	445	445
ARKANSAS		
BEAVER LAKE, AR	8,956	8,956
BLAKELY MOUNTAIN DAM, LAKE OUACHITA, AR	7,460	7,460
BLUE MOUNTAIN LAKE, AR	1,998	1,998
BULL SHOALS LAKE, AR	9,525	9,525
DEGRAY LAKE, AR	6,587	6,587
DEQUEEN LAKE, AR	1,846	1,846
DIERKS LAKE, AR	1,488	1,488

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
GILLHAM LAKE, AR	1,430	1,430
GREERS FERRY LAKE, AR	7,947	7,947
HELENA HARBOR, AR	---	540 *
INSPECTION OF COMPLETED WORKS, AR	---	929 ~
MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM, AR	56,136	56,136
MILLWOOD LAKE, AR	2,831	2,831
NARROWS DAM, LAKE GREESON, AR	5,691	5,691
NIMROD LAKE, AR	2,267	2,267
NORFORK LAKE, AR	6,572	6,572
OSCEOLA HARBOR, AR	---	15 *
OUACHITA AND BLACK RIVERS, AR and LA	12,065	12,065
PROJECT CONDITION SURVEYS, AR	---	5 *
WHITE RIVER, AR	25	25
YELLOW BEND PORT, AR	---	127 *
CALIFORNIA		
BLACK BUTTE LAKE, CA	6,400	6,400
BUCHANAN DAM - H.V. EASTMAN LAKE, CA	2,295	2,295
CHANNEL ISLANDS HARBOR, CA	---	8,000 *
COYOTE VALLEY DAM, LAKE MENDOCINO, CA	8,200	8,200
DRY CREEK (WARM SPRINGS) LAKE AND CHANNEL, CA	9,524	9,524
FARMINGTON DAM, CA	525	525
HIDDEN DAM - HENSLEY LAKE, CA	7,495	7,495
HUMBOLDT HARBOR AND BAY, CA	---	4,700 *
INSPECTION OF COMPLETED WORKS, CA	---	3,410 ~
ISABELLA LAKE, CA	3,440	3,440
LOS ANGELES COUNTY DRAINAGE AREA, CA	20,220	20,220
MERCED COUNTY STREAMS, CA	835	835
MOJAVE RIVER DAM, CA	1,101	1,101
MORRO BAY HARBOR, CA	---	3,600 *
NAPA RIVER, CA	---	4,750 *
NEW HOGAN LAKE, CA	6,390	6,390
NEW MELONES LAKE (DOWNSTREAM CHANNEL), CA	2,480	2,480
OAKLAND HARBOR, CA	---	25,634 *
OCEANSIDE HARBOR, CA	---	1,790 *
PINE FLAT LAKE, CA	3,930	3,930
PROJECT CONDITION SURVEYS, CA	---	840 *
RICHMOND HARBOR, CA	---	13,179 *
SACRAMENTO RIVER (30 FOOT CHANNEL), CA	---	3,875 *
SACRAMENTO RIVER AND TRIBUTARIES (DEBRIS CONTROL), CA	990	1,795 *
SACRAMENTO RIVER (SHALLOW DRAFT CHANNEL), CA	---	190 *
SAN FRANCISCO BAY DELTA MODEL STRUCTURE, CA	1,018	1,018
SAN FRANCISCO BAY LONG TERM MANAGEMENT STRATEGY (LTMS), CA	---	450 *
SAN FRANCISCO HARBOR AND BAY (DRIFT REMOVAL), CA	---	3,883 *
SAN FRANCISCO HARBOR, CA	---	5,275 *
SAN JOAQUIN RIVER (PORT OF STOCKTON), CA	---	9,675 *
SAN PABLO BAY AND MARE ISLAND STRAIT, CA	---	600 *
SAN RAFAEL CREEK, CA	---	6,750 *
SANTA ANA RIVER BASIN, CA	6,572	9,072

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
SANTA BARBARA HARBOR, CA	---	3,640 *
SANTA CRUZ HARBOR, CA	---	15 *
SCHEDULING RESERVOIR OPERATIONS, CA	---	1,623 ~
SUCCESS LAKE, CA	2,972	2,972
SUISUN BAY CHANNEL, CA	---	5,880 *
TERMINUS DAM (LAKE KAWEAH), CA	5,750	5,750
VENTURA HARBOR, CA	---	5,516 *
YUBA RIVER, CA	200	1,755 *
COLORADO		
BEAR CREEK LAKE, CO	662	662
CHATFIELD LAKE, CO	1,937	1,937
CHERRY CREEK LAKE, CO	1,487	1,487
INSPECTION OF COMPLETED WORKS, CO	---	314 ~
JOHN MARTIN RESERVOIR, CO	9,594	9,594
TRINIDAD LAKE, CO	2,023	2,023
SCHEDULING RESERVOIR OPERATIONS, CO	---	530 ~
CONNECTICUT		
BLACK ROCK LAKE, CT	643	643
COLEBROOK RIVER LAKE, CT	833	833
HANCOCK BROOK LAKE, CT	558	558
HOP BROOK LAKE, CT	1,317	1,317
INSPECTION OF COMPLETED WORKS, CT	---	970 ~
MANSFIELD HOLLOW LAKE, CT	816	816
NEW HAVEN HARBOR, CT	---	401 *
NORTHFIELD BROOK LAKE, CT	585	585
PROJECT CONDITION SURVEYS, CT	---	1,100 *
STAMFORD HURRICANE BARRIER, CT	597	597
THOMASTON DAM, CT	1,000	1,000
WEST THOMPSON LAKE, CT	890	890
WESTPORT HARBOR & SAUGATUCK RIVER, CT	---	2,810
DELAWARE		
INDIAN RIVER INLET & BAY, DE	---	30 *
INSPECTION OF COMPLETED WORKS, DE	---	2 ~
INTRACOASTAL WATERWAY, DELAWARE RIVER TO CHESAPEAKE BAY, DE and MD	---	19,130 *
INTRACOASTAL WATERWAY, REHOBOTH BAY TO DELAWARE BAY, DE	---	150 *
PROJECT CONDITION SURVEYS, DE	---	225 *
WILMINGTON HARBOR, DE	---	8,950 *
DISTRICT OF COLUMBIA		
INSPECTION OF COMPLETED WORKS, DC	---	39 ~
POTOMAC AND ANACOSTIA RIVERS, DC AND MD (DRIFT REMOVAL)	---	1,175 *
PROJECT CONDITION SURVEYS, DC	---	30 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
WASHINGTON HARBOR, DC	---	25 *
FLORIDA		
CANAVERAL HARBOR, FL	---	2,215 *
CENTRAL & SOUTHERN FLORIDA (C&SF), FL	22,243	23,854 *
INSPECTION OF COMPLETED WORKS, FL	---	1,003 ~
INTRACOASTAL WATERWAY (IWW) - CALOOSAHATCHEE RIVER TO ANCLOTE RIVER, FL	---	2,500
INTRACOASTAL WATERWAY (IWW) - JACKSONVILLE TO MIAMI, FL	4,380	6,000
JACKSONVILLE HARBOR, FL	---	7,155 *
JIM WOODRUFF LOCK AND DAM, FL, AL and GA	8,501	8,501
MANATEE HARBOR, FL	---	680 *
MIAMI HARBOR, FL	---	180 *
OKEECHOBEE WATERWAY (OWW), FL	1,365	3,710 *
PALM BEACH HARBOR, FL	---	5,120 *
PENSACOLA HARBOR, FL	---	40 *
PORT EVERGLADES HARBOR, FL	---	180 *
PROJECT CONDITION SURVEYS, FL	---	1,275 *
REMOVAL OF AQUATIC GROWTH, FL	---	3,449 *
SCHEDULING RESERVOIR OPERATIONS, FL	---	100 ~
SOUTH FLORIDA ECOSYSTEM RESTORATION, FL	8,950	8,950
ST. LUCIE INLET, FL	---	5,750
ST. LUCIE INLET (SOUTH JETTY REHABILITATION), FL	---	4,800
TAMPA HARBOR, FL	---	12,472 *
WATER/ENVIRONMENTAL CERTIFICATION, FL	---	80 *
GEORGIA		
ALLATOONA LAKE, GA	9,164	9,164
APALACHICOLA, CHATTAHOOCHEE AND FLINT (ACF) RIVERS, GA, AL and FL	1,459	1,459
ATLANTIC INTRACOASTAL WATERWAY (AIWW), GA	3,739	3,739
BRUNSWICK HARBOR, GA	---	7,778 *
BUFORD DAM AND LAKE SIDNEY LANIER, GA	12,441	12,441
CARTERS DAM AND LAKE, GA	8,504	8,504
HARTWELL LAKE, GA and SC	13,090	13,090
INSPECTION OF COMPLETED WORKS, GA	---	196 ~
J. STROM THURMOND (JST) DAM AND LAKE, GA and SC	11,206	11,206
PROJECT CONDITION SURVEYS, GA	---	76 *
RICHARD B. RUSSELL (RBR) DAM AND LAKE, GA and SC	9,541	9,541
SAVANNAH HARBOR, GA	---	33,053 *
SAVANNAH RIVER BELOW AUGUSTA, GA	---	148 *
WEST POINT DAM AND LAKE, GA and AL	8,354	8,354
HAWAII		
BARBERS POINT DEEP DRAFT HARBOR, OAHU, HI	300	300
INSPECTION OF COMPLETED WORKS, HI	---	797 ~

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
PROJECT CONDITION SURVEYS, HI	---	709 *
IDAHO		
ALBENI FALLS DAM, ID	1,245	1,245
DWORSHAK DAM AND RESERVOIR, ID	3,063	3,063
INSPECTION OF COMPLETED WORKS, ID	---	466 ~
LUCKY PEAK DAM AND LAKE, ID	2,366	2,366
SCHEDULING RESERVOIR OPERATIONS, ID	---	750 ~
ILLINOIS		
CALUMET HARBOR AND RIVER, IL and IN	---	5,009 *
CARLYLE LAKE, IL	14,360	14,360
CHICAGO HARBOR, IL	---	16,823 *
CHICAGO RIVER, IL	635	635
CHICAGO SANITARY AND SHIP CANAL DISPERSAL BARRIERS, IL	12,948	12,948
FARM CREEK RESERVOIRS, IL	541	541
ILLINOIS WATERWAY (MVR PORTION), IL and IN	64,614	64,614
ILLINOIS WATERWAY (MVS PORTION), IL and IN	2,183	2,183
INSPECTION OF COMPLETED WORKS, IL	---	2,787 ~
KASKASKIA RIVER NAVIGATION, IL	4,383	4,383
LAKE MICHIGAN DIVERSION, IL	---	1,190 *
LAKE SHELBYVILLE, IL	17,965	17,965
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVR PORTION), IL	80,667	81,367 *
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVS PORTION), IL	34,951	34,951
PROJECT CONDITION SURVEYS, IL	---	103 *
REND LAKE, IL	12,797	12,797
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IL	---	398 *
WAUKEGAN HARBOR, IL	---	11 *
INDIANA		
BROOKVILLE LAKE, IN	3,157	3,157
BURNS WATERWAY HARBOR, IN	---	1,561 *
CAGLES MILL LAKE, IN	1,335	1,335
CECIL M. HARDEN LAKE, IN	1,467	1,467
INDIANA HARBOR, IN	---	8,196 *
INSPECTION OF COMPLETED WORKS, IN	---	1,264 ~
J. EDWARD ROUSH LAKE, IN	2,051	2,051
MICHIGAN CITY HARBOR, IN	---	10 *
MISSISSINewa LAKE, IN	1,915	1,915
MONROE LAKE, IN	1,479	1,479
PATOKA LAKE, IN	1,446	1,446
PROJECT CONDITION SURVEYS, IN	---	197 *
SALAMONIE LAKE, IN	3,282	3,282
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, IN	---	81 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
IOWA		
CORALVILLE LAKE, IA	6,170	6,170
INSPECTION OF COMPLETED WORKS, IA	—	1,202 ~
MISSOURI RIVER, SIOUX CITY TO THE MOUTH, IA, KS, MO and NE	47,406	47,406
PROJECT CONDITION SURVEYS, IA	—	2 *
RATHBUN LAKE, IA	3,254	3,254
RED ROCK DAM AND LAKE RED ROCK, IA	27,728	27,728
SAYLORVILLE LAKE, IA	19,500	19,500
KANSAS		
CLINTON LAKE, KS	2,763	2,763
COUNCIL GROVE LAKE, KS	1,925	1,925
EL DORADO LAKE, KS	675	675
ELK CITY LAKE, KS	1,310	1,310
FALL RIVER LAKE, KS	4,214	4,214
HILLSDALE LAKE, KS	1,089	1,089
INSPECTION OF COMPLETED WORKS, KS	—	2,132 ~
JOHN REDMOND DAM AND RESERVOIR, KS	1,764	1,764
KANOPOLIS LAKE, KS	1,974	1,974
MARION LAKE, KS	1,812	1,812
MELVERN LAKE, KS	2,667	2,667
MILFORD LAKE, KS	2,589	2,589
PEARSON-SKUBITZ BIG HILL LAKE, KS	1,247	1,247
PERRY LAKE, KS	3,069	3,069
POMONA LAKE, KS	2,951	2,951
SCHEDULING RESERVOIR OPERATIONS, KS	—	774 ~
TORONTO LAKE, KS	694	694
TUTTLE CREEK LAKE, KS	12,373	12,373
WILSON LAKE, KS	1,902	1,902
KENTUCKY		
BARKLEY DAM AND LAKE BARKLEY, KY and TN	19,522	19,522
BARREN RIVER LAKE, KY	3,228	3,228
BIG SANDY HARBOR, KY	—	1,977 *
BUCKHORN LAKE, KY	2,812	2,812
CARR CREEK LAKE, KY	2,220	2,220
CAVE RUN LAKE, KY	1,484	1,484
DEWEY LAKE, KY	2,096	2,096
ELVIS STAHR (HICKMAN) HARBOR, KY	—	935 *
FALLS OF THE OHIO NATIONAL WILDLIFE, KY and IN	63	63
FISHTRAP LAKE, KY	2,515	2,515
GRAYSON LAKE, KY	1,867	1,867
GREEN AND BARREN RIVERS, KY	2,776	2,776
GREEN RIVER LAKE, KY	3,643	3,643
INSPECTION OF COMPLETED WORKS, KY	—	1,192 ~
LAUREL RIVER LAKE, KY	5,891	5,891
MARTINS FORK LAKE, KY	1,443	1,443

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
MIDDLESBORO CUMBERLAND RIVER, KY	291	291
NOLIN LAKE, KY	3,647	3,647
OHIO RIVER LOCKS AND DAMS, KY, IL, IN and OH	55,307	55,307
OHIO RIVER OPEN CHANNEL WORK, KY, IL, IN and OH	7,563	7,563
PAINTSVILLE LAKE, KY	1,919	1,919
PROJECT CONDITION SURVEYS, KY	—	5 *
ROUGH RIVER LAKE, KY	4,541	4,541
TAYLORSVILLE LAKE, KY	1,503	1,503
WOLF CREEK DAM, LAKE CUMBERLAND, KY	17,476	17,476
YATESVILLE LAKE, KY	2,503	2,503
LOUISIANA		
ATCHAFALAYA RIVER AND BAYOUS CHENE, BOEUF and BLACK, LA	—	16,296 *
BARATARIA BAY WATERWAY, LA	—	6,200 *
BAYOU BODCAU DAM AND RESERVOIR, LA	1,494	1,494
BAYOU LAFOURCHE AND LAFOURCHE JUMP WATERWAY, LA	—	6,185 *
BAYOU PIERRE, LA	33	33
BAYOU SEGNETTE WATERWAY, LA	—	25 *
BAYOU TECHE AND VERMILION RIVER, LA	—	50,030 *
BAYOU TECHE, LA	—	1,150 *
CADDO LAKE, LA	186	186
CALCASIEU RIVER AND PASS, LA	—	20,500 *
FRESHWATER BAYOU, LA	—	3,634 *
GULF INTRACOASTAL WATERWAY, LA	70,715	70,715
HOUMA NAVIGATION CANAL, LA	—	12,593 *
INSPECTION OF COMPLETED WORKS, LA	—	978 ~
J. BENNETT JOHNSTON WATERWAY, LA	27,764	27,764
LAKE PROVIDENCE HARBOR, LA	—	1,332 *
MADISON PARISH PORT, LA	—	208 *
MERMENTAU RIVER, LA	—	10,880 *
MISSISSIPPI RIVER OUTLETS AT VENICE, LA	—	19,755 *
MISSISSIPPI RIVER, BATON ROUGE TO THE GULF OF MEXICO, LA	—	126,000 *
PROJECT CONDITION SURVEYS, LA	—	51 *
REMOVAL OF AQUATIC GROWTH, LA	—	200 *
WALLACE LAKE, LA	318	318
WATERWAY FROM EMPIRE TO THE GULF, LA	—	10 *
WATERWAY FROM INTRACOASTAL WATERWAY TO BAYOU DULAC, LA	—	15 *
MAINE		
DISPOSAL AREA MONITORING, ME	—	1,050 *
INSPECTION OF COMPLETED WORKS, ME	—	121 ~
PROJECT CONDITION SURVEYS, ME	—	1,100 *
SEARSPORT HARBOR, ME	—	4,200 *
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ME	—	22 *
WELLS HARBOR, ME	—	4,296 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
MARYLAND		
BALTIMORE HARBOR AND CHANNELS (50 FOOT), MD	---	20,385 *
BALTIMORE HARBOR, MD (DRIFT REMOVAL)	---	720 *
CUMBERLAND, MD AND RIDGELEY, WV	219	219
INSPECTION OF COMPLETED WORKS, MD	---	89 ~
JENNINGS RANDOLPH LAKE, MD and WV	2,488	2,488
OCEAN CITY HARBOR AND INLET AND SINEPUXENT BAY, MD	---	510 *
PROJECT CONDITION SURVEYS, MD	---	600 *
SCHEDULING RESERVOIR OPERATIONS, MD	---	123 ~
ST. PATRICK'S CREEK, MD	---	2,070
WICOMICO RIVER, MD	---	4,300 *
MASSACHUSETTS		
BARRE FALLS DAM, MA	823	823
BIRCH HILL DAM, MA	1,054	1,054
BUFFUMVILLE LAKE, MA	722	722
CAPE COD CANAL, MA	1,793	24,216 *
CHARLES RIVER NATURAL VALLEY STORAGE AREAS, MA	401	401
CONANT BROOK DAM, MA	371	371
EAST BRIMFIELD LAKE, MA	758	758
GREEN HARBOR, MA	---	2,749 *
HODGES VILLAGE DAM, MA	793	793
INSPECTION OF COMPLETED WORKS, MA	---	450 ~
KNIGHTVILLE DAM, MA	887	887
LITTLEVILLE LAKE, MA	821	821
NEW BEDFORD HURRICANE BARRIER, MA	537	537
PLYMOUTH HARBOR, MA	---	6 *
PROJECT CONDITION SURVEYS, MA	---	1,250 *
TULLY LAKE, MA	984	984
WEST HILL DAM, MA	934	934
WESTVILLE LAKE, MA	752	752
MICHIGAN		
ALPENA HARBOR, MI	---	5 *
CHANNELS IN LAKE ST. CLAIR, MI	---	243 *
CHARLEVOIX HARBOR, MI	---	570 *
CHEBOYGAN HARBOR, MI	---	6 *
DETROIT RIVER, MI	---	7,645 *
GRAND HAVEN HARBOR AND GRAND RIVER, MI	---	3,934 *
HARBOR BEACH HARBOR, MI	---	1,320 *
HOLLAND HARBOR, MI	---	516 *
INSPECTION OF COMPLETED WORKS, MI	---	329 ~
INLAND ROUTE, MI	---	52 *
KAWKAWLIN DREDGING, MI	570	570
KEWEENAW WATERWAY, MI	10	1,279 *
LUDINGTON HARBOR, MI	---	1,007 *
MANISTEE HARBOR, MI	---	4,111 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
MANISTIQUE HARBOR, MI	---	1,332 *
MARQUETTE HARBOR, MI	---	5 *
MENOMINEE HARBOR, MI and WI	---	5 *
MONROE HARBOR, MI	---	1,137 *
MUSKEGON HARBOR, MI	---	1,711 *
ONTONAGON HARBOR, MI	---	1,136 *
PRESQUE ISLE HARBOR, MI	---	1,505 *
PROJECT CONDITION SURVEYS, MI	---	828 *
ROUGE RIVER, MI	---	1,133 *
SAGINAW RIVER, MI	---	3,844 *
SEBEWAING RIVER, MI	214	214
SOUTH HAVEN HARBOR, MI	---	500 *
ST. CLAIR RIVER, MI	---	1,653 *
ST. JOSEPH HARBOR, MI	---	1,068 *
ST. MARYS RIVER, MI	2,702	58,361 *
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MI	---	2,217 *
WHITE LAKE HARBOR, MI	---	500 *
MINNESOTA		
BIG STONE LAKE AND WHETSTONE RIVER, MN and SD	318	318
DULUTH-SUPERIOR HARBOR, MN and WI	400	6,847 *
GRAND MARAIS HARBOR, MN	---	25 *
INSPECTION OF COMPLETED WORKS, MN	---	565 ~
LAC QUI PARLE LAKES, MINNESOTA RIVER, MN	1,150	1,150
MINNESOTA RIVER, MN	---	265 *
MISSISSIPPI RIVER BETWEEN MISSOURI RIVER AND MINNEAPOLIS (MVP PORTION), MN	104,193	105,843 *
ORWELL LAKE, MN	565	565
PROJECT CONDITION SURVEYS, MN	---	104 *
RED LAKE RESERVOIR, MN	206	206
RESERVOIRS AT HEADWATERS OF MISSISSIPPI RIVER, MN	6,576	6,576
ST. PAUL SMALL BOAT HARBOR, MN	---	500
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, MN	---	428 *
TWO HARBORS, MN	---	31 *
MISSISSIPPI		
EAST FORK, TOMBIGBEE RIVER, MS	290	290
GULFPORT HARBOR, MS	---	9,536 *
INSPECTION OF COMPLETED WORKS, MS	---	103 ~
MOUTH OF YAZOO RIVER, MS	---	32 *
OKATIBBEE LAKE, MS	2,152	2,152
PASCAGOULA HARBOR, MS	---	6,287 *
PEARL RIVER, MS and LA	140	140
PROJECT CONDITION SURVEYS, MS	---	155 *
ROSEDALE HARBOR, MS	---	1,687 *
WATER/ENVIRONMENTAL CERTIFICATION, MS	---	40 *
YAZOO RIVER, MS	---	32 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
MISSOURI		
CARUTHERSVILLE HARBOR, MO	---	791 *
CLARENCE CANNON DAM AND MARK TWAIN LAKE, MO	11,301	11,301
CLEARWATER LAKE, MO	4,639	4,639
HARRY S. TRUMAN DAM AND RESERVOIR, MO	14,482	14,482
INSPECTION OF COMPLETED WORKS, MO	---	1,563 ~
LITTLE BLUE RIVER LAKES, MO	1,345	1,345
LONG BRANCH LAKE, MO	948	948
MISSISSIPPI RIVER BETWEEN THE OHIO AND MISSOURI RIVERS (REG WORKS), MO and IL	35,279	35,279
NEW MADRID COUNTY HARBOR, MO	---	520 *
NEW MADRID HARBOR, MO (MILE 889)	---	92 *
POMME DE TERRE LAKE, MO	4,704	4,704
PROJECT CONDITION SURVEYS, MO	---	5 *
SCHEDULING RESERVOIR OPERATIONS, MO	---	174
SMITHVILLE LAKE, MO	2,033	2,033
SOUTHEAST MISSOURI PORT, MISSISSIPPI RIVER, MO	---	234 *
STOCKTON LAKE, MO	5,817	5,817
TABLE ROCK LAKE, MO and AR	9,693	9,693
MONTANA		
FT PECK DAM AND LAKE, MT	6,017	6,017
INSPECTION OF COMPLETED WORKS, MT	---	191 ~
LIBBY DAM, MT	1,744	1,744
SCHEDULING RESERVOIR OPERATIONS, MT	---	130 ~
NEBRASKA		
GAVINS POINT DAM, LEWIS AND CLARK LAKE, NE and SD	10,093	10,093
HARLAN COUNTY LAKE, NE	9,151	9,151
INSPECTION OF COMPLETED WORKS, NE	---	785 ~
MISSOURI RIVER - KENSLERS BEND, NE TO SIOUX CITY, IA	117	117
PAPILLION CREEK AND TRIBUTARIES LAKES, NE	1,196	1,196
SALT CREEK AND TRIBUTARIES, NE	1,337	1,337
NEVADA		
INSPECTION OF COMPLETED WORKS, NV	---	50 ~
MARTIS CREEK LAKE, NV and CA	1,435	1,435
PINE AND MATHEWS CANYONS DAMS, NV	591	591
NEW HAMPSHIRE		
BLACKWATER DAM, NH	865	865
EDWARD MACDOWELL LAKE, NH	826	826
FRANKLIN FALLS DAM, NH	890	890
HOPKINTON-EVERETT LAKES, NH	1,933	1,933

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
INSPECTION OF COMPLETED WORKS, NH	---	111 ~
OTTER BROOK LAKE, NH	1,204	1,204
PROJECT CONDITION SURVEYS, NH	---	350 *
SURRY MOUNTAIN LAKE, NH	1,253	1,253
NEW JERSEY		
BARNEGAT INLET, NJ	---	760 *
COLD SPRING INLET, NJ	---	300 *
DELAWARE RIVER AT CAMDEN, NJ	---	15 *
DELAWARE RIVER, PHILADELPHIA TO THE SEA, NJ, PA and DE	---	41,823 *
INSPECTION OF COMPLETED WORKS, NJ	---	382 ~
MANASQUAN RIVER, NJ	---	375 *
MAURICE RIVER, NJ	---	4,010 *
NEW JERSEY INTRACOASTAL WATERWAY, NJ	---	985 *
NEWARK BAY, HACKENSACK AND PASSAIC RIVERS, NJ	---	24,825 *
PASSAIC RIVER FLOOD WARNING SYSTEMS, NJ	600	600
PROJECT CONDITION SURVEYS, NJ	---	2,175 *
SALEM RIVER, NJ	---	100 *
SHARK RIVER, NJ	---	1,150 *
SHOAL HARBOR AND COMPTON CREEK, NJ	---	8,000
NEW MEXICO		
ABIQUIU DAM, NM	6,378	6,378
COCHITI LAKE, NM	2,962	2,962
CONCHAS LAKE, NM	3,808	3,808
GALISTEO DAM, NM	685	685
INSPECTION OF COMPLETED WORKS, NM	---	526 ~
JEMEZ CANYON DAM, NM	1,102	1,102
MIDDLE RIO GRANDE ENDANGERED SPECIES COLLABORATIVE PROGRAM, NM	1,994	1,994
SANTA ROSA DAM AND LAKE, NM	1,502	1,502
SCHEDULING RESERVOIR OPERATIONS, NM	---	270 ~
TWO RIVERS DAM, NM	937	937
UPPER RIO GRANDE WATER OPERATIONS MODEL, NM	1,006	1,006
NEW YORK		
ALMOND LAKE, NY	716	716
ARKPORT DAM, NY	559	559
BAY RIDGE AND RED HOOK CHANNELS, NY	---	200 *
BLACK ROCK CHANNEL AND TONAWANDA HARBOR, NY	---	10,600 *
BRONX RIVER, NY	---	250 *
BROWN'S CREEK, NY	---	250
BUFFALO HARBOR, NY	---	20,908 *
BUTTERMILK CHANNEL, NY	---	19,525 *
DUNKIRK HARBOR, NY	---	680 *
EAST RIVER, NY	---	5 *
EAST ROCKAWAY INLET, NY	---	11,500 *
EAST SIDNEY LAKE, NY	712	712

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
FIRE ISLAND INLET TO JONES INLET, NY	---	25 *
FLUSHING BAY AND CREEK, NY	---	24,880 *
GREAT KILLS HARBOR, NY	---	100 *
HUDSON RIVER, NY (MAINT)	---	4,810 *
HUDSON RIVER, NY (O and C)	---	2,350 *
INSPECTION OF COMPLETED WORKS, NY	---	1,464 ~
JONES INLET, NY	---	19,025 *
LITTLE SODUS BAY HARBOR, NY	---	6,900 *
LONG ISLAND INTRACOASTAL WATERWAY, NY	---	8,500
MOUNT MORRIS DAM, NY	5,799	5,799
NEW YORK AND NEW JERSEY CHANNELS, NY	---	5 *
NEW YORK AND NEW JERSEY HARBOR, NY and NJ	---	87,980 *
NEW YORK HARBOR, NY	---	7,885 *
NEW YORK HARBOR, NY and NJ (DRIFT REMOVAL)	---	12,591 *
NEW YORK HARBOR, NY (PREVENTION OF OBSTRUCTIVE DEPOSITS)	---	2,059 *
OSWEGO HARBOR, NY	---	5,606 *
PROJECT CONDITION SURVEYS, NY	---	2,468 *
ROCHESTER HARBOR, NY	---	5,010 *
RONDOUT HARBOR, NY	---	200 *
SOUTHERN NEW YORK FLOOD CONTROL PROJECTS, NY	980	980
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, NY	---	597 *
WHITNEY POINT LAKE, NY	832	832
NORTH CAROLINA		
ATLANTIC INTRACOASTAL WATERWAY (AIWW), NC	5,950	5,950
B. EVERETT JORDAN DAM AND LAKE, NC	2,077	2,077
CAPE FEAR RIVER ABOVE WILMINGTON, NC	151	480 *
FALLS LAKE, NC	3,189	3,189
INSPECTION OF COMPLETED WORKS, NC	---	209 ~
LOCKWOODS FOLLY RIVER, NC	---	1,050
MANTEO (SHALLOWBAG) BAY, NC	---	3,296 *
MOREHEAD CITY HARBOR, NC	---	8,340 *
NEW RIVER INLET, NC	---	390 *
PROJECT CONDITION SURVEYS, NC	---	700 *
ROLLINSON CHANNEL, NC	---	30 *
SILVER LAKE HARBOR, NC	---	1,120 *
W. KERR SCOTT DAM AND RESERVOIR, NC	4,025	4,025
WILMINGTON HARBOR, NC	---	25,260 *
NORTH DAKOTA		
BOWMAN HALEY LAKE, ND	351	351
GARRISON DAM, LAKE SAKAKAWEA, ND	18,609	18,609
HOMME LAKE, ND	409	409
INSPECTION OF COMPLETED WORKS, ND	---	311 ~
LAKE ASHTABULA AND BALDHILL DAM, ND	1,689	1,689
PIPESTEM LAKE, ND	615	615
SCHEDULING RESERVOIR OPERATIONS, ND	---	128 ~
SOURIS RIVER, ND	381	381

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, ND	---	125 *
OHIO		
ALUM CREEK LAKE, OH	5,454	5,454
ASHTABULA HARBOR, OH	---	457 *
BERLIN LAKE, OH	3,554	3,554
CAESAR CREEK LAKE, OH	2,928	2,928
CLARENCE J. BROWN DAM AND RESERVOIR, OH	1,958	1,958
CLEVELAND HARBOR, OH	---	10,020 *
CONNEAUT HARBOR, OH	---	2,764 *
DEER CREEK LAKE, OH	2,057	2,057
DELAWARE LAKE, OH	4,364	4,364
DILLON LAKE, OH	3,335	3,335
FAIRPORT HARBOR, OH	---	3,880 *
HURON HARBOR, OH	---	8 *
INSPECTION OF COMPLETED WORKS, OH	---	984 ~
LORAIN HARBOR, OH	---	2,317 *
MASSILLON LOCAL PROTECTION PROJECT, OH	235	235
MICHAEL J. KIRWAN DAM AND RESERVOIR, OH	1,805	1,805
MOSQUITO CREEK LAKE, OH	4,610	4,610
MUSKINGUM RIVER LAKES, OH	24,813	24,813
NORTH BRANCH KOKOSING RIVER LAKE, OH	558	558
OHIO-MISSISSIPPI FLOOD CONTROL, OH	1,490	1,490
PAINT CREEK LAKE, OH	2,578	2,578
PROJECT CONDITION SURVEYS, OH	---	340 *
ROSEVILLE LOCAL PROTECTION PROJECT, OH	56	56
SANDUSKY HARBOR, OH	---	1,463 *
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OH	---	230 *
TOLEDO HARBOR, OH	---	6,929 *
TOM JENKINS DAM, OH	984	984
VERMILION HARBOR, OH	---	5,700 *
WEST FORK OF MILL CREEK LAKE, OH	4,875	4,875
WILLIAM H. HARSHA LAKE, OH	2,221	2,221
OKLAHOMA		
ARCADIA LAKE, OK	525	525
BIRCH LAKE, OK	847	847
BROKEN BOW LAKE, OK	3,267	3,267
CANTON LAKE, OK	2,207	2,207
COPAN LAKE, OK	1,885	1,885
EUPAULA LAKE, OK	16,618	16,618
FORT GIBSON LAKE, OK	5,195	5,195
FORT SUPPLY LAKE, OK	1,163	1,163
GREAT SALT PLAINS LAKE, OK	454	454
HEYBURN LAKE, OK	817	817
HUGO LAKE, OK	1,896	1,896
HULAH LAKE, OK	1,908	1,908
INSPECTION OF COMPLETED WORKS, OK	---	310 ~

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
KAW LAKE, OK	2,833	2,833
KEYSTONE LAKE, OK	4,874	4,874
MCCLELLAN-KERR ARKANSAS RIVER NAVIGATION SYSTEM, OK	37,629	37,629
OLOGAH LAKE, OK	5,221	5,221
OPTIMA LAKE, OK	198	198
PENSACOLA RESERVOIR, LAKE OF THE CHEROKEES, OK	163	163
PINE CREEK LAKE, OK	1,745	1,745
SARDIS LAKE, OK	1,556	1,556
SCHEDULING RESERVOIR OPERATIONS, OK	---	1,750 ~
SKIATOOK LAKE, OK	5,130	5,130
TENKILLER FERRY LAKE, OK	11,990	11,990
WAURIKA LAKE, OK	2,796	2,796
WISTER LAKE, OK	988	988
OREGON		
APLEGATE LAKE, OR	1,674	1,674
BLUE RIVER LAKE, OR	1,385	1,385
BONNEVILLE LOCK AND DAM, OR and WA	1,937	8,994 *
CHETCO RIVER, OR	---	954 *
COLUMBIA RIVER AT THE MOUTH, OR and WA	---	41,061 *
COOS BAY, OR	---	40,671 *
COOS BAY (MAJOR MAINTENANCE), OR	---	(32,720)
COQUILLE RIVER, OR	---	619 *
COTTAGE GROVE LAKE, OR	2,415	2,415
COUGAR LAKE, OR	2,756	2,756
DEPOE BAY, OR	---	71 *
DETROIT LAKE, OR	1,720	1,720
DORENA LAKE, OR	3,326	3,326
ELK CREEK LAKE, OR	248	248
FALL CREEK LAKE, OR	2,423	2,423
FERN RIDGE LAKE, OR	2,939	2,939
GREEN PETER - FOSTER LAKES, OR	2,898	2,898
HILLS CREEK LAKE, OR	1,598	1,598
INSPECTION OF COMPLETED WORKS, OR	---	425 ~
JOHN DAY LOCK AND DAM, OR and WA	6,300	6,300
LOOKOUT POINT LAKE, OR	3,167	3,167
LOST CREEK LAKE, OR	4,810	4,810
MENARY LOCK AND DAM, OR and WA	14,983	14,983
NEHALEM BAY, OR	---	15 *
PORT ORFORD, OR	---	459 *
PROJECT CONDITION SURVEYS, OR	---	477 *
ROGUE RIVER AT GOLD BEACH, OR	---	2,781 *
SCHEDULING RESERVOIR OPERATIONS, OR	---	104 ~
SIUSLAW RIVER, OR	---	1,049 *
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, OR	---	10,350 *
TILLAMOOK BAY & BAR, OR	---	172 *
UMPQUA RIVER, OR	---	1,183 *
WILLAMETTE RIVER AT WILLAMETTE FALLS, OR	80	80
WILLAMETTE RIVER BANK PROTECTION, OR	160	160

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
WILLOW CREEK LAKE, OR	1,189	1,189
YAQUINA BAY AND HARBOR, OR	—	4,572 *
PENNSYLVANIA		
ALLEGHENY RIVER, PA	9,064	9,064
ALVIN R. BUSH DAM, PA	782	782
AYLESWORTH CREEK LAKE, PA	312	312
BELTZVILLE LAKE, PA	1,886	1,886
BLUE MARSH LAKE, PA	4,734	4,734
CONEMAUGH RIVER LAKE, PA	1,677	1,677
COWANESQUE LAKE, PA	2,244	2,244
CROOKED CREEK LAKE, PA	2,348	2,348
CURWENSVILLE LAKE, PA	1,260	1,260
DELAWARE RIVER, PHILADELPHIA TO TRENTON, PA and NJ	—	13,710 *
EAST BRANCH CLARION RIVER LAKE, PA	2,013	2,013
ERIE HARBOR, PA	—	263 *
FOSTER J. SAYERS DAM, PA	1,837	1,837
FRANCIS E. WALTER DAM AND RESERVOIR, PA	1,225	1,225
GENERAL EDGAR JADWIN DAM AND RESERVOIR, PA	459	459
INSPECTION OF COMPLETED WORKS, PA	—	601 ~
JOHNSTOWN, PA	3,288	3,288
KINZUA DAM AND ALLEGHENY RESERVOIR, PA	2,362	2,362
LOYALHANNA LAKE, PA	5,308	5,308
MAHONING CREEK LAKE, PA	2,409	2,409
MONONGAHELA RIVER, PA AND WV	18,807	18,807
OHIO RIVER LOCKS AND DAMS, PA, OH and WV	76,654	76,654
OHIO RIVER OPEN CHANNEL WORK, PA, OH and WV	851	851
PROJECT CONDITION SURVEYS, PA	—	177 *
PROMPTON LAKE, PA	1,049	1,049
PUNXSUTAWNEY, PA	100	100
RAYSTOWN LAKE, PA	4,828	4,828
SCHEDULING RESERVOIR OPERATIONS, PA	—	82 ~
SCHUYLKILL RIVER, PA	—	100 *
SHENANGO RIVER LAKE, PA	3,675	3,675
STILLWATER LAKE, PA	481	481
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, PA	—	91 *
TIOGA-HAMMOND LAKES, PA	3,000	3,000
TIONESTA LAKE, PA	3,934	3,934
UNION CITY LAKE, PA	626	626
WOODCOCK CREEK LAKE, PA	1,381	1,381
YORK INDIAN ROCK DAM, PA	989	989
YOUGHIOGHENY RIVER LAKE, PA and MD	4,345	4,345
PUERTO RICO		
INSPECTION OF COMPLETED WORKS, PR	—	150 ~
PROJECT CONDITION SURVEYS, PR	—	100 *
SAN JUAN HARBOR, PR	—	3,940 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
RHODE ISLAND		
BLOCK ISLAND HARBOR OF REFUGE, RI	---	350 *
FOX POINT HURRICANE BARRIER, RI	704	704
GREAT SALT POND, BLOCK ISLAND, RI	---	350 *
INSPECTION OF COMPLETED WORKS, RI	---	49 ~
PROJECT CONDITION SURVEYS, RI	---	500 *
PROVIDENCE RIVER AND HARBOR, RI	---	38,600 *
WOONSOCKET LOCAL PROTECTION PROJECT, RI	543	543
SOUTH CAROLINA		
ATLANTIC INTRACOASTAL WATERWAY (AIWW), SC	4,315	4,315
CHARLESTON HARBOR, SC	---	9,145 *
COOPER RIVER, CHARLESTON HARBOR, SC	---	4,175 *
INSPECTION OF COMPLETED WORKS, SC	---	65 ~
PROJECT CONDITION SURVEYS, SC	---	875 *
SOUTH DAKOTA		
BIG BEND DAM AND LAKE SHARPE, SD	13,412	13,412
COLD BROOK LAKE, SD	386	386
COTTONWOOD SPRINGS LAKE, SD	257	257
FORT RANDALL DAM, LAKE FRANCIS CASE, SD	22,264	22,264
INSPECTION OF COMPLETED WORKS, SD	---	224 ~
LAKE TRAVERSE, SD and MN	687	687
OAHE DAM AND LAKE OAHE, SD	13,386	13,386
SCHEDULING RESERVOIR OPERATIONS, SD	---	158 ~
TENNESSEE		
CENTER HILL LAKE, TN	7,806	7,806
CHEATHAM LOCK AND DAM, TN	15,984	15,984
CORDELL HULL DAM AND RESERVOIR, TN	8,610	8,610
DALE HOLLOW LAKE, TN	8,292	8,292
J. PERCY PRIEST DAM AND RESERVOIR, TN	6,481	6,481
INSPECTION OF COMPLETED WORKS, TN	---	294 ~
NORTHWEST TENNESSEE REGIONAL HARBOR, TN	---	540 *
OLD HICKORY LOCK AND DAM, TN	11,870	11,870
PROJECT CONDITION SURVEYS, TN	---	5 *
TENNESSEE RIVER, TN	27,738	27,738
WOLF RIVER HARBOR, TN	---	655 *
TEXAS		
AQUILLA LAKE, TX	2,169	2,169
BARDWELL LAKE, TX	3,972	3,972
BELTON LAKE, TX	4,455	4,455
BENBROOK LAKE, TX	3,091	3,091

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
BRAZOS ISLAND HARBOR, TX	---	4,135 *
BUFFALO BAYOU AND TRIBUTARIES, TX	3,906	3,906
CANYON LAKE, TX	5,614	5,614
CEDAR BAYOU, TX	---	3,150 *
CHANNEL TO HARLINGEN, TX	---	1,100 *
CHANNEL TO PORT BOLIVAR, TX	---	600 *
CORPUS CHRISTI SHIP CHANNEL, TX	---	9,600 *
DENISON DAM, LAKE TEXOMA, TX	10,216	10,216
FERRELLS BRIDGE DAM - LAKE O' THE PINES, TX	3,708	3,708
FREEPORT HARBOR, TX	---	8,015 *
INSPECTION OF COMPLETED WORKS, TX	---	1,573 ~
GALVESTON HARBOR AND CHANNEL, TX	---	7,175 *
GIWW, CHANNEL TO VICTORIA, TX	---	130 *
GRANGER LAKE, TX	2,628	2,628
GRAPEVINE LAKE, TX	2,607	2,607
GULF INTRACOASTAL WATERWAY, TX	29,250	29,250
GULF INTRACOASTAL WATERWAY, CHOCOLATE BAYOU, TX	---	50 *
HORDS CREEK LAKE, TX	1,712	1,712
HOUSTON SHIP CHANNEL, TX	---	25,250 *
HOUSTON SHIP CHANNEL (DMMP), TX	---	(1,500)
JIM CHAPMAN LAKE, TX	2,307	2,307
JOE POOL LAKE, TX	6,748	6,748
LAKE KEMP, TX	261	261
LAVON LAKE, TX	3,699	3,699
LEWISVILLE DAM, TX	4,094	4,094
MATAGORDA SHIP CHANNEL, TX	---	4,255 *
NAVARRO MILLS LAKE, TX	2,871	2,871
NORTH SAN GABRIEL DAM AND LAKE GEORGETOWN, TX	2,703	2,703
O. C. FISHER DAM AND LAKE, TX	1,336	1,336
PAT MAYSE LAKE, TX	1,439	1,439
PROCTOR LAKE, TX	3,393	3,393
PROJECT CONDITION SURVEYS, TX	---	325 *
RAY ROBERTS LAKE, TX	1,570	1,570
SABINE - NECHES WATERWAY, TX	---	8,900 *
SAM RAYBURN DAM AND RESERVOIR, TX	7,448	7,448
SCHEDULING RESERVOIR OPERATIONS, TX	---	592 ~
SOMERVILLE LAKE, TX	3,352	3,352
STILLHOUSE HOLLOW DAM, TX	2,892	2,892
TEXAS CITY SHIP CHANNEL, TX	---	5,500 *
TOWN BLUFF DAM, B. A. STEINHAGEN LAKE AND ROBERT DOUGLAS WILLIS HYDROPOWER PROJECT, TX	3,402	3,402
WACO LAKE, TX	3,961	3,961
WALLISVILLE LAKE, TX	2,946	2,946
WHITNEY LAKE, TX	7,090	7,090
WRIGHT PATMAN DAM AND LAKE, TX	5,664	5,664
UTAH		
INSPECTION OF COMPLETED WORKS, UT	---	40 ~
SCHEDULING RESERVOIR OPERATIONS, UT	---	410 ~

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
VERMONT		
BALL MOUNTAIN LAKE, VT	986	986
GORDONS LANDING, VT	---	250 *
INSPECTION OF COMPLETED WORKS, VT	---	9 ~
NORTH HARTLAND LAKE, VT	884	884
NORTH SPRINGFIELD LAKE, VT	949	949
TOWNSHEND LAKE, VT	988	988
UNION VILLAGE DAM, VT	817	817
VIRGINIA		
ATLANTIC INTRACOASTAL WATERWAY - ALBEMARLE AND CHESAPEAKE CANAL ROUTE, VA	3,015	3,015
ATLANTIC INTRACOASTAL WATERWAY - DISMAL SWAMP CANAL ROUTE, VA	1,754	1,754
BENNETTS CREEK, VA	---	420 *
CHINCOTEAGUE INLET, VA	---	680 *
DAVIS CREEK, VA	---	265 *
GATHRIGHT DAM AND LAKE MOOMAW, VA	2,749	2,749
HAMPTON ROADS DRIFT REMOVAL, VA	---	2,632 *
HAMPTON ROADS, PREVENTION OF OBSTRUCTIVE DEPOSITS, VA	---	130 *
INSPECTION OF COMPLETED WORKS, VA	---	381 ~
JAMES RIVER CHANNEL, VA	---	8,025 *
JOHN H. KERR LAKE, VA and NC	12,131	12,131
JOHN W. FLANNAGAN DAM AND RESERVOIR, VA	7,864	7,864
LYNNHAVEN INLET, VA	---	425 *
NORFOLK HARBOR, VA	---	26,700 *
NORTH FORK OF POUND RIVER LAKE, VA	698	698
PHILPOTT LAKE, VA	4,833	4,833
PROJECT CONDITION SURVEYS, VA	---	1,229 *
WATER AND ENVIRONMENTAL CERTIFICATIONS, VA	---	200 *
YORK RIVER ENTRANCE CHANNEL, VA	---	300 *
VIRGIN ISLANDS		
INSPECTION OF COMPLETED WORKS, VI	---	36 ~
PROJECT CONDITION SURVEYS, VI	---	50 *
WASHINGTON		
CHIEF JOSEPH DAM, WA	676	676
COLUMBIA AND LOWER WILLAMETTE RIVERS BELOW VANCOUVER, WA and PORTLAND, OR	---	56,665 *
COLUMBIA RIVER AT BAKER BAY, WA	---	849 *
COLUMBIA RIVER BETWEEN CHINOOK AND SAND ISLAND, WA	---	1,894 *
COLUMBIA RIVER BETWEEN VANCOUVER, WA AND THE DALLES, OR	---	1,117 *
EVERETT HARBOR AND SNOHOMISH RIVER, WA	---	2,513 *
GRAYS HARBOR, WA	---	18,851 *
HOWARD A. HANSON DAM, WA	9,065	9,065

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
ICE HARBOR LOCK AND DAM, WA	5,012	5,012
INSPECTION OF COMPLETED WORKS, WA	---	1,223 ~
LAKE RIVER, WA (PORT OF RIDGEFIELD)	---	124
LAKE WASHINGTON SHIP CANAL, WA	1,314	11,199 *
LITTLE GOOSE LOCK AND DAM, WA	3,133	3,133
LOWER GRANITE LOCK AND DAM, WA	3,559	3,559
LOWER MONUMENTAL LOCK AND DAM, WA	3,095	3,095
MILL CREEK LAKE, WA	2,849	2,849
MOUNT ST. HELENS SEDIMENT CONTROL, WA	918	918
MUD MOUNTAIN DAM, WA	13,409	13,409
PROJECT CONDITION SURVEYS, WA	---	810 *
PUGET SOUND AND TRIBUTARY WATERS, WA	---	1,276 *
QUILLAYUTE RIVER, WA	---	2,334 *
SEATTLE HARBOR, WA	---	378 *
SCHEDULING RESERVOIR OPERATIONS, WA	---	493 ~
STILLAGUAMISH RIVER, WA	299	299
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WA	---	53 *
TACOMA-PUYALLUP RIVER, WA	364	364
THE DALLES LOCK AND DAM, WA and OR	4,033	4,033
WILLAPA RIVER AND HARBOR, WA	---	3,290 *
WEST VIRGINIA		
BEECH FORK LAKE, WV	1,534	1,534
BLUESTONE LAKE, WV	2,883	2,883
BURNSVILLE LAKE, WV	2,944	2,944
EAST LYNN LAKE, WV	3,098	3,098
ELKINS, WV	70	70
INSPECTION OF COMPLETED WORKS, WV	---	536 ~
KANAWHA RIVER LOCKS AND DAMS, WV	17,043	17,043
OHIO RIVER LOCKS AND DAMS, WV, KY and OH	57,656	57,656
OHIO RIVER OPEN CHANNEL WORK, WV, KY and OH	2,726	2,726
R. D. BAILEY LAKE, WV	2,760	2,760
STONEWALL JACKSON LAKE, WV	1,832	1,832
SUMMERSVILLE LAKE, WV	2,752	2,752
SUTTON LAKE, WV	3,609	3,609
TYGART LAKE, WV	2,351	2,351
WISCONSIN		
ASHLAND HARBOR, WI	---	1,020 *
EAU GALLE RIVER LAKE, WI	1,026	1,026
FOX RIVER, WI	3,444	3,444
GREEN BAY HARBOR, WI	---	3,101 *
INSPECTION OF COMPLETED WORKS, WI	---	45 ~
KENOSHA HARBOR, WI	---	730 *
KEWAUNEE HARBOR, WI	---	462 *
MANITOWOC HARBOR, WI	---	830 *
MILWAUKEE HARBOR, WI	---	3,112 *
PORT WING HARBOR, WI	---	25 *

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
PROJECT CONDITION SURVEYS, WI	---	359 *
STURGEON BAY HARBOR AND LAKE MICHIGAN SHIP CANAL, WI	18	629 *
SURVEILLANCE OF NORTHERN BOUNDARY WATERS, WI	---	408 *
WYOMING		
INSPECTION OF COMPLETED WORKS, WY	---	70 ~
JACKSON HOLE LEVEES, WY	1,678	1,678
SCHEDULING RESERVOIR OPERATIONS, WY	---	112 ~
SUBTOTAL, PROJECTS LISTED UNDER STATES	2,337,681	4,007,378
REMAINING ITEMS		
ADDITIONAL FUNDING FOR ONGOING WORK		
NAVIGATION MAINTENANCE	---	50,156
DEEP-DRAFT HARBOR AND CHANNEL	---	260,000
DONOR AND ENERGY TRANSFER PORTS	---	50,000
INLAND WATERWAYS	---	60,000
SMALL, REMOTE, OR SUBSISTENCE NAVIGATION	---	65,000
OTHER AUTHORIZED PROJECT PURPOSES	---	78,201
AQUATIC NUISANCE CONTROL RESEARCH	100	20,700
ASSET MANAGEMENT/FACILITIES AND EQUIP MAINTENANCE (FEM)	---	2,000
CIVIL WORKS WATER MANAGEMENT SYSTEM (CWWMS)	8,000	8,000
COASTAL INLETS RESEARCH PROGRAM	100	12,050
COASTAL OCEAN DATA SYSTEMS (CODS) PROGRAM	2,500	8,500
CULTURAL RESOURCES	900	900
CYBERSECURITY	4,000	4,000
DREGE 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	5,000
DREDGING OPERATIONS TECHNICAL SUPPORT PRORGAM (DOTS)	100	6,500
EARTHQUAKE HAZARDS REDUCTION PROGRAM	100	100
ENGINEERING WITH NATURE	---	20,000
ELECTRIC VEHICLE FLEET AND CHARGING INFRASTRUCTURE	8,000	8,000
FACILITY PROTECTION	4,200	4,200
FISH AND WILDLIFE OPERATION FISH HATCHERY REIMBURSEMENT	5,400	5,400
HARBOR MAINTENANCE FEE DATA COLLECTION	---	795 *
INLAND WATERWAY NAVIGATION CHARTS	4,000	4,000
INPSECTION OF COMPLETED FEDERAL FLOOD CONTROL PROJECTS	18,000	18,000
INSPECTION OF COMPLETED WORKS	32,500	---
MONITORING OF COMPLETED NAVIGATION PROJECTS	100	10,000
NATIONAL COASTAL MAPPING PROGRAM	4,000	8,000
NATIONAL DAM SAFETY PROGRAM (PORTFOLIO RISK ASSESSMENT)	10,000	10,000
NATIONAL EMERGENCY PREPAREDNESS PROGRAM (NEPP)	5,500	5,500
NATIONAL (LEVEE) FLOOD INVENTORY	4,500	4,500
NATIONAL (MULTIPLE PROJECT) NATURAL RESOURCES MANAGEMENT	2,500	2,500
NATIONAL PORTFOLIO ASSESSMENT FOR REALLOCATIONS	600	600

CORPS OF ENGINEERS - OPERATION AND MAINTENANCE
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST	HOUSE RECOMMENDED
OPTIMIZATION TOOLS FOR NAVIGATION	350	350
PERFORMANCE-BASED BUDGETING SUPPORT PROGRAM	---	2,500
RECREATION MANAGEMENT SUPPORT PROGRAM	1,000	1,000
REGIONAL SEDIMENT MANAGEMENT	100	3,500
RESPONSE TO CLIMATE CHANGE AT CORPS PROJECTS	6,000	6,000
REVIEW OF NON-FEDERAL ALTERATIONS OF CIVIL WORKS PROJECTS (SECTION 408)	10,000	10,000
SCHEDULING OF RESERVOIR OPERATIONS	8,500	---
SOIL MOISTURE AND SNOWPACK MONITORING	5,000	5,000
STEWARDSHIP SUPPORT PROGRAM	900	900
SUSTAINABLE RIVERS PROGRAM (SRP)	500	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)	500	5,500
SUBTOTAL, REMAINING ITEMS	165,220	809,622
TOTAL, OPERATION AND MAINTENANCE	2,502,901	4,817,000

**Includes funds requested in other accounts.*

^Funded under projects listed under states.

~Requested in remaining items.

Additional Funding for Ongoing Work.—Of the additional funding provided in this account, the Corps shall allocate not less than \$7,500,000 to complete water control manual updates at projects identified on the comprehensive list developed by the Corps referenced in this account under the heading “Water Control Manuals”, including in regions impacted by atmospheric rivers and where enhanced forecasting can improve water operations.

When allocating the additional funding provided 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 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, including domestic manufacturing capacity;
- 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;
- ability to address hazardous barriers to navigation due to shallow channels;
- risk of imminent failure or closure of the facility;
- improvements to federal breakwaters and jetties where additional work will improve the safety of navigation and stabilize infrastructure to prevent continued deterioration; and
- 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;
 - maintenance of dredge disposal facilities;
 - lack of alternative means of freight movement; and
 - savings over alternative means of freight movement.

Aquatic Nuisance Control Research Program.—The recommendation provides \$8,000,000 to supplement activities related to harmful algal bloom research and control, and the Committee directs the Corps to target freshwater ecosystems. The Committee is aware of the need to develop next generation ecological models to maintain inland and intracoastal waterways and provides \$5,600,000 for this purpose. The recommendation provides \$4,000,000 to establish the Harmful Algal Bloom Demonstration Program, as authorized by WRDA 2020, and the Corps is directed to provide to the Committee prior to the obligation of any funds a briefing on how it will implement this program. Within additional funds provided, the Corps is encouraged to support research that will identify and develop improved strategies for early detection, prevention, and management

techniques and procedures to reduce the occurrence and impacts of harmful algal blooms in the nation's water resources. The Corps is urged to work collaboratively with university partners as appropriate to address these issues.

The Committee encourages the Corps to facilitate collaboration with university partners to assess the impacts of environmental triggers in riverine ecosystems to advance prediction, avoidance, and remediation efforts for harmful algal blooms.

The Committee encourages the Corps to conduct research into environmental triggers that initiate harmful algal blooms, how upstream inputs influence development, and how triggers vary across regions.

Asset Management/Facilities Equipment Maintenance Program.—The recommendation provides \$2,000,000 above the budget request for research on novel approaches to repair and maintenance practices that will increase civil infrastructure intelligence and resilience.

Beneficial Use of Dredged Material.—Section 125 of WRDA 2020 directs the Corps to include the economic benefits and efficiencies of beneficial use of dredged material, including the use of alternative dredging equipment and dredging disposal methods, when calculating economic and environmental benefits of the beneficial use of dredged material. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on its efforts to comply with this provision.

Chicago Sanitary and Ship Canal Dispersal Barrier.—The Committee notes the Chicago Sanitary and Ship Canal (CSSC) dispersal barrier at Des Plaines River is a key control mechanism for protecting the Great Lakes from invasive carp. Over the last decade, the Corps has invested significant resources in building a permanent electric barrier on the Chicago Area Waterways System. The Committee appreciates that the Corps allocated resources to complete construction of the second array at the CSSC in fiscal year 2021. The Committee notes that maximizing effectiveness of the CSSC can have significant immediate benefits for preventing spread of aquatic invasive species into the productive and ecologically diverse Great Lakes system.

Contaminated Sediment.—Section 312 of WRDA 1990 provides for the removal of contaminated sediment for the purpose of environmental enhancement and water quality improvement. The Committee is aware that the Corps has been constrained in its use of section 312 due to liability concerns when dredging contaminated sediment. As such, the Committee directs the Corps, when necessary to exercise its section 312 authority, to enter into agreements with states and localities whereby those states and localities shall assume any liability concerns.

District Realignment Activities.—The Committee acknowledges the transfer of civil works missions at T.J. O'Brien and Lockport Locks from the Rock Island District to the Chicago District. The Committee understands that the transfer of two additional locks from the Rock Island District to the Chicago District will be considered in 2022 and strongly encourages the Corps to conduct robust stakeholder outreach prior to reaching any determination on the transfer of these locks. Additionally, the Corps is directed to notify

the Committee when the review commences. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a report on the long-term workload viability on both the Rock Island District and Chicago District.

Dredging Operations Technical Support Program.—Additional funding is included 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.

Emerging Harbor Projects.—The recommendation includes funding for individual projects defined as emerging harbor projects in section 210(f)(2) of WRDA 1986 that exceeds the funding levels envisioned in sections 210(c)(3) and 210(d)(1)(B)(ii) of WRDA 1986.

Engineering with Nature.—The recommendation provides \$20,000,000 for the Engineering With Nature initiative which enables more sustainable delivery of economic, social, and environmental benefits associated with water resources infrastructure and involves the intentional alignment of natural and engineering processes to efficiently and sustainably deliver economic, environmental, and social benefits through collaborative processes.

The Committee notes that using nature-based systems to adapt to and account for rapidly changing environmental conditions may lengthen the lifespan of infrastructure, improve readiness, and lower long-term infrastructure investment. Of the funding provided in this remaining item, up to \$5,000,000 is provided to employ nature-based tools and principles to support civil works flood control and ecosystem management planning objectives and operations in the Chesapeake Bay.

Federal Breakwaters and Jetties.—The Corps is directed to continue to assess the inventory of the structural condition of federal breakwaters and jetties protecting harbors and inland harbors using available funds from fiscal year 2021. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act an update on the status of the report and inventory that summarizes the available data.

Hamilton Wetlands, California.—The Committee understands the non-federal sponsor for the Hamilton Wetlands Restoration Project is working with the Corps to amend the Project Cooperation Agreement to include the authorized Bel Marin Keys project as a portion of the overall project. The Corps is encouraged to work with the non-federal sponsor to develop and execute an agreement that keeps the total project cost within the authorized amount in a timely manner.

Harmful Algal Bloom and Hypoxia Research and Control Act.—When Congress passed the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA), it created a task force intended to coordinate the federal response to harmful algal bloom activities. The Corps possesses key research, management, and control capabilities in assisting the fight against harmful algal blooms. The Corps is directed to provide to the Committee not later than 120 days after enactment of this Act a briefing with an update on how the Corps is using its expertise to target a strategic response to the harmful algal blooms in various parts of the nation, including its role in the interagency HABHRCA Task Force. The

Corps is encouraged to continue high level participation in the HABHRCA Task Force.

Hiram M. Chittenden Locks, Washington.—The Committee recognizes the importance of the Hiram M. Chittenden Locks for public safety, the environment, and the regional economy. The Corps is reminded that this project is eligible to compete for additional funding provided in this account.

Lake Okeechobee, Florida.—In accordance with section 1106 of the America's Water Infrastructure Act of 2018 (Public Law 115–270), the Corps is currently updating the Lake Okeechobee System Operating Manual to take into consideration the upcoming completion of the Herbert Hoover Dike and related Everglades restoration projects. As the Corps continues the public scoping process and initial formulation, the Corps is encouraged to use the best available science and appropriately weigh the concerns of all water users to ensure the ecosystem is preserved, water supply for the eight million residents in South Florida is maintained, and the safety of all residents of the region is upheld.

Levee Safety.—The Committee notes that the Corps has authorization to carry out certain levee safety initiatives that are funded within two remaining items: the National (Levee) Flood Inventory and Inspection of Completed Federal Flood Control Projects. The Committee supports the budget request to fund the National Levee Flood Inventory remaining item at the capability amount, and the Committee notes that, in fiscal year 2022, all activities associated with the National Levee Safety Program will be funded from this remaining item. All activities for the Inspection of Completed Federal Flood Control Projects remaining item were funded in the budget request and shall be used for the assessment of high risk federally authorized levees. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on its efforts to implement these initiatives. Additionally, the Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a report detailing how it will comply with section 131 of WRDA 2020.

Mississippi River Basin Coordination.—The Committee continues to urge the Corps to participate and coordinate as an essential federal stakeholder with the Environmental Protection Agency's development of the Mississippi River Restoration and Resiliency Strategy, as urged in the fiscal year 2021 Act. The Corps is also encouraged to engage with the U.S. Geological Survey as it hosts the Mississippi River Science Forum and to contribute to the proceedings as a federal agency with relevant scientific expertise.

Mississippi River Navigation System.—The Committee notes the important role small shallow draft ports play in ensuring the proper function of the Mississippi River navigation system. The Corps is reminded that these activities are eligible to compete for additional funding provided in this account.

Monitoring of Completed Navigation Projects, Structural Health Monitoring.—The recommendation provides \$4,000,000 to support the structural health monitoring program to facilitate research to maximize operations, enhance efficiency, and protect asset life through catastrophic failure mitigation.

Mount St. Helens Sediment Monitoring.—Yearly sediment monitoring at Mt. St. Helens is an important federal responsibility to ensure that water levels on the Lower Cowlitz River do not threaten downstream communities of Cowlitz County, Washington. The Committee commends the Corps for including funding for sediment monitoring activities in the budget request and encourages the Corps to include appropriate funding for these activities in future budget submissions.

Okatibbee Lake, Mississippi.—The Committee remains aware of significant shoreline sloughing and erosion at this project caused by severe storms and the resulting changing water levels, which have the potential to impact infrastructure, damage property, and put lives at risk. The Corps is reminded that addressing shoreline sloughing and erosion at a Corps project, including at locations leased by non-federal entities, is an activity eligible to compete for additional funding provided in this account.

Ohio Harbors.—Toledo Harbor and the channel at the mouth of western Lake Erie serves as a major thoroughfare to the Great Lakes navigation system, supporting manufacturing and commerce throughout the region. The Corps is reminded that Toledo and Sandusky Harbors are eligible to compete for additional funding in this account and that Lorain and Huron Harbors are small draft harbors that are eligible to compete for additional funds in this account.

Performance Based Budgeting Support Program.—Of the funding provided for this remaining item, \$2,500,000 shall be used to support performance-based methods that enable robust budgeting of the hydropower program through better understanding of operation and maintenance impacts leveraging data analytics.

Prado Dam Spillway Mural.—The Committee is aware of ongoing efforts to remove the existing lead-based paint mural on the Prado Dam Spillway and restore the mural to its original state using safe, non-toxic paint. The Committee directs the Corps to remove the existing lead paint as quickly as possible and to expeditiously execute a license agreement with the local sponsor in Riverside County that would allow the mural to be repainted. The Committee expects the Corps to coordinate lead paint removal with the execution of a license agreement to ensure the mural can be restored soon after the lead paint is removed.

Recreational Facilities.—The Corps is one of the nation's largest providers of conventional outdoor recreation opportunities and ranks first among federal providers of outdoor recreation. The Committee recognizes the important role that the Corps plays in providing recreational opportunities to the public. The Corps is encouraged to recognize the importance of concessionaires at their recreational facilities and to work with them on ways to improve recreational facilities. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a report that includes an analysis of current lease terms and the effects these terms have on concessionaire financing.

The Committee is aware of the importance that waterborne transportation systems play in helping enhance a community's economic competitiveness and recognizes how essential water resources are in improving the lives of those living and working along

our nation's navigable waterways, including the Alabama and Coosa Rivers project in Alabama. The Corps is encouraged to work across all Corps districts and with local stakeholders to ensure that small boat access channels and recreational facilities, in accordance with previously approved operations and maintenance dredging and disposal plans, can be utilized in a safe, reliable, and efficient manner. The Committee supports efforts to address racial equity and social justice issues and encourages the Corps to prioritize projects that provide opportunities for low income, racial, and ethnic minority communities.

Regional Dredge Contracting.—In accordance with section 1111 of the America's Water Infrastructure Act of 2018 (Public Law 115–270) and the Gulf Coast Regional Dredge Demonstration Program established by Public Law 116–94, the Corps is encouraged to enter into regional contracts to support increased efficiencies in the deployment of dredges for all civil works mission sets, prioritizing deep draft navigational projects.

Repair and Restoration of Embankments.—In accordance with section 147 of WRDA 2020, the Corps is encouraged to assess the cause of damages to embankments adjacent to shorelines of reservoir projects owned and operated by the Corps and to participate in the repair and restoration of the embankment as appropriate. The Corps is reminded that Waco Lake, Texas, is eligible to compete for additional funding provided in this account.

River Commissions.—The Congress has made clear its intent that the Susquehanna, Delaware and Potomac River Basin Commissions be supported, and the Corps is encouraged to budget accordingly in future budget submissions.

Seven Oaks Dam, California.—The Committee is aware that non-federal entities are working with the Corps in an effort to operate the Seven Oaks Dam, California, in a manner that would allow water agencies along the Santa Ana River to capture water released from the dam and recharge it into the groundwater basin. The Committee encourages the Corps to work with non-federal entities to coordinate releases of water behind the dam in a manner that protects water quality, ensures that it can be diverted for water supply purposes, and provides advance notice to ensure habitat conservation efforts are protected.

Sustainable Temporary Power.—The Committee is aware the Corps utilizes mobile diesel generators as a power source in the execution of its civil works and emergency response missions. The Committee encourages the Corps to explore the use of hybrid solar, battery, and diesel technology in its use of mobile generators for these purposes. The Corps is encouraged to coordinate with other agencies and the private sector as to research options and innovative solutions on these activities and is directed to provide to the Committee not later than 30 days after enactment of this Act a briefing on its findings.

Tampa Harbor, Florida.—The Committee recognizes the dramatic increase in global post-panamax vessels utilizing Tampa Harbor and the need to maintain the main federal channel at its authorized depth to accommodate these vessels. The Corps is reminded that Tampa Harbor is eligible to compete for additional funding provided in this account.

Upper St. Anthony Falls, Minnesota.—The cross over wall at the Upper St. Anthony Falls is experiencing seepage that is deteriorating the concrete wall. WRDA 2020 encouraged the Corps to continue to operate and maintain the Upper St Anthony Falls Lock and Dam. The Corps is further reminded that the Upper St. Anthony Falls project remains an authorized federal project that requires routine maintenance and is eligible to compete for additional funding provided in this account.

Water Control Manuals.—The Committee recognizes that many water control manuals are in need of updates, particularly in light of recent dam disasters and improvements in forecast-informed reservoir operations (FIRO). The Corps received funding in fiscal years 2020 and 2021 to develop 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. If needed, funds shall also be used to operationalize a FIRO-compatible component of the Corps Water Management System to process ensemble and synthetic forecasts to ensure continuous implementation of improvements in forecast skill for water operations. The Corps is directed to brief the Committee prior to executing any water control manual updates.

Water Operations Technical Support (WOTS).—The recommendation includes \$5,000,000 in addition to the budget request to continue research into atmospheric rivers first funded in fiscal year 2015 and to continue developing and incorporating improved weather forecasting for Corps reservoir and waterway projects through this multiagency, multidisciplinary research effort.

REGULATORY PROGRAM

Appropriation, 2021	\$210,000,000
Budget estimate, 2022	204,400,000
Recommended, 2022	212,000,000
Comparison:	
Appropriation, 2021	+2,000,000
Budget estimate, 2022	+7,600,000

This appropriation provides funds to administer laws pertaining to the regulation of activities affecting U.S. waters, including wetlands, in accordance with the Rivers and Harbors Appropriation Act of 1899, the Clean Water Act, and the Marine Protection, Research, and Sanctuaries Act of 1972. Appropriated funds are used to review and process permit applications, ensure compliance on permitted sites, protect important aquatic resources, and support watershed planning efforts in sensitive environmental areas in cooperation with states and local communities.

Permit Application Backlogs.—Additional funding is provided in this account to address staffing shortages and reduce permit application backlogs, including in the Northwestern Division. The Corps is directed to brief the Committee quarterly on these efforts beginning not later than 45 days of enactment of this Act. The Corps is to include in these briefings information on how the funding is to be utilized by the Northwestern Division to ensure the timely processing of shellfish aquaculture permitting activities.

Chehalis Basin.—The Committee is aware that flooding has long been a problem in the Chehalis Basin and encourages the Corps to continue to work in coordination with the non-federal sponsor on plans to reduce flooding in the basin. The Corps is directed to continue to provide quarterly briefings to the Committee.

Regional General Permits.—The Committee urges the Corps and the National Marine Fisheries Service to continue to evaluate appropriate mitigation options for Seattle District Regional General Permits that take into consideration improvements to existing structures.

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM

Appropriation, 2021	\$250,000,000
Budget estimate, 2022	---
Recommended, 2022	250,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	+250,000,000

This appropriation funds the cleanup of certain low-level radioactive materials and mixed wastes located at sites contaminated as a result of the nation's early efforts to develop atomic weapons.

The Committee again rejects the budget request proposal to transfer the Formerly Utilized Sites Remedial Action Program (FUSRAP) to the Department of Energy. The Congress intentionally transferred FUSRAP from the Department to the Corps in fiscal year 1998. In appropriating FUSRAP funds to the Corps, the Committee transferred only the responsibility for administration and execution of cleanup activities at FUSRAP sites where the Department had not completed cleanup. The Committee did not transfer to the Corps ownership of and accountability for real property interests, which remain with the Department. The Corps is directed to submit its fiscal year 2023 budget request using this budget structure.

The Committee remains pleased with the current cooperation between the Corps and the Department in carrying out the program and expects the Department to continue to provide its institutional knowledge and expertise to ensure the success of this program and to serve the nation and the affected communities.

The Committee continues to support the prioritization of sites, especially those that are nearing completion. The Committee is aware that the Corps continues to work on the Remedial Investigation/Feasibility Study of the former Sylvania nuclear fuel site at Hicksville, New York. The Committee supports these efforts, and encourages the Corps to proceed expeditiously, as appropriate, with subsequent activities in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

FLOOD CONTROL AND COASTAL EMERGENCIES

Appropriation, 2021	\$35,000,000
Budget estimate, 2022	35,000,000
Recommended, 2022	35,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

This appropriation funds planning, training, and other measures that ensure the readiness of the Corps to respond to floods, hurricanes, and other natural disasters, and to support emergency operations in response to such natural disasters, including advance measures, flood fighting, emergency operations, the provision of potable water on an emergency basis, and the repair of certain flood and storm damage reduction projects.

As the nation experiences severe weather events more frequently, the Committee appreciates the work the Corps undertakes with this funding. The Committee notes that traditionally, funding for disaster response has been provided in supplemental appropriations legislation, including recently in 2018 (Public Law 115–123) and 2019 (Public Law 116–20) and that amounts necessary to address damages at Corps projects in response to natural disasters can be significant. The Administration is again reminded that it has been deficient in providing to the Committee detailed estimates of damages to Corps projects as required by Public Law 115–123 and shall submit such report not later than 15 days after enactment of this Act and monthly thereafter.

Levee Rehabilitation and Inspection Program.—The Committee notes that the Corps provides non-federal entities continued eligibility in the Public Law 84–99 Rehabilitation and Inspection Program as levees are transitioned to meet Corps standards.

EXPENSES

Appropriation, 2021	\$206,000,000
Budget estimate, 2022	199,290,000
Recommended, 2022	208,000,000
Comparison:	
Appropriation, 2021	+2,000,000
Budget estimate, 2022	+8,710,000

This appropriation funds the executive direction and management of the Office of the Chief of Engineers, the Division Offices, and certain research and statistical functions of the Corps.

Alternative Financing.—The Committee remains supportive of public-private partnerships (P3) and is supportive of the alternative financing mechanisms authorized in the Water Infrastructure Finance and Innovation Act. The Corps is reminded of the Committee’s long-standing concerns that federal funding decisions not be biased by non-federal decisions to construct projects in advance of federal funding or to provide funding in excess of legally required cost shares. The Corps is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on its P3 pilot program.

Buoy Chain.—The Committee is concerned that acquisition regulations relating to the Corps procurement of buoy chain fails to appropriately prioritize domestic content preference rules and current Buy America directives. The Corps is directed to abide by Buy America requirements and preferences for buoy chain direct acquisitions and to provide to the Committee not later than 90 days after the enactment of this Act a briefing on its compliance with these requirements.

OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS

Appropriation, 2021	\$4,500,000
Budget estimate, 2022	5,000,000
Recommended, 2022	5,000,000
Comparison:	
Appropriation, 2021	+500,000
Budget estimate, 2022	---

The Assistant Secretary of the Army for Civil Works oversees the Civil Works budget and policy, whereas the Corps' executive direction and management of the Civil Works program are funded from the Expenses account.

The recommendation includes legislative language restricting the availability of 25 percent of the funding provided in this account until such time as at least 95 percent of the additional funding provided in each account has been allocated to specific programs, projects, or activities. This restriction shall not affect the roles and responsibilities established in previous fiscal years of the Office of the Assistant Secretary of the Army for Civil Works, the Corps headquarters, the Corps field operating agencies, or any other executive branch agency.

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, such as budget justification materials and statutorily required reports including execution reports and damage repair estimates, is vital in order to maintain 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 this same sensitivity and are critical to the budget process. The Administration shall ensure timely and complete responses to these inquiries.

Further, the Administration is reminded that it has been seriously deficient in providing to the Committee statutorily-required reports, including detailed estimates of damages to Corps projects and reports on the allocation and obligation of annual appropriations and supplemental appropriations.

Administrative Costs.—To support additional transparency in project costs, the Secretary is directed to ensure that future budget submissions specify the amount of anticipated administrative costs for individual projects.

WATER INFRASTRUCTURE FINANCE AND INNOVATION PROGRAM

Appropriation, 2021	\$14,200,000
Budget estimate, 2022	---
Recommended, 2022	14,200,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	+14,200,000

The financial assistance the Secretary is authorized to provide pursuant to the Water Infrastructure Finance and Innovation Act (Public Law 113–121) (WIFIA) can play an important role in improving the nation's infrastructure. The Administration is directed to complete the administrative actions necessary to stand up the

WIFIA program and to provide the financial assistance envisioned in the legislation. The recommendation makes \$8,500,000 available to the Secretary for program development, administration, and oversight, including but not limited to, publishing the final fee and program rules, criteria for project eligibility and Notice of Funding Availability. The recommendation includes \$5,700,000 for the financial assistance authorized by WIFIA. The fiscal year 2021 Act provided funds to publish the final fee and program rules and Notice of Funding Availability. The Committee reminds the Administration that the publication of these rules is necessary to move forward with the WIFIA program and directs the Administration to expeditiously publish the rules.

The Corps is directed to provide to the Committee not later than 45 days after enactment of this Act a briefing on the inclusion of levees in the WIFIA program.

GENERAL PROVISIONS—CORPS OF ENGINEERS—CIVIL

(INCLUDING TRANSFER OF FUNDS)

The bill continues a provision that prohibits the obligation or expenditure of funds through a reprogramming of funds in this title except in certain circumstances.

The bill includes a provision regarding the allocation of funds.

The bill continues a provision prohibiting the use of funds in this Act to carry out any contract that commits funds beyond the amounts appropriated for that program, project, or activity.

The bill continues a provision authorizing the transfer of funds to the Fish and Wildlife Service to mitigate for fisheries lost due to Corps projects.

The bill includes a provision regarding certain dredged material disposal activities. The Committee is aware of certain issues regarding placement of dredge material. The Corps is directed to brief the Committee not later than 90 days after enactment of this Act on these activities.

The bill includes a provision regarding reallocations at a project.

The bill includes a provision prohibiting the use of funds in this Act to reorganize or transfer the Civil Works functions of the Corps.

The bill includes a provision regarding eligibility for additional funding. Whether a project is eligible for funding under a particular provision of additional funding is a function of the technical details of the project; it is not a policy decision. The Chief of Engineers is the federal government's technical expert responsible for execution of the civil works program and for offering professional advice on its development. Therefore, the provision clarifies that a project's eligibility for additional funding shall be solely the professional determination of the Chief of Engineers.

TITLE II—DEPARTMENT OF THE INTERIOR

CENTRAL UTAH PROJECT

CENTRAL UTAH PROJECT COMPLETION ACCOUNT

Appropriation, 2021	\$21,000,000
Budget estimate, 2022	20,000,000
Recommended, 2022	20,000,000
Comparison:	
Appropriation, 2021	- 1,000,000
Budget estimate, 2022	- - -

The Central Utah Project Completion Act (CUPCA) (Titles II–VI of Public Law 102–575) provides for the completion of the Central Utah Project by the Central Utah Water Conservancy District. CUPCA also authorizes the appropriation of funds for fish, wildlife, and recreation mitigation and conservation; establishes an account in the Treasury for the deposit of these funds and of other contributions for mitigation and conservation activities; and establishes a Utah Reclamation Mitigation and Conservation Commission to administer funds in that account. CUPCA further assigns responsibilities for carrying out the Act to the Secretary of the Interior and prohibits delegation of those responsibilities to the Bureau of Reclamation.

The Committee recommendation includes a total of \$20,000,000 for the Central Utah Project Completion Account, which includes \$13,150,000 for Central Utah Project construction, \$5,000,000 for transfer to the Utah Reclamation Mitigation and Conservation Account for use by the Utah Reclamation Mitigation and Conservation Commission, and \$1,550,000 for necessary expenses of the Secretary of the Interior.

BUREAU OF RECLAMATION

INTRODUCTION

The mission of the Bureau of Reclamation (Reclamation) is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. Since its establishment by the Reclamation Act of 1902, Reclamation has developed water supply facilities that have contributed to sustained economic growth and an enhanced quality of life in the western states. Lands and communities served by Reclamation projects have been developed to meet agricultural, tribal, urban, and industrial needs. Reclamation continues to develop authorized facilities to store and convey new water supplies and is the largest supplier and manager of water in the 17 western states and does so in response to a changing climate that strains the very resources that Reclamation is charged with managing, developing, and protecting. Reclamation maintains 338 reservoirs with the capacity to store 140 million acre-feet of water.

The West is currently experiencing one of the most severe droughts on record, which could be more severe than the last stretch of drought from 2012 to 2017. Furthermore, over the last 40 years, snowpack in the western states has declined by about 25 percent. Climate change has exacerbated the presence and effects of drought in the region, resulting in having consequential impacts

on public health, water supply, and fire intensity. Innovation and infrastructure investments are critical to secure water resources for both municipal and agricultural usage now and into the future. Accordingly, the Committee recommendation includes targeted increased investments in programs to assist western states now as they respond to the drought crisis and continues to build on long-term efforts to address future challenges.

As Reclamation's facilities reach their design life, the projected cost of operating, maintaining, and rehabilitating this infrastructure continues to grow, yet Reclamation has not budgeted funding sufficient to implement a comprehensive program to reduce its maintenance backlog. At the same time, Reclamation is increasingly relied upon to supply water to federally-recognized Indian tribes through water settlements, rural communities through its Title I Rural Water Program, and municipalities through its Title XVI Water Reclamation and Reuse Program. Balancing these competing priorities will be challenging and requires active participation and leadership on the part of Reclamation and its technical staff.

COMMITTEE RECOMMENDATION

The budget request for the Bureau of Reclamation totals \$1,532,949,000. The Committee recommendation totals \$1,945,899,000, which is \$275,899,000 above fiscal year 2021 and \$412,950,000 above the budget request.

A table summarizing the fiscal year 2021 enacted appropriation, the fiscal year 2022 budget request, and the Committee recommendation is provided below:

(Dollars in thousands)

Account	FY 2021 enacted	FY 2022 request	Cmte rec.
Water and Related Resources	\$1,521,125	\$1,379,050	\$1,792,000
Central Valley Project Restoration Fund	55,875	56,499	56,499
California Bay-Delta Restoration	33,000	33,000	33,000
Policy and Administration	60,000	64,400	64,400
Total, Bureau of Reclamation	1,670,000	1,532,949	1,945,899

WATER AND RELATED RESOURCES

(INCLUDING TRANSFERS OF FUNDS)

Appropriation, 2021	\$1,521,125,000
Budget estimate, 2022	1,379,050,000
Recommended, 2022	1,792,000,000
Comparison:	
Appropriation, 2021	+270,875,000
Budget estimate, 2022	+412,950,000

The Water and Related Resources account supports the development, construction, 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 levels of benefits, to protect public safety, and to conduct studies on ways to improve the use of water and related natural resources.

The budget request for this account and the approved Committee allowance are shown on the following table:

WATER AND RELATED RESOURCES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST		HOUSE RECOMMENDED	
	RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R
	TOTAL	TOTAL	TOTAL	TOTAL
ARIZONA				
AK-CHIN WTR RIGHTS SETLMINT ACT	---	19,433	---	19,433
COLORADO RIVER BASIN - CENTRAL ARIZONA PROJECT	20,957	648	20,957	648
COLO RIV FRONT WORK/LEVEE SYST	2,303	---	2,303	---
SALT RIVER PROJECT	649	364	649	364
SAN CARLOS APACHE WTR SETLMINT	550	---	550	---
YUMA AREA PROJECTS	1,025	28,364	1,025	28,364
		19,433		19,433
		21,605		21,605
		2,303		2,303
		1,013		1,013
		550		550
		29,389		29,389
CALIFORNIA				
CACHUMA PROJECT	915	1,401	915	1,401
CENTRAL VALLEY PROJECT	---	---	---	---
CVP, AMERICAN RIVER DIVISION	1,830	10,937	1,830	10,937
CVP, AUBURN-FOLSOM SOUTH UNIT	35	2,564	35	2,564
CVP, DELTA DIVISION	17,586	12,145	18,086	12,145
EAST TO WEST CONVEYANCE PROJECT (SIR TO DMC) APPRAISAL STUDY	---	---	(500)	---
CVP, EAST SIDE DIVISION	1,290	2,772	1,290	2,772
CVP, FRIANT DIVISION	1,375	3,761	1,375	3,761
CVP, FRIANT DIVISION, SAN JOAQUIN RIVER RESTORATION	20,500	---	20,500	---
CVP, MISC PROJECT PROGRAMS	21,694	370	21,694	370
CVP, REPL,ADD,EXTRAMINT (RAX)	---	29,500	---	29,500
CVP, SACRAMENTO RIVER DIVISION	7,450	695	8,450	695
SACRAMENTO RIVER BASIN FLOOD PLAIN REACTIVATION	---	---	(1,000)	---
CVP, SAN FELIPE DIVISION	128	68	128	68
CVP, SAN JOAQUIN DIVISION	---	---	---	---
CVP, SAN LUIS UNIT, WEST SAN JOAQUIN DIVISION	2,604	7,075	3,104	7,075
LOS BANOS CREEK APPRAISAL STUDY	---	---	(500)	---
		2,316		2,316
		12,767		12,767
		2,599		2,599
		29,731		30,231
		---		(500)
		4,062		4,062
		5,136		5,136
		20,500		20,500
		22,064		22,064
		29,500		29,500
		8,145		9,145
		---		(1,000)
		196		196
		---		---
		9,679		10,179
		---		(500)

WATER AND RELATED RESOURCES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST		HOUSE RECOMMENDED		TOTAL
	RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R	
CVP, SHASTA DIVISION	494	11,190	494	11,190	11,684
CVP, TRINITY RIVER DIVISION	10,361	5,230	10,361	5,230	15,591
CVP, WATER AND POWER OPERS	2,251	10,843	2,251	10,843	13,094
ORLAND PROJECT	---	923	---	923	923
SALTON SEA RESEARCH PROJECT	2,000	---	2,546	---	2,546
SAN GABRIEL BASIN RESTORATION FUND	---	---	10,000	---	10,000
SOLANO PROJECT	1,162	2,535	1,162	2,535	3,697
VENTURA RIVER PROJECT	330	44	330	44	374
COLORADO					
ANIMAS-LA PLATA PROJ	758	4,506	758	4,506	5,264
ARMEL UNIT, P-SMBP	15	434	15	434	449
COLLBRAN PROJECT	148	2,686	148	2,686	2,834
COLORADO-BIG THOMPSON PROJECT	265	15,092	265	15,092	15,357
FRUITGROWERS DAM PROJECT	67	133	67	133	200
FRYINGPAN-ARKANSAS PROJECT	76	8,880	76	8,880	8,956
FRYINGPAN-ARKANSAS, AV CONDUIT	10,050	---	10,050	---	10,050
GRAND VALLEY PROJECT	193	155	193	155	348
CRBSCP, GRAND VALLEY UNIT TITLE II	64	1,755	64	1,755	1,819
LEADVILLE/ARKANSAS RV RCVRY PR	---	24,878	---	24,878	24,878
MANCOS PROJECT	93	258	93	258	351
NARROWS UNIT, P-SMBP	---	33	---	33	33
PARADOX VALLEY UNIT	771	2,967	771	2,967	3,738
PINE RIVER PROJECT	127	361	127	361	488
SAN LUIS VALLEY, CLOSED BASIN	100	2,950	100	2,950	3,050
SAN LUIS VAL PROJ, CONEJOS DIV	10	20	10	20	30
UNCOMPAGRE PROJECT	711	169	711	169	880
UPPER COLO RIVER OPERATION PRG	3,250	---	3,250	---	3,250

WATER AND RELATED RESOURCES (AMOUNTS IN THOUSANDS)		BUDGET REQUEST		HOUSE RECOMMENDED		TOTAL
		RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R	
IDAHO						
BOISE AREA PROJECTS						
CLMB/SNAKE RV SALMON RECVRY PR	2,753	2,964	5,717	2,753	2,964	5,717
LEWISTON ORCHARDS PROJECT	18,000	---	18,000	18,000	---	18,000
MINIDOKA AREA PROJECTS	880	27	907	880	27	907
PRESTON BENCH PROJECT	2,654	4,557	7,211	2,654	4,557	7,211
	13	34	47	13	34	47
KANSAS						
ALMENA UNIT, P-SMBP						
BOSTWICK DIVISION, P-SMBP	18	1,131	1,149	18	1,131	1,149
CEDAR BLUFF UNIT, P-SMBP	199	1,243	1,442	199	1,243	1,442
GLEN ELDER UNIT, P-SMBP	13	452	465	13	452	465
KANSAS RIVER AREA, P-SMBP	18	18,519	18,537	18	18,519	18,537
KIRWIN UNIT, P-SMBP	---	100	100	---	100	100
WEBSTER UNIT, P-SMBP	27	387	414	27	387	414
WICHITA, CHENEY DIVISION	18	5,010	5,028	18	5,010	5,028
WICHITA, EQUUS BEDS DIVISION	39	398	437	39	398	437
	10	---	10	10	---	10
MONTANA						
CANYON FERRY UNIT, P-SMBP						
EAST BENCH UNIT, P-SMBP	188	8,012	8,200	188	8,012	8,200
FORT PECK RSRVTN/DRY PRAIRIE	162	602	764	162	602	764
HELENA VALLEY UNIT, P-SMBP	17,191	---	17,191	17,191	---	17,191
HUNGRY HORSE PROJECT	52	200	252	52	200	252
HUNTLEY PROJECT	---	1,673	1,673	---	1,673	1,673
	38	24	62	38	24	62

WATER AND RELATED RESOURCES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST		HOUSE RECOMMENDED		TOTAL
	RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R	
LOWER MARIAS UNIT, P-SMBP	536	1,496	536	1,496	2,032
LOWER YELLOWSTONE PROJECT	905	22	905	22	927
MILK RVR/ST MARY DIV REHAB PRJ	400	1,202	400	1,202	1,602
MISSOURI BASIN UNIT, P-SMBP	1,015	157	1,015	157	1,172
ROCKY BOYS/N CNTRL MT RURAL WTR SYS	13,504	---	13,504	---	13,504
SUN RIVER PROJECT	107	373	107	373	480
YELLOWTAIL UNIT, P-SMBP	105	9,875	105	9,875	9,980
NEBRASKA					
AINSWORTH UNIT, P-SMBP	33	109	33	109	142
FRENCHMAN-CAMBRIDGE DIVN, P-SMBP	174	2,411	174	2,411	2,585
MIRAGE FLATS PROJECT	24	102	24	102	126
NORTH LOUP DIVISION, P-SMBP	46	198	46	198	244
NEVADA					
LAHONTAN BASIN PROJECT	5,435	5,858	5,435	5,858	11,293
LAKE TAHOE REGIONAL DEV	115	---	115	---	115
LAKE MEAD/LAS VEGAS WASH PRGM	595	---	595	---	3,655
NEW MEXICO					
CARLSBAD PROJECT	2,794	6,946	2,794	6,946	9,740
EASTERN NM WTR SPLY-UTE RESVR	7,790	---	7,790	---	7,790
MIDDLE RIO GRANDE PROJECT	20,100	10,530	20,100	10,530	30,630
RIO GRANDE PROJECT	2,391	6,709	2,391	6,709	9,100
RIO GRANDE PUEBLOS	1,050	---	1,050	---	1,050
TUCUMCARI PROJECT	15	5	15	5	20

WATER AND RELATED RESOURCES (AMOUNTS IN THOUSANDS)		BUDGET REQUEST RESOURCES MANAGEMENT		HOUSE RECOMMENDED RESOURCES MANAGEMENT		HOUSE RECOMMENDED FACILITIES OM&R		TOTAL	
NORTH DAKOTA									
DICKINSON UNIT, P-SMBP		838	---	838	---	838	838	838	
GARRISON DIVERSION UNIT, P-SMBP Rural and Non-Rural Water		14,891	24,568	14,891	24,568	14,891	14,891	39,459	
HEART BUTTE UNIT, P-SMBP		1,271	82	1,271	82	1,271	1,271	1,353	
OKLAHOMA									
ARBUCKLE PROJECT		243	39	243	39	243	243	282	
MCGEE CREEK PROJECT		904	20	904	20	904	904	924	
MOUNTAIN PARK PROJECT		681	30	681	30	681	681	711	
NORMAN PROJECT		289	76	289	76	289	289	365	
WASHITA BASIN PROJECT		1,555	52	1,555	52	1,555	1,555	1,607	
W. C. AUSTIN, ALTUS DAM		905	37	905	37	905	905	942	
OREGON									
CROOKED RIVER PROJECT		499	314	499	314	499	499	813	
DESCHUTES PROJECT		231	429	231	429	231	231	660	
EASTERN OREGON PROJECTS		256	721	256	721	256	256	977	
KLAMATH PROJECT		4,299	19,770	4,299	19,770	4,299	4,299	24,069	
ROGUE RIVER, TALENT DIVISION		543	738	543	738	543	543	1,281	
TUALATIN PROJECT		1,856	382	1,856	382	1,856	1,856	2,238	
UMATILLA PROJECT		3,100	567	3,100	567	3,100	3,100	3,667	
SOUTH DAKOTA									
ANGOSTURA UNIT, P-SMBP		882	10	882	10	882	882	892	

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WATER AND RELATED RESOURCES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST		HOUSE RECOMMENDED		TOTAL
	RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R	
BELLE FOURCHE UNIT, P-SMBP	130	1,507	130	1,507	1,637
KEYHOLE UNIT, P-SMBP	190	586	190	586	776
LEWIS AND CLARK RURAL WTR SYS	9,220	---	9,220	---	9,220
MID-DAKOTA RURAL WATER PROJECT	---	13	---	13	13
MNI WICONI PROJECT	---	17,010	---	17,010	17,010
OAHE UNIT, P-SMBP	---	90	---	90	90
RAPID VALLEY PROJECT	---	86	---	86	86
RAPID VALLEY UNIT, P-SMBP	---	224	---	224	224
SHADEHILL UNIT, P-SMBP	119	715	119	715	834
TEXAS					
BALMORHEA PROJECT	4	---	4	---	4
CANADIAN RIVER PROJECT	42	82	42	82	124
LOWER RIO GRANDE WATER CONSERVATION PROJECT	911	---	1,709	---	1,709
ISLAND MAIN LATERAL CONCRETE LINING PROJECT	---	---	(798)	---	(798)
NUECES RIVER PROJECT	52	1,010	52	1,010	1,062
SAN ANGELO PROJECT	23	680	23	680	703
UTAH					
HYRUM PROJECT	109	260	109	260	369
MOON LAKE PROJECT	19	159	19	159	178
NEWTON PROJECT	56	132	56	132	188
OGDEN RIVER PROJECT	195	246	195	246	441
PROVO RIVER PROJECT	3,336	532	3,336	532	3,868
SANPETE PROJECT	85	18	85	18	103
SCOFIELD PROJECT	344	153	344	153	497
STRAWBERRY VALLEY PROJECT	500	60	500	60	560

WATER AND RELATED RESOURCES (AMOUNTS IN THOUSANDS)		BUDGET REQUEST		HOUSE RECOMMENDED		TOTAL
	RESOURCES MANAGEMENT	FACILITIES OM&R	TOTAL	RESOURCES MANAGEMENT	FACILITIES OM&R	TOTAL
WEBER BASIN PROJECT	1,273	942	2,215	1,273	942	2,215
WEBER RIVER PROJECT	108	212	320	108	212	320
WASHINGTON						
COLUMBIA BASIN	7,270	20,715	27,985	7,770	20,715	28,485
ODESSA SUBAREA	(1500)	---	(1500)	(2000)	---	(2000)
WASHINGTON AREA PROJECTS	372	160	532	372	160	532
YAKIMA PROJECT	1,887	7,040	8,927	1,887	7,040	8,927
YAKIMA RV BSN WTR ENHNCMT PROJ	25,500	---	25,500	25,500	---	25,500
WYOMING						
BOYSEN UNIT, P-SMBP	78	2,235	2,313	78	2,235	2,313
BUFFALO BILL DAM MODF, P-SMBP	9	5,941	5,950	9	5,941	5,950
KENDRICK PROJECT	79	3,841	3,920	79	3,841	3,920
NORTH PLATTE PROJECT	93	2,487	2,580	93	2,487	2,580
NORTH PLATTE AREA O/M, P-SMBP	121	6,787	6,908	121	6,787	6,908
OWL CREEK UNIT, P-SMBP	4	102	106	4	102	106
RIVERTON UNIT, P-SMBP	12	716	728	12	716	728
SHOSHONE PROJECT	34	1,293	1,327	34	1,293	1,327
SUBTOTAL, PROJECTS	333,604	416,742	750,346	350,508	416,742	767,250
REGIONAL PROGRAMS						
ADDITIONAL FUNDING FOR ONGOING WORK:						
RURAL WATER	---	---	---	55,675	---	55,675
FISH PASSAGE AND FISH SCREENS	---	---	---	8,000	---	8,000
WATER CONSERVATION AND DELIVERY	---	---	---	137,627	---	137,627

WATER AND RELATED RESOURCES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST		HOUSE RECOMMENDED		TOTAL
	RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R	
ENVIRONMENTAL RESTORATION OR COMPLIANCE			30,377		30,377
FACILITIES OPERATION, MAINTENANCE, AND REHABILITATION				4,000	4,000
AGING INFRASTRUCTURE		1,000		1,000	1,000
AQUATIC ECOSYSTEM RESTORATION PROGRAM	1,000		5,000		5,000
COLORADO RIVER COMPLIANCE ACTIVITIES	21,400		21,400		21,400
COLORADO RIVER BASIN SALINITY CONTROL PROJECT, TITLE I		17,574	17,574		17,574
COLORADO RIVER BASIN SALINITY CONTROL PROJECT, TITLE II, BASINWIDE	7,000		7,000		7,000
COLORADO RIVER STORAGE PROJECT (CRSP), SECTION 5	3,164	7,469	3,164	7,469	10,633
COLORADO RIVER STORAGE PROJECT (CRSP), SECTION 8	3,322		3,322		3,322
COLORADO RIVER WATER QUALITY IMPROVEMENT PROJECT	740		740		740
DAM SAFETY PROGRAM					
DEPARTMENT DAM SAFETY PROGRAM		1,300		1,300	1,300
INITIATE SAFETY OF DAMS CORRECTIVE ACTION		182,500		182,500	182,500
SAFETY EVALUATION OF EXISTING DAMS		23,284		23,284	23,284
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM					
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM (Bureauwide)	2,575		2,575		2,575
ENDANGERED SPECIES RECOVERY IMPLEMENTATION PROGRAM (Platte River)	4,950		4,950		4,950
ENDANGERED SPEC RECOVERY IMPL. PROG (Upper Colo & San Juan Riv Basins)	5,700		5,700		5,700
ENVIRONMENTAL PROGRAM ADMINISTRATION					
EXAM OF EXISTING STRUCTURES	1,711		1,711		1,711
GENERAL PLANNING STUDIES		12,727		12,727	12,727
INDIAN WATER RIGHTS SETTLEMENT	2,195		2,195		2,195
AAMODT LITIGATION	10,000		10,000		10,000
BLACKFEET INDIAN WATER RIGHTS SETTLEMENT	40,000		40,000		40,000
CROW TRIBE INDIAN WATER RIGHTS SETTLEMENT	12,772		12,772		12,772
NAVAJO-GALLUP WATER SUPPLY PROJECT	51,342	5,000	56,342	5,000	67,342
LAND RESOURCES MANAGEMENT PRGM	16,190		16,190		16,190

WATER AND RELATED RESOURCES
(AMOUNTS IN THOUSANDS)

	BUDGET REQUEST		HOUSE RECOMMENDED	
	RESOURCES MANAGEMENT	FACILITIES OM&R	RESOURCES MANAGEMENT	FACILITIES OM&R
	45,218	---	45,218	---
LOWER COLO RV OPERATIONS PROG	---	971	971	---
MISCELLANEOUS FLOOD CONTROL OPERATIONS	---	---	---	971
NATIVE AMERICAN AFFAIRS PROGRAM	20,000	---	20,000	---
NEGOTIATION & ADMINISTRATION OF WATER MARKETING	2,219	---	2,219	---
OPERATION AND PROGRAM MANAGEMENT	836	3,264	4,100	3,264
POWER PROGRAM SERVICES	3,121	307	3,428	307
PUBLIC ACCESS AND SAFETY PROG	610	206	816	206
PUBLIC RISK/LAW ENFORCEMENT - SITE SECURITY	---	27,500	27,500	---
RECREATION & FISH & WILDLIFE PROGRAM ADMINISTRATION	5,508	---	5,508	---
RECLAMATION LAW ADMINISTRATION	1,131	---	1,131	---
RESEARCH AND DEVELOPMENT:				
DESALINATION AND WATER PURIFICATION PROGRAM	7,850	1,650	9,500	1,650
SCIENCE AND TECHNOLOGY PROGRAM	18,000	---	18,000	---
UNITED STATES/MEXICO BORDER ISSUES - TECHNICAL SUPPORT	80	---	80	---
EMERGENCY PLANNING & DISASTER RESPONSE PROGRAM	---	1,250	1,250	---
WATERSMART PROGRAM:				
WATERSMART GRANTS	15,000	---	15,000	---
WATER CONSERVATION FIELD SERVICES PROGRAM	2,318	---	2,318	---
COOPERATIVE WATERSHED MANAGEMENT	2,250	---	2,250	---
BASIN STUDIES	13,500	---	13,500	---
DROUGHT RESPONSES & COMPREHENSIVE DROUGHT PLANS	16,500	---	16,500	---
TITLE XVI WATER RECLAMATION & REUSE PROGRAM	4,500	---	4,500	---
	342,702	286,002	628,704	290,002
SUBTOTAL - REGIONAL PROGRAMS			734,748	
TOTAL, WATER AND RELATED RESOURCES	676,306	702,744	1,379,050	706,744
			1,085,256	1,792,000

Additional Funding for Water and Related Resources Work.—The recommendation includes funds in addition to the budget request for Water and Related Resources studies, projects, and activities. Priority in allocating these funds should 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 nontribal water settlement studies and activities; or address critical backlog maintenance and rehabilitation activities. Funding provided under the heading, “Additional Funding for Ongoing Work” may be utilized for ongoing work, including preconstruction activities, on projects which provide new or existing water supplies through additional infrastructure.

Of the additional funding provided under the heading “Water Conservation and Delivery”, \$67,000,000 shall be for water storage projects as authorized in section 4007 of Public Law 114–322.

Of the funding recommended under the heading “Water Conservation and Delivery,” \$50,000,000 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 River 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 (Public Law 116–14) and related agreements. 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 “Fish Passage and Fish Screens”, \$6,000,000 shall be for the Anadromous Fish Screen Program.

Not later than 45 days after enactment of this Act, Reclamation shall provide to the Committee a report delineating how the additional funds in this account are to be distributed, in which phase the work is to be accomplished, and an explanation of the criteria and rankings used to justify each allocation.

Reclamation is reminded that activities authorized under Indian Water Rights Settlements and under section 206 of Public Law 113–235 are eligible to compete for the additional funding provided under “Water Conservation and Delivery.”

Aging Infrastructure Account.—The Committee recommends \$1,000,000 for the Aging Infrastructure Account for the purpose of making financing available for the cost of emergency and extraordinary maintenance improvements to aging federal Reclamation-owned facilities. The Committee does not support allowing increases or decreases in transfer amounts at this time and directs Reclamation to provide to the Committee prior to the obligation of any funds for this purpose a report detailing implementation plans for this program. As it implements the program, Reclamation is encouraged to prioritize financing improvements to eligible transferred operation and maintenance work beneficiaries in drought prone areas with the greatest need for repair.

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, both of which have been specifically identified as priorities in the California Natural Resources Agency Sacramento Valley Salmon Resiliency Strategy. Additionally, Reclamation is encouraged to maintain its focus on screening high priority diversions in the San Joaquin River Basin. Reclamation is reminded that these diversions are eligible to compete for the additional funding provided in this account, under Fish Passage and Fish Screens.

Columbia Basin Project, Washington.—The Committee is aware of the Odessa Ground Water Replacement Program within the Columbia Basin Project to deliver surface water to the Odessa Subarea. The Subarea groundwater is being withdrawn at a rate beyond the aquifer’s capacity to recharge, and aquifers in the Subarea are quickly declining. Groundwater is virtually depleted to such an extent that water must be pumped from wells as deep as 2,400 feet. Water pumped from such depths is hot and has dangerously high sodium concentrations. The Committee supports Reclamation’s partnership in the 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.

Columbia Basin Supervisory Control and Data Acquisition.—The Committee is aware that the Columbia Basin Project has been using the Supervisory Control and Data Acquisition (SCADA) information system architecture since 1987 to operate and monitor hundreds of remote field sites critical to the mission of the irrigation project. The project is dependent on this system to monitor the project’s reservoirs, canals, pumping plants, drains, and wasteways to manage water across 1,500 square miles of the project. The last significant modernization of the program took place in 2002 and the system is in need of additional upgrades to ensure the stability and durability of its operation during future irrigation systems. Reclamation is encouraged to include appropriate funding for this effort in future budget submissions.

Lower Colorado River Operations Program.—The Lower Colorado River Operations Program supports water efficiency activities and conservation efforts in partnership with non-federal water users, including Minute 323 implementation and monitoring. Reclamation is reminded that activities within this program are eligible to compete for additional funds provided under “Water Conservation and Delivery”.

Milk River Project, Montana.—The Committee recognizes the importance of stable water supply to regional economies and communities and notes that the current cost allocations for the St. Mary Unit, Milk River Project, operation, maintenance, and rehabilitation is 73.96 percent reimbursable and 26.04 percent non-reimbursable.

Mni Wiconi Project, South Dakota.—Reclamation is directed to continue working with the tribes and relevant federal agencies, such as the U.S. Department of Agriculture, the U.S. Environmental Protection Agency, the Bureau of Indian Affairs, the Indian

Health Service, and the Department of Housing and Urban Development, to coordinate use of all existing authorities and funding sources to finish needed community system upgrades and connections, as well as transfers of those systems, as quickly as possible. The Administration is encouraged to include appropriate funding for upgrades and transferred community systems in future budget requests.

Salton Sea Restoration.—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. Additionally, the Committee is concerned by the public health, environmental, agricultural, and natural resource impacts at the Salton Sea. The Committee encourages Reclamation to partner with federal, state, and local agencies and coordinate use of all existing authorities to support the State of California's Salton Sea Management Program. Reclamation is encouraged to provide appropriate funding for these efforts in future budget submissions.

Salton Sea Research Program.—Reclamation is encouraged to include appropriate funding in future budget submissions for activities and projects associated with habitat improvement, water quality, and system development and projects with a public health benefit that will benefit economically disadvantaged communities.

San Joaquin River Restoration Program.—Permanent appropriations, available for the program in fiscal year 2020, should not supplant continued annual appropriations, and the Committee encourages Reclamation to include adequate funding in future budget submissions.

San Justo Reservoir, California.—The Committee recognizes the benefits of the San Justo Reservoir Zebra Mussel Eradication Project, and Reclamation is reminded that this project is eligible to compete for the additional funding provided in Water Conservation and Delivery. The Committee also recognizes that previous work conducted by Reclamation has demonstrated the efficacy of using muriate of potash (MOP) in treating invasive mussels. The Committee encourages Reclamation to leverage existing knowledge on MOP treatments to address the zebra mussel infestation at the San Justo Reservoir.

Research and Development: Desalination and Water Purification Program.—Of the funding provided for this program, \$6,000,000 shall be for desalination projects as authorized in section 4009(a) of Public Law 114–322.

Research and Development: Airborne Snow Observatory Program.—The recommendation provides an additional \$2,000,000 for this program, which advances snow and water supply forecasting.

Upper Rio Grande Basin Study.—The Committee recognizes the ecological, economic, cultural, and historic importance of the Upper Rio Grande Basin and the increasing stress on its water supply. Accordingly, Reclamation is directed to enter into a contract with the National Academies of Sciences to conduct a comprehensive study of Rio Grande dams and reservoirs in the upper Rio Grande Basin (headwaters to Fort Quitman, Texas) on how to conserve water and optimize river management to benefit water users throughout the basin, promote the health of the river, and support

fish and wildlife. Reclamation is encouraged to leverage ongoing and completed activities in this area to benefit this effort.

Verde River Basin.—The Committee is aware of the appraisal study being conducted by Reclamation in partnership with the Salt River Project on water storage capacity at Horseshoe Reservoir. The Committee recognizes the importance of this study to the management and reliability of water provided to central Arizona and directs Reclamation to provide to the Committee not later than 60 days after enactment of this Act a briefing on the status of the study.

WaterSMART: Climate Resilience.—Within the Water and Energy Efficiency Grants program, Reclamation is encouraged to consider as priority factors decreasing water scarcity and increasing drought resilience while also improving instream flows, either by releasing conserved water or decreasing diversions, or otherwise restoring hydrologic function through nature-based solutions.

WaterSMART Program: Title XVI Water Reclamation & Reuse Program.—Of the funding provided for this program, \$10,000,000 shall be for water recycling and reuse projects as authorized in section 4009(c) of Public Law 114–322.

WaterSMART Program: Open Evapotranspiration System.—Reclamation is encouraged to utilize the OpenET 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: Non-contiguous States and Territories.—The Committee is concerned about the unique water challenges faced by the non-contiguous states and territories and notes that Congress recently made Alaska, Hawaii, and Puerto Rico, as well as the American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands eligible applicant locations for WaterSMART grants. Reclamation is encouraged to conduct outreach in all non-contiguous states and territories about this and other available funding opportunities to address and mitigate water challenges in these jurisdictions.

Yakima River Basin Water Enhancement Project Integrated Plan, Washington.—The Committee notes that the Yakima Basin Integrated Plan, developed to address water storage, water supply, and fishery and ecosystem restoration needs for agriculture, fish, and municipalities within the Yakima River Basin in Central Washington, was authorized by Public Law 116–9. The Committee is supportive of the Plan and reminds Reclamation that activities within this program are eligible to compete for additional funds provided in this account.

CENTRAL VALLEY PROJECT RESTORATION FUND

Appropriation, 2021	\$55,875,000
Budget estimate, 2022	56,499,000
Recommended, 2022	56,499,000
Comparison:	
Appropriation, 2021	+624,000
Budget estimate, 2022	---

This fund was established to carry out the provisions of the Central Valley Project Improvement Act and to provide funding for habitat restoration, improvement and acquisition, and other fish and wildlife restoration activities in the Central Valley area of California. Resources are derived from donations, revenues from voluntary water transfers and tiered water pricing, and Friant Division surcharges. The account is also financed through additional mitigation and restoration payments collected on an annual basis from project beneficiaries.

Within available funds, the Committee provides funding for programs and activities according to the budget request. The Committee notes that the amount for this account in the budget request and recommendation is based on a three-year rolling average of collections, in accordance with the authorizing statute.

Anadromous Fish Screen Program.—The Committee continues to be concerned with the disconnect between funding levels requested and ultimately allocated for the Anadromous Fish Screen Program. The Committee urges Reclamation to maintain its focus on screening the remaining high priority diversions from within funds made available under the Central Valley Project Restoration Fund.

CALIFORNIA BAY DELTA RESTORATION
(INCLUDING TRANSFERS OF FUNDS)

Appropriation, 2021	\$33,000,000
Budget estimate, 2022	33,000,000
Recommended, 2022	33,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

The California Bay-Delta Restoration account funds the federal share of water supply and reliability improvements, ecosystem improvements, and other activities being developed for the Sacramento-San Joaquin Delta and associated watersheds by a state and federal partnership (CALFED). Federal participation in this program was initially authorized in the California Bay-Delta Environmental and Water Security Act enacted in 1996.

The Committee notes that this important program was previously funded at \$35,000,000 and encourages the Administration to return to this level of funding in future budget requests.

POLICY AND ADMINISTRATION

Appropriation, 2021	\$60,000,000
Budget estimate, 2022	64,400,000
Recommended, 2022	64,400,000
Comparison:	
Appropriation, 2021	+4,400,000
Budget estimate, 2022	---

The Policy and Administration account provides for the executive direction and management of all Reclamation activities, as performed by the Commissioner's office in Washington, D.C.; the Technical Service Center in Denver, Colorado; and in six regional offices. The Denver 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.

ADMINISTRATIVE PROVISION

The bill includes an administrative provision allowing for the purchase of passenger motor vehicles.

GENERAL PROVISIONS—DEPARTMENT OF THE INTERIOR

The bill continues a provision regarding the circumstances in which the Bureau of Reclamation may reprogram funds.

The bill continues a provision regarding the San Luis Unit and Kesterson Reservoir in California.

The bill contains a provision regarding the Secure Water Act of 2009.

The bill contains a provision regarding the CALFED Bay-Delta Authorization Act.

The bill contains a provision regarding the Omnibus Public Land Management Act of 2009.

The bill contains a provision regarding the Reclamation States Emergency Drought Relief Act of 1991.

The bill contains a provision regarding the Reclamation Projects Authorization and Adjustment Act of 1992.

The bill contains a provision prohibiting the use of funds in this Act for certain activities.

TITLE III—DEPARTMENT OF ENERGY

INTRODUCTION

Funds recommended in Title III provide for all Department of Energy (Department) programs, including Energy Efficiency and Renewable Energy; Cybersecurity, Energy Security, and Emergency Response; Electricity; Nuclear Energy; Fossil Energy and Carbon Management; Naval Petroleum and Oil Shale Reserves; Strategic Petroleum Reserve; SPR Petroleum Account; Northeast Home Heating Oil Reserve; Energy Information Administration; Non-Defense Environmental Cleanup; Uranium Enrichment Decontamination and Decommissioning Fund; Science; Nuclear Waste Disposal; Technology Transitions; Clean Energy Demonstrations; Advanced Research Projects Agency—Energy; Title 17 Innovative Technology Loan Guarantee Program; Advanced Technology Vehicles Manufacturing Loan Program; Tribal Energy Loan Guarantee Program; Indian Energy Policy and Programs; Departmental Administration; Office of the Inspector General; National Nuclear Security Administration (Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors, and Federal Salaries and Expenses); Defense Environmental Cleanup; Defense Uranium Enrichment Decontamination and Decommissioning; Other Defense Activities; Power Marketing Administrations; and Federal Energy Regulatory Commission.

COMMITTEE RECOMMENDATION

The Department of Energy has requested a total budget of \$46,646,300,000 in fiscal year 2022 to fund programs in its four

primary mission areas: science, energy, environment, and national security. The recommendation provides \$45,126,500,000 for the Department of Energy, \$3,201,475,000 above fiscal year 2021 amounts.

The Committee's recommendations for Department of Energy programs in fiscal year 2022 are described in the following sections. A detailed funding table is included at the end of this title.

CONGRESSIONAL DIRECTION

Article 1, section 9 of the United States Constitution states, "No money shall be drawn from the Treasury but in consequence of Appropriations made by law."

The Committee continues to include the Department's reprogramming authority in statute to ensure that the Department carries out its programs consistent with congressional direction. This reprogramming authority is established at the program, project, or activity level, whichever is the most specific level of budget items identified in this Act and the Committee report accompanying this Act. The Committee also prohibits new starts through the use of reprogramming and includes other direction to improve public oversight of the Department's actions. In addition, the recommendation continues to include a general provision specifying which transfer authorities may be used for accounts funded by this Act.

The Committee counts on a timely and accessible executive branch in the course of fulfilling its constitutional role in the appropriations process. Requesting and receiving basic, factual information, including budget justification materials and responses to inquiries, is vital in order to ensure transparency and accountability. While some discussions internal to the executive branch may be pre-decisional in nature and therefore not subject to release, the Committee's access to the facts, figures, and statistics that inform the decisions of the executive branch are not subject to those same sensitivities. The Committee shall have ready and timely access to information from the Department, Federally Funded Research and Development Centers, and any recipient of funding from this Act. Further, the Committee appreciates the ability for open and direct communication with all recipients of funding from this Act, and the Department shall not interfere with such communication and shall not penalize recipients of funding from this Act for such communication.

REPROGRAMMING AND TRANSFER GUIDELINES

The Committee requires the Department to inform the Committee promptly when a change in program execution and funding is required during the fiscal year. The Department's reprogramming requirements are detailed in statute. To assist the Department in this effort, the following guidance is provided for programs and activities.

Definition.—A reprogramming includes the reallocation of funds from one activity to another within an appropriation. The recommendation includes a general provision providing internal reprogramming authority to the Department, as long as no program, project, or activity is increased or decreased by more than

\$5,000,000 or 10 percent, whichever is less, compared to the levels in the table detailing the Committee's recommendations for the Department's various accounts. For construction projects, a reprogramming constitutes the reallocation of funds from one construction project to another project or a change of \$2,000,000 or 10 percent, whichever is less, in the scope of an approved project.

Criteria for Reprogramming.—A reprogramming should be made only when an unforeseen situation arises, and then only if delay of the project or activity until the next fiscal year would result in a detrimental impact to an agency program or priority. A reprogramming may also be considered if the Department can show that significant cost savings can accrue by increasing funding for an activity. Mere convenience or preference shall not be a factor for consideration. A reprogramming may not be employed to initiate new programs or to change program, project, or activity allocations specifically denied, limited, or increased by the Congress in the Act or report.

Reporting and Approval Procedures.—In recognition of the security missions of the Department, the legislative guidelines allow the Secretary and the Administrator of the National Nuclear Security Administration jointly to waive the reprogramming restriction by certifying to the Committee that it is in the nation's security interest to do so. The Department shall not deviate from the levels for activities specified in the report that are below the level of the detail table, except through the regular notification procedures of the Committee. No funds may be added to programs for which funding has been denied. Any reallocation of new or prior-year budget authority or prior-year de-obligations or any request to implement a reorganization that includes moving previous appropriations between appropriations accounts must be submitted to the Committee in writing and shall not be implemented prior to approval by the Committee.

Transfers.—As in fiscal year 2021, funding actions into or out of accounts funded by this Act may only be made by transfer authorities provided by this or other appropriations Acts.

FINANCIAL REPORTING AND MANAGEMENT

The Department is still not in compliance with its statutory requirement to submit to Congress, at the time that the President's budget request is submitted, a future-years energy program that covers the fiscal year of the budget submission and the four succeeding years, as directed in the fiscal year 2012 Act. In addition, the Department has an outstanding requirement to submit a plan to become fully compliant with this requirement. The Department is directed to provide these requirements not later than 30 days after enactment of this Act. The Department may not obligate more than 75 percent of amounts provided to the Chief Financial Officer until the Department submits to the Committee a plan to become fully compliant with this requirement.

Working Capital Fund.—The Department has requested \$282,272,000 for the Working Capital Fund for fiscal year 2022. The Committee provides \$282,272,000 for this purpose and directs that if the Department transfers additional amounts to the Working Capital Fund, notification must be provided to the Committee

in advance of any such transfer. The notification shall identify the sources of funds by program, project, or activity. Further, the Department shall notify the Committee before adding or removing any activities from the fund.

Public Access Plan.—The Committee appreciates the Department issuing its Public Access Plan on July 24, 2014. The Committee urges the Department to continue efforts toward full implementation of the plan and expects an update on progress to be included in the fiscal year 2023 budget request.

Commonly Recycled Paper.—The Department shall not expend funds for projects that knowingly use as a feedstock commonly recycled paper that is segregated from municipal solid waste or collected as part of a collection system that commingles commonly recycled paper with other solid waste at any point from the time of collection through materials recovery.

Congressional Reporting Requirements.—The Committee remains concerned by the Department's often lengthy delays in meeting its Congressional reporting requirements. However, the Committee appreciates the Department's effort, led by the Office of the Chief Financial Officer, to establish a tracking mechanism for all Congressional reporting requirements. The Department is directed to provide monthly updates to the Committee on this issue. Further, the Department is directed to provide all Congressionally required reports digitally in addition to traditional correspondence.

SBIR and STTR Programs.—The Department is directed to use the definition of research and development as provided by the Small Business Innovation Development Act of 1982 and Small Business Administration's "SBIR and STTR Program Policy Directive" for the purposes of the Department's SBIR and STTR programs.

Mortgaging Future-Year Awards.—The Committee remains concerned about the Department's practice of making awards dependent on funding from future years' appropriations. The Department is directed to provide to the Committee not later than 30 days after enactment of this Act a briefing on how the Department can better track and provide information about the accounting of future-year awards by control point.

General Plant Projects.—In alignment with the requirements of section 3118(c) of the National Defense Authorization Act for FY2010, the Department is directed to notify the Committee at least 15 days prior to starting any General Plant Project unless the project is directed by this recommendation or explicitly included in the fiscal year 2022 budget request.

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.

WORKFORCE DEVELOPMENT AND DIVERSITY

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 a briefing on the status of this report not later than 15 days after enactment of this Act.

The Department is encouraged to allocate funding to 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, including training programs focused on building retrofit, the construction industry, and the electric vehicle industry. The Department is encouraged to continue to work with two-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.

The Committee supports improving the coordination of federal efforts involved in growing and sustaining a robust national security workforce. The Committee recognizes the Department's collaborations with the Department of Defense to address national security priorities including, but not limited to, climate change, electric infrastructure, nuclear energy, and space. 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 Department is directed to continue participation in the Interagency Working Group on the National Security Workforce to implement the "Revitalizing America's Foreign Policy and National Security Workforce, Institutions, and Partnerships" National Security Memorandum. Further, the Department is directed to participate in efforts led by the Department of Defense in developing a strategy to address national security education and workforce issues.

Workplace Diversity.—The Committee recognizes the importance of workplace diversity at the Department and its national laboratories. Increasing workplace diversity addresses inequity and inequality and drives performance excellence through improvements in creativity, productivity, and inclusivity. The Committee directs the Department to continue to develop and broaden partnerships with minority serving institutions, including Hispanic Serving Institutions, Historically Black Colleges and Universities, Asian and Pacific Islander Serving Institutions, Predominantly Black Institutions, Tribal Colleges and Universities, and other Minority Serving Institutions. The Committee understands that each national laboratory develops its own recruitment and retention strategies and provides those plans to the Department for review. The fiscal year

2020 Act directed the Department to comprehensively evaluate these plans and provide a report to the Committee detailing efforts to recruit and retain diverse talent from the institutions mentioned above. Further, the fiscal year 2020 Act directed the Department to provide to the Committee a report on its internal programs that support research and development opportunities for the institutions mentioned above. The Committee is still awaiting these reports and directs the Department to provide a briefing on the status these reports not later than 30 days after enactment of this Act. Additionally, the Department is directed to provide to the Committee not later than 120 days after enactment of this Act a report on the Department's plan to recruit and retain more African Americans, Hispanic/Latinx, Asian Americans, Native Americans/Alaskan Natives, Pacific Islander/Native Hawaiian, and people with disabilities across all job types, including research and technical positions. This report should also include current workforce numbers with disaggregated data for racial, ethnic, gender, and other underrepresented minorities at all national laboratories and across the Department. The Department is encouraged to consider direct programmatic funding to the national laboratories to support locally developed activities and programs that advance the Department's diversity, equity, and inclusion goals and objectives.

CROSSCUTTING INITIATIVES

Equity and Justice.—The Committee recognizes the importance of establishing a 21st-century clean energy system that will both combat climate change and institute principles of equity and justice in the U.S. energy system. The Committee supports the Department's reforms toward this goal. In order to improve these practices at the Department, the Committee directs the Department to survey its current programs, policies, procedures, and rules to ensure that it is adequately meeting the clean energy, energy conservation, and energy efficiency needs of low-income, minority, and other marginalized communities. Further, the Department is directed to consider social equity, workforce development standards, public health effects, and environmental and energy justice in conducting activities across the Department's programs and to prioritize projects and grantees that advance equity and justice and maximize public health benefits. The Department is directed to improve analytical tools and grantmaking criteria to evaluate the social equity, public health, and environmental and energy justice impacts of technologies and projects and to incorporate these criteria into agency activities. The Department is directed to increase engagement with communities impacted by climate change, air and water pollution, systemic racism and underinvestment, high energy costs, and economic inequality when carrying out this section, designing grant programs, and conducting activities across the Department's programs. The Department is directed to provide funding to state, local, and tribal government entities, community organizations, businesses, universities, and other entities to advance equity and environmental and energy justice while driving innovation and to integrate this funding across the energy programs. The Department is directed to provide to the Committee not later than

90 days after enactment of this Act a report summarizing its efforts and findings in carrying out the direction contained herein.

The Department is directed to contract with the National Academies of Sciences, Engineering, and Medicine to study the technical and non-technical barriers to and solutions for ensuring equitable distribution of the benefits associated with clean energy in environmental justice communities across all sectors of the economy, and in particular the role of the Department in assessing and mitigating such barriers. In this study, the term “environmental justice community” means a community with significant representation of communities of color, low-income communities, or tribal and indigenous communities, that experiences, or is at risk of experiencing, higher or more adverse human health or environmental effects. Environmental justice communities should be part of the development of the study. The study shall: (1) assess the state of research on the equitable distribution of the benefits of clean energy including workforce development, job creation, and public health benefits; (2) identify key indicators and standards to measure equitable and effective allocation of resources; (3) assess the progress in implementing programs and policies that result in increased adoption of clean energy technologies in environmental justice communities; (4) identify barriers as well as potential incentives and mechanisms to achieving the equitable distribution of the benefits associated with clean energy in environmental justice communities, including through the consideration of social, behavioral, regulatory, policy, market, and technology aspects, and considerations of the characteristics of individual communities, such as geographical location, average income, and racial-ethnic composition; (5) identify mechanisms for ensuring the effective participation of environmental justice communities in decision-making about the transition to a clean energy economy; and (6) recommend research areas for the Department to make progress toward ensuring equitable distribution of the benefits associated with clean energy in environmental justice communities.

The Committee supports the Department’s continuing efforts and progress in implementing the Justice40 Initiative, the energy justice initiative, and Executive Order 14008.

Energy Storage.—The Committee continues to support the Department’s Energy Storage Grand Challenge initiative to build on and coordinate the Department’s research, development, demonstration, and deployment efforts in energy storage to accelerate the development, commercialization, and utilization of next generation energy storage technologies. The Department is directed to carry out these activities in accordance with sections 3201 and 3202 of the Energy Act of 2020. The recommendation provides not less than \$484,000,000 for energy storage, including not less than \$350,000,000 from the Office of Energy Efficiency and Renewable Energy (EERE), not less than \$101,000,000 from the Office of Electricity (OE), not less than \$5,000,000 from the Office of Fossil Energy and Carbon Management (FECM), not less than \$4,000,000 from the Office of Nuclear Energy (NE), and not less than \$24,000,000 from the Office of Science.

The Department is directed to support long-duration joint demonstration projects with the Department of Defense and grants for

rural utilities to build microgrids for resiliency. The Department is directed to support competitive pilot demonstration grants, 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 support activities that would also help build a domestic energy storage supply chain that does not depend on foreign sources of critical minerals. The Department is directed to continue to support research and technology development efforts in long-duration energy storage in all its forms, including electrochemical, chemical, thermal, and mechanical, as a critical enabler of high volumes of renewables on the grid and as the key to the future of energy innovation in buildings, transportation, and the electric grid.

The Committee recognizes the emergence of several new energy storage technologies that can support energy independence in the United States. The Committee directs the Department to publish a report on emerging energy storage technologies. Further, the report shall include an analysis of which technologies show promise for further or future funding. The emergent energy storage technologies explored in this report shall include, but not be limited to, supercapacitors, flow batteries, low-carbon hydrogen storage, and compressed-air energy storage. The Department is directed to provide this report to the Committee not later than 270 days after enactment of this Act.

Critical Minerals.—The modern global economy has increasingly come to depend on access to a number of critical materials that were not widely used or considered essential to manufacturing just a few decades ago. Given that growing dependency, the Committee appreciates the Department's elevation and coordination of critical minerals activities across the Department through the Critical Minerals Initiative. The recommendation provides not less than \$152,000,000 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 \$100,000,000 from EERE, not less than \$35,000,000 from FECM, and not less than \$17,000,000 from the Office of Science. The Department is directed to carry out these activities pursuant to sections 7001 and 7002 of the Energy Act of 2020. These activities may be carried out by the Critical Materials Energy Innovation Hub.

The Committee supports the construction of a Critical Materials Supply Chain Research Facility, as authorized by section 7002(h) of the Energy Act of 2020. However, the Committee is concerned about the lack of approval of mission need and the unclear responsibilities among program offices for supporting construction of this facility. The Department is directed to provide to the Committee a report detailing the mission and cost of developing the Critical Materials Supply Chain Research Facility. The report shall include a breakdown of the roles and costs associated with each participating program office. The report shall be provided not later than 30 days after enactment of this Act and prior to the obligation of any funds for the design or construction of the facility.

The Committee is concerned about the security and economic implications of foreign ownership, in whole or in part, of mines and

other federal assets containing rare earth minerals. The Department, in coordination with relevant federal agencies, is directed provide to the Committee not later than 60 days after enactment of this Act a report regarding any financial or technical support provided by the Department to mines containing rare earth minerals in the United States, including but not limited to the Mountain Pass mine, and when such financial or technical support started if it exists; rationale for such financial or technical support; whether concerns exist over partial foreign ownership of rare earth mineral mines; and the benefits and costs of the rare earth mineral mines to U.S. economic and security interests, including the composition and relative importance of the mine's minerals.

Industrial Decarbonization.—Industrial processes currently contribute as much as 20 percent of the nation's carbon dioxide emissions. The Committee supports the Department's efforts, aligned with title VI of the Energy Act of 2020, to foster innovations and enable scale up of cost-competitive, low-emissions technologies. The Department is encouraged to supplement research, development, demonstration, and deployment activities with technical assistance and workforce development programs. The recommendation provides not less than \$520,000,000 for industrial decarbonization activities, including not less than \$250,000,000 from EERE, not less than \$250,000,000 from FECM, and not less than \$20,000,000 from the Office of Science.

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 is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on the revised GMI strategy, plans to reflect new decarbonization targets in strategy enhancements, funding profiles, portfolio of funding opportunities, programmatic investments for the Initiative, and the roles and responsibilities of each participating program office. The Committee directs the Department to continue emphasis on national energy systems resilience within the context of the Administration's goals for decarbonization of the power system and related infrastructures such as transportation. This should build on GMI and Grid Modernization Lab Consortium progress in advanced grid modeling and improved grid cyber resilience to address emerging national resilience challenges of the grid and related energy systems, planned investments in energy storage to improve grid flexibility and resilience, and advanced sensors and control paradigms that promise to improve energy system resilience of the grid of the future. 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.

Recognizing the importance of adaptation of the electric grid to reducing greenhouse gas emissions by accommodating consumer-

generated energy, variable generation sources such as wind and solar, and changing demand patterns, including from vehicle electrification, the Department is directed to prioritize implementation of grid modernization programs.

Integrated Energy Systems.—The Committee supports the integrated energy systems activities of EERE, FECM, and NE with the purposes of maximizing energy production and efficiency; developing energy systems involving the integration of nuclear energy with renewable energy, fossil energy, and energy storage; and expanding the use of emissions-reducing energy technologies into nonelectric sectors to achieve significant reductions in environmental emissions. The Department is directed to coordinate all integrated energy systems activities across FECM, NE, EERE, and any other relevant program office. The fiscal year 2021 Act directed the Department to submit a report that details a potential research agenda of integrated energy systems activities, including estimated funding levels for those activities and the roles and responsibilities of each participating program office. The Committee is still awaiting this report and directs the Department to provide the report not later than 30 days after enactment of this Act.

Carbon Dioxide Removal.—Carbon dioxide removal technologies, also referred to as negative emissions technologies, aim to remove and sequester excess carbon from the atmosphere, and these technologies have been identified as an important part of the portfolio of responses to climate change. The fiscal year 2020 Act directed the Department to develop an implementation plan coordinated across FECM, EERE, and the Office of Science. The Committee is still awaiting this plan and directs the Department to provide the plan not later than 15 days after enactment of this Act. The Department is directed to include a breakdown of the roles and responsibilities of each participating program office in the implementation plan.

The recommendation provides not less than \$106,000,000 for research, development, and demonstration of carbon dioxide removal technologies, including not less than \$20,000,000 from EERE, not less than \$51,000,000 from FECM, and not less than \$35,000,000 from the Office of Science. Within available funds for carbon dioxide removal, the recommendation provides not less than \$75,000,000 for direct air capture. The Department is directed, pursuant to section 5001 and 5002 of the Energy Act of 2020, to establish the Carbon Dioxide Removal Program and Carbon Dioxide Removal Task Force to advance the development and commercialization of carbon dioxide removal, direct air capture, sequestration, and any other relevant technologies on a significant scale. The Department is directed to coordinate these activities among FECM, EERE, and the Office of Science. The Committee supports direct air capture prize competitions and the direct air capture test center. The Department is directed to provide to the Committee not later than 30 days after enactment of this Act the report required by section 5002 of the Energy Act of 2020.

Energy-Water Nexus.—The Committee supports the Department's ongoing efforts, including through the Water Security Grand Challenge, on advancing transformational technology and innovation to meet the global need for safe, secure, and affordable water. The

Committee recognizes the impact of water security and availability on energy production and reliability and the growing interconnectivity between energy and water systems. The Department is directed to continue programs that provide technology innovation, modeling and assessment tools, technical support, informed policy, planning tools to inform financing, and workforce development to focus on the energy-water nexus. The Committee supports the Department's use of a diverse portfolio of prizes; competitions; research, development, and demonstration; and other programs. The recommendation provides not less than \$70,000,000 for Energy-Water Nexus activities.

The fiscal year 2021 Act directed the Department to submit a report that outlines the activities previously conducted under the Energy-Water Nexus across the Department, which activities have continued, which activities ended, and an explanation for the termination of each activity that ended. The Committee is still awaiting this report and directs the Department to provide the report to the Committee not later than 30 days after enactment of this Act. The Department is directed to coordinate all Energy-Water Nexus activities across EERE, OE, FECM, NE, Science, and any other relevant program offices.

Emissions Reductions.—Energy production is a principle contributor to U.S. greenhouse gas emissions. The Committee recognizes the urgent necessity of reducing greenhouse gas emissions to mitigate the impacts of global climate change, as well as the centrality of the power sector to that effort and opportunities for research and development of key technologies at the Department. The Department is encouraged to integrate considerations of climate impacts centrally into all aspects of energy planning and funding. The Department is directed to provide to the Committee not later than 180 days after enactment of this Act a report outlining the Department's plans to reduce greenhouse gas emissions in line with the United States' Nationally Determined Contribution under the U.N. Framework Convention on Climate Change.

Hydrogen Energy and Fuel Cell Coordination.—The Department is directed to coordinate its efforts in hydrogen energy and fuel cell technologies across EERE, FECM, NE, OE, the Office of Science, and any other relevant program offices to maximize the effectiveness of investments in hydrogen-related activities.

Harmful Algal Blooms.—When Congress passed the Harmful Algal Bloom and Hypoxia Research and Control Act (HABHRCA), it created a task force intended to coordinate the federal response to harmful algal bloom activities. The Department is not currently listed as a partner in the task force activities, but the Department conducts and possesses key research, management, and supercomputing capabilities that may be of assistance in the fight against harmful algal blooms. The Department is directed to provide to the Committee not later than 120 days after enactment of this Act a report identifying its relevant capabilities and how it is using those capabilities to support key questions posed in managing, controlling, and diagnosing the public response to harmful algal blooms. Further, the Department is encouraged to engage with partner agencies, such as the National Oceanic and Atmospheric Adminis-

tration, to determine how its capabilities could play a supporting role with the HABHRCA task force.

DOE and USDA Interagency Working Group.—The Committee supports the establishment of the interagency working group to promote energy and develop technologies that will support and advance agricultural communities and domestic manufacturing, as required by the Agriculture Improvement Act of 2018. Both agencies have a unique role in assisting the country integrate alternative fuel and energy efficiency savings throughout our economy. The Committee directs the working group to pursue joint activities related to the research and development of climate-controlled, affordable, deployable, energy- and water-efficient technologies for four-season food production platforms that can serve undernourished regions of the country. Additionally, the Committee directs the working group to pursue joint activities related to the energy efficiency of other agricultural platforms; water and wastewater treatment; and greenhouse facilities. The Committee encourages collaboration between USDA's Office of Urban Agriculture and Innovative Production, the Agricultural Research Service, and the National Institute of Food and Agriculture, and the various Department's offices, including, but not limited to, the Advanced Manufacturing Office, Solar Energy Technology Office, Biofuels Technologies Office, Fossil Energy and Carbon Management, Advanced Research Projects Agency—Energy, and Office of Science. The Department is directed to provide to the Committee regular updates on the goals, benchmarks, and progress in implementation of the working group and collaborations. Further, the Department is directed to provide to the Committee not later than 30 days after enactment of this Act a briefing explaining the Department's research agenda relating to promoting energy efficiency for industrial processes, lighting systems, the utilization of advanced soil science, reuse of plant residue materials, materials science, capture of carbon dioxide, and energy efficiency at agricultural production platforms.

The Commonwealth of Puerto Rico and the U.S. Virgin Islands.—The Department is directed to offer technical and other programmatic assistance to the Commonwealth of Puerto Rico for the assessment and implementation of innovative technologies with the capability of combining different infrastructure systems in an integrated manner to effectively mitigate power plant emissions, efficiently treat and reuse wastewater, produce biofuels, and generate power from solid waste. In addition, the Department is directed to offer technical and other programmatic assistance to the Commonwealth of Puerto Rico and the U.S. Virgin Islands in assessing the effectiveness of renewable energy technologies, such as solar and wind, for the territories; power grid feasibility, including repairs, improvements, and modernization; mitigation of storm damages through resilient electric power grids; and microgrid innovation. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on the status of, and future plans for, these efforts.

Civilian Climate Corps.—The Department is directed to coordinate with the Department of the Interior and Department of Agriculture on implementation of a Civilian Climate Corps. The Department has capabilities that could contribute to the new Civilian

Climate Corps in assisting communities in need and communities interested in transitioning to the green energy economy. The Department is directed to provide to the Committee not later than 30 days after enactment of this Act a briefing on its coordination with the Department of the Interior and Department of Agriculture to ensure the Department's capabilities, technology development, and technical assistance can be utilized by the Civilian Climate Corps. The Department is directed to identify what steps it can take to ensure that its deployment programs inspire a new generation of conservationists and adoption of clean energy technologies.

Landfill Emissions.—The Department, through EERE and FECM and in coordination with the U.S. Environmental Protection Agency, is directed to provide to the Committee not later than 120 days after enactment of this Act a report describing the opportunities and challenges for technologies that capture greenhouse gases, including methane, from municipal landfills. The report should consider synergies between these technologies and technologies used for carbon capture, utilization, and storage, and the report should include a recommendation for better utilizing and preventing greenhouse gas emissions from landfills.

Variable Buoyancy Aircraft.—The Committee notes that variable buoyancy aircraft may allow for direct factory-to-site transportation of energy products, such as transformers, grid modules, transmission towers, wind turbine blades, and generators. The Department in coordination with relevant federal agencies, is directed to provide to the Committee not later than 180 days after enactment of this Act a report on the feasibility of developing operation concepts and application system configurations of variable buoyancy cargo transportation aircraft with internal-ballast systems. The report should include the benefits, challenges, costs, and proper responsibilities of particular federal agencies and the private sector in developing the operation concepts and application system configurations.

Digital Energy Innovation with Decentralized Technologies.—A growing body of research and real-world examples indicate that public, open-source decentralized technologies, including blockchain technology, may help address existing challenges around access to and usefulness of data generated from energy devices in order to promote numerous innovative digital energy solutions. The Committee notes the promise of these technologies for unlocking the economic potential of energy infrastructure investments happening nationwide in renewable energy, electric vehicles, and distributed energy resources like batteries to ensure these devices can participate seamlessly and reliably across different markets and scenarios. Therefore, the Committee encourages the continued research and investment efforts related to decentralized technologies and their application within the energy sector. The Department is directed to provide to the Committee not later than 270 days after the date of enactment of this Act a report on the Department's research activities related to public, open-source decentralized technologies, including blockchain technology. The report should include, but is not limited to, a discussion of all current research related to decentralized technologies, like blockchain; an outline of research that could be done to better understand and utilize decen-

tralized technologies; recommendations for how to encourage adoption and integration of decentralized technologies within the energy sector; and any other relevant observations or recommendations within the field of decentralized technologies and energy.

COVID-19 Research Delays.—The Committee recognizes the potential impacts and delays in research caused by the effects of the COVID-19 pandemic. The Committee notes that the Department has taken some steps to engage scientific professional societies, universities and colleges, and other federal agencies to obtain up-to-date information on the impacts to institutions and research communities to help inform an open, transparent, and equitable response. However, the Committee is concerned that this response has been uneven across the Department. The Department is encouraged to consider these impacts within the resources available. The Department is directed to provide to the Committee not later than 60 days after enactment of this Act a report that details the impacts of the COVID-19 pandemic on institutions and research communities. The report shall outline funding and costs associated with the impacts. Further, the Department is encouraged to include funding to address the impacts in future budget requests.

ENERGY PROGRAMS

ENERGY EFFICIENCY AND RENEWABLE ENERGY

Appropriation, 2021	\$2,861,760,000
Budget estimate, 2022	4,732,000,000
Recommended, 2022	3,768,000,000
Comparison:	
Appropriation, 2021	+906,240,000
Budget estimate, 2022	-964,000,000

The Office of Energy Efficiency and Renewable Energy (EERE) accelerates the research, development, demonstration, and deployment activities that advance energy efficiency and renewable energy technologies, as well as federal energy assistance programs. Since the early 1970s and in partnership with business, industry, universities, research labs, and stakeholders, EERE has spurred innovation of affordable, renewable energy and energy efficiency technologies critical to combating climate change. EERE remains at the forefront of clean energy innovation, implementing a range of strategies aimed at creating good paying jobs, ensuring the clean energy economy benefits all Americans, saving American families and businesses money, and reducing pollution.

The EERE program is divided into three portfolios: sustainable transportation, renewable energy, and energy efficiency. The sustainable transportation portfolio, which consists of the vehicles, bio-energy, and hydrogen and fuel cell programs, focuses on efforts to decarbonize transportation across all modes to enable greater vehicle electrification, commercially viable hydrogen fuel cell trucks, sustainable aviation fuel from biomass, and lower-pollution options for off-road vehicles, rail, and maritime transport. The renewable energy portfolio, which consists of the solar, wind, water, and geothermal programs, supports efforts to reduce the costs and accelerate the use and integration of renewables to contribute to a reliable, secure, and resilient electric grid. The energy efficiency port-

folio, which consists of the advanced manufacturing, buildings, and federal energy assistance programs, develops cost-effective solutions to reduce energy consumption in plants, buildings, and homes.

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

In carrying out deployment activities for energy efficiency improvements, energy demand savings, use of renewable energy, and other innovative energy technologies to reach climate mitigation goals, the Department is encouraged to prioritize projects at the local and regional level that use a cooperative model of development, such as Energy Improvement Districts, to encourage coordination between public authorities, energy providers, property owners, and citizens.

Benefits of Renewable and Clean Energy Technologies.—The Committee recognizes the significant impacts of the nation's energy infrastructure on social, health, economic, and ecological outcomes, and that successful decarbonization efforts must consider these impacts in a holistic manner. Therefore, the Department is encouraged to expand its efforts to study the varied benefits of distributed, renewable, and clean energy technologies, including their potential to 1) address racial and economic inequality; 2) promote community health and well-being; 3) strengthen the climate and disaster resilience and cybersecurity of the nation's energy infrastructure; and 4) increase democratic participation in the energy sector. Further, the Department is encouraged to examine how increased public and nonprofit ownership of distributed, renewable, or clean energy infrastructure, including federal, regional, municipal, and cooperative ownership of generation, distribution, and transmission, can employ accountability mechanisms to maximize the achievement of the described benefits, while also increasing planning capacity to accelerate the transition to a net-zero emissions economy. Finally, to conduct interdisciplinary research on these questions, the Department is encouraged to collaborate with other federal agencies, such as the Department of Health and Human Services, Department of Labor, Department of Commerce, Environmental Protection Agency, Department of the Interior, and Department of Homeland Security, including the Cybersecurity and Infrastructure Security Agency.

Blockchain for Energy Procurement and Traceability.—Public, open-source decentralized technologies like blockchain are being used in various markets worldwide to develop new digital platforms for renewable energy procurement and help the companies, cities, and other renewable energy buyers meet their voluntary procurement goals. These digital solutions built with decentralized technologies may help simplify, reduce costs, and enhance the traceability of renewable energy trading and reporting among market participants. These solutions may also help expand access to more market participants. The Department is directed to coordinate research about the opportunity and needs for new digital solutions built with public, open-source decentralized technologies to promote renewable energy procurement, market access, and market growth.

Development of Open-Source Technology Services for Clean Energy Products and Services.—The Committee notes the growing global competition for clean energy goods and services as well as the need to support energy sector digitalization. There is an opportunity to position American goods and services ahead of global competition by developing and implementing open-source technology standards for renewable energy, storage, energy efficiency, electric vehicle, and other clean energy technologies so that these goods and related services deliver their full economic potential. The Department is encouraged to coordinate research evaluating and testing open-source technological standards for clean energy products and services, particularly in terms of use of digital identities and decentralized identity registries for such goods, that promote greater interoperability and market access across energy markets and, ultimately, help position the United States as a clean energy solutions leader.

Zero Emissions Energy Credit.—The Committee notes that in the fiscal year 2018, 2019, and 2020 Acts the Department was directed to produce a report to evaluate the effects of a Zero Emissions Energy Credit. The Department is directed to provide this report not later than 15 days after enactment of this Act.

Energy Transitions Initiative.—The recommendation provides not less than \$10,000,000 for the Energy Transitions Initiative (ETI) to address high energy costs, reliability, and inadequate infrastructure challenges faced by islands and remote communities. This program, which aims to advance self-reliant island and remote communities through the development of resilient energy systems, is enormously beneficial to its recipients that face unique energy challenges due to their remote location, fossil fuel dependency, and limited access to affordable infrastructure improvements. The program also has a disproportionately positive effect on indigenous groups within these locations who are subject to increased difficulty in obtaining and maintaining clean and resilient infrastructure. To facilitate expansion and improvement of this initiative, the Department is directed to provide to the Committee not later than 180 days after enactment of this Act a report detailing: (1) projects undertaken to date; (2) the costs and scope of each approved project; (3) description of the evaluation criteria used to select the grant recipients; (4) description of how the Department accounts for a location's fossil fuel dependence in the selection process; (5) how the Department defines remoteness and to what degree it factors into the selection process; (6) the effects of the initiative on indigenous communities, including Alaska Natives, Native Hawaiians, and American Indians; and (7) how the initiative incorporates culturally respectful decision-making processes and addresses unique cultural needs for areas with high populations of indigenous peoples.

SUSTAINABLE TRANSPORTATION

The Committee directs the Vehicle Technologies, Bioenergy Technologies, and Hydrogen and Fuel Cell Technologies offices to work closely with the Department of Agriculture and the private sector to develop common metrics to evaluate and compare the impact of

the emerging green hydrogen industry on the ethanol and biodiesel industries.

Within available funds, the recommendation provides not less than \$30,000,000 to continue the SuperTruck III vehicle demonstration program and further address the energy efficiency, carbon dioxide emissions reduction potential, and freight efficiency of heavy and medium duty long- and regional-haul vehicles.

The Committee notes that liquified petroleum gases (LPG), including propane gas, are increasingly being generated from renewable sources. The Committee encourages the Department to support demonstration projects to show the increased viability of renewable LPG.

Vehicle Technologies.—Within available funds, the Committee provides not less than \$200,000,000 for Battery and Electrification Technologies, including not less than \$40,000,000 for Electric Drive Research and not less than \$20,000,000 for the ReCell initiative to improve strategies to recycle and repurpose batteries, including for use on the electrical grid. The Committee also supports efforts to improve cost, performance, and charging time of plug-in electric vehicles, as well as further research into reducing the size of vehicle batteries and reducing cobalt content. The recommendation provides not less than \$25,000,000 for the Vehicle Technologies Office to expand its partnership with the Advanced Manufacturing Office on efforts to scale up the domestic battery supply chain, including battery manufacturing demonstration projects.

The recommendation provides \$10,000,000 for research and development of new engine architectures that integrate low-carbon fuels like ethanol and biodiesel, including the performance of these engines on higher blends of renewable fuels.

The recommendation provides up to \$25,000,000 to advance zero-emission technologies for off-road applications and improving the energy efficiency of commercial off-road vehicles, including fluid power systems.

The Committee recognizes novel engine designs can achieve significant efficiency improvements. The recommendation provides up to \$10,000,000 to support research and development for two-stroke opposed piston engines.

The Committee recommends not less than \$100,000,000 for Technology Integration, previously called Outreach, Deployment, and Analysis.

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 not less than \$60,000,000 for deployment through the Clean Cities program, including not less than \$40,000,000 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 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 not less than \$50,000,000 for Energy Efficient Mobility Systems.

The recommendation provides not less than \$5,000,000 for electric vehicle workforce development activities. Integrating electric vehicles into the nation's public and private fleets requires specialized expertise and knowledge, and the Department has a leadership role to play in helping institutions confront these challenges as the electric vehicle and autonomous markets shift the landscape. Considering the complicated challenges for fleet managers and manufacturers in designing and building vehicles capable of being operated in a cost effective and safe manner, the Department is directed to provide to the Committee not later than 180 days after enactment of this Act a report that describes how the Vehicle Technologies Office, in coordination with the Advanced Manufacturing Office, is meeting these challenges. Further, the Department is directed to coordinate with the Department of Transportation to develop a roadmap for electric vehicle transition and workforce training. The Department is directed to coordinate with the Clean Cities Program and the Department of Transportation to ensure all activities are aligned to meet the goals of widespread adoption of electric vehicles.

The Department is directed to coordinate with and assist the Environmental Protection Agency with the Clean School Bus Grant Program.

The Committee directs the Department to carry out a nationwide assessment of the state of, challenges to, and opportunities for deployment of electric vehicle charging infrastructure in underserved or disadvantaged communities. The Committee encourages the Department to look at urban, rural, and suburban areas. The Committee encourages the Department to create a publicly accessible and routinely updated registry, at the most granular level practicable, of existing and planned publicly accessible electric vehicle charging stations throughout the United States. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on the methodology that will be used to obtain information provided in the assessment. Further, the Department is directed to provide the assessment to the Committee not later than 180 days after enactment of this Act and release the assessment on a publicly accessible website as soon as practicable.

The Committee directs the Department to increase deployment and accessibility of electric vehicle charging infrastructure in un-

derserved or disadvantaged communities through grants, technical assistance, and community engagement. The Committee encourages the Department to focus on electric vehicle charging infrastructure that is publicly accessible or available to residents of multi-unit dwellings, including public and affordable housing, who would otherwise lack convenient access to such infrastructure. The Committee encourages the Department to partner with local government entities and community organizations to increase awareness of the program benefits and ensure that the needs and concerns of local communities are specifically addressed.

Propane-fueled vehicles may have a lower emissions profile than traditional gasoline powered vehicles, and the Department is encouraged to support additional research to advance this technology to a commercial scale.

The Department is encouraged to address technical barriers to the increased use of natural gas vehicles, including medium and heavy duty on-road vehicles, off-road vehicles, maritime, and rail.

The Department is encouraged to consider the impacts of supporting activities in any state or locality that has enacted and is enforcing any law or order prohibiting the construction of any type of fueling or charging station for transportation vehicles.

Bioenergy Technologies.—The recommendation provides \$50,000,000 for Feedstock Technologies and the Biomass Feedstock National User Facility and \$40,000,000 for advanced algal systems.

The recommendation provides \$3,000,000 for research, at commercially relevant processing scales, into affordable wood chip fractionation technologies and other processing improvements relevant to biorefineries in order to enable economic production of cellulose nanomaterials and economic upgrading of hemicelluloses and lignin.

The recommendation provides not less than \$20,000,000 for the Agile BioFoundry to continue developing methods and technologies to advance biological engineering, to support expanded focus on artificial intelligence and machine learning and software development, to improve the predictive design of organisms and pathways, to build tools accessible to the wider scientific community, and for the purchase of state-of-technology instrumentation that will enable better and more expansive collaborations. A portion of the funding should be used to support Directed Funding Opportunities to meet the demand for collaboration by industry partners.

The Committee supports the Department's research to integrate the use of captured carbon as feedstock in high pH algal cultivation to maximize the production of biofuels and bioproducts and research to develop advanced sorbent materials to optimize direct air carbon capture.

The Committee recognizes the vital importance of forests and grasslands as natural carbon storage. These ecosystems provide a critical regulating function in offsetting the nation's annual greenhouse gas emissions. The Department is directed to consider mechanisms that will incorporate the preservation and expansion of forests and grasslands and metrics for natural climate solutions. The Department shall define metrics to report the benefits of these actions on carbon and weather growing alignment with other agencies that have responsibility.

Hydrogen and Fuel Cell Technologies.—The recommendation provides not less than \$100,000,000 for continuation of the H2@Scale Initiative to facilitate wide-scale hydrogen production and utilization in the United States, to enable resiliency of power generation and transmission, as well as the advancement of a wide range of industrial processes for the production of fuels, chemicals, and other materials.

The recommendation provides not less than \$114,000,000 for technologies to advance hydrogen use for heavy-duty transportation and industrial applications and not less than \$70,000,000 for activities relevant to hydrogen as a fuel for sustainable aviation.

The recommendation provides not less than \$30,000,000 for Fuel Cell Technologies, with a focus on reducing fuel cell system cost and improving overall system efficiency and durability. Component development and testing should include stack materials, material processing, efficient and cost-effective air compression, operation at low humidification levels and materials that are robust to poor air quality.

The Committee recognizes the potential for perovskites as catalysts and catalyst supports for hydrogen extraction from hydrogen-rich feedstocks and carriers. The recommendation provides \$2,500,000 for research that tightly couples advanced modeling, characterization, and controlled synthesis to elucidate the key mechanisms in this technology. This research should include participation by a university with demonstrated expertise with perovskite materials.

The recommendation provides not less than \$15,000,000 to cost share the Office of Nuclear Energy hydrogen demonstration project, including for high temperature electrolysis research and development at a national laboratory.

The recommendation provides not less than \$14,000,000 to support ongoing efforts for high- and low-temperature electrolyzer development. The Department is encouraged to pursue research on large-scale low carbon intensity hydrogen production, including high-temperature electrolysis, to enable decarbonization of the industrial sector. The Department is directed to consider the transactive interactions of the electrolyzer operation with the grid as well as the development of transportation fuels and high value chemical products from hydrogen produced at a nuclear power plant.

Within available funds, the recommendation provides not less than \$10,000,000 for solar fuels research and development to identify and develop entirely solar driven processes for hydrogen production, including activities on adsorbents for sequestering carbon dioxide and catalysts needed to activate carbon dioxide and hydrogen. To test these processes at scale, funds may be used to assist partners in designing, building, and operating a continuous laboratory scale pilot plant that integrates such systems. The Department is encouraged to leverage research and technology advances from the Fuels from Sunlight Energy Innovation Hub program.

Within available funds, the recommendation provides not less than \$60,000,000 for System Development and Integration, including not less than \$10,000,000 for Safety, Codes, and Standards.

The Department is encouraged to pursue research and partnerships with non-federal entities on large-scale low carbon intensity hydrogen energy production, including next generation liquefaction plants, large-scale hydrogen energy storage, and development of systems and equipment for the production and delivery of small-scale and large-scale hydrogen energy. Further, the Department is encouraged to continue to research ways to reduce the cost of hydrogen fuel production, storage, and distribution. The Department is encouraged to continue to research novel onboard hydrogen tank systems, as well as trailer delivery systems to reduce cost of delivered hydrogen and to work with the Department of Transportation on coordinating efforts to deploy hydrogen fueling infrastructure.

The Department is directed to provide to the Committee not later than 120 days after enactment of this Act a briefing on its efforts to work cooperatively with industry, university, and laboratory partners and efforts to develop strategies and technologies to support continued evolution and success of low-carbon intensity hydrogen production. The briefing shall include an outline of a technical and policy roadmap to demonstrate how existing infrastructure can be utilized in a transition to low-carbon intensity hydrogen production.

RENEWABLE ENERGY

Solar Energy.—The recommendation provides not less than \$60,000,000 for Systems Integration, including for demonstration of operation of the grid with very high levels of solar penetration.

The recommendation provides not less than \$75,000,000 for Photovoltaic Technologies.

The Committee notes that the Department recently announced a comprehensive and systematic approach to support Cadmium Telluride (CdTe) Photovoltaics (PV). This work will advance low-cost manufacturing techniques and domestic research capabilities in this important domestic sector. The Committee notes that the United States is the leader in CdTe PV manufacturing, contributing to high value job production in the Midwest and elsewhere. The recommendation provides not less than \$30,000,000 for additional investments in CdTe to implement goals of a technology roadmap developed by the consortium for research leading to reducing CdTe module manufacturing costs, addressing supply chain challenges, achieving greater cell and module efficiency, cutting CdTe solar costs while extending solar panel life, and increasing the global market share of domestically-produced PV. The Committee further notes that this program is intended to ensure manufacturing, development, and supply chain jobs for CdTe technology.

The recommendation provides not less than \$30,000,000 for research, development, demonstration, and commercialization activities focused on perovskites, including inherently scalable production methods, such as solution processing, roll-to-roll manufacturing, or inline rigid substrate/superstrate processing, the science of inherent material stability, and ultra-high efficiency through tandem or hybrid tandem cell or module architectures.

The recommendation provides not less than \$20,000,000 to continue and expand work to lower barriers to solar adoption for low-income households, renters, multifamily homes, and minority com-

munities, and the Department is directed to prioritize these activities throughout the programs of the Solar Energy Technologies Office. This includes exploring and providing resources on financing and business models that are well-suited to these households and communities.

The recommendation provides not less than \$50,000,000 for Balance of System Soft Costs efforts focused on reducing the time and costs for planning, siting, permitting, inspecting, and interconnecting distributed and large-scale solar or storage projects through standardized requirements, online application systems, and technical assistance.

The recommendation provides not less than \$60,000,000 for Concentrating Solar Power Technologies. Within available funds for Concentrating Solar Power Technologies, the recommendation provides up to \$50,000,000 to advance technologies for long-duration storage and process heat for industrial applications.

The recommendation provides up to \$20,000,000 for research, development, demonstration, and commercialization projects to create innovative and practical approaches to increase the reuse and recycling of solar energy technologies.

Within available funds, the recommendation provides \$15,000,000 for technology development, testing and verification of technologies that help solar energy projects avoid, minimize, and mitigate impacts on wildlife and ecosystems, including through improved scientific research into avian-solar interactions. The Department is directed to continue research and activities to promote the development and deployment of bird-friendly renewable energy development that applies technologies and procedures to mitigate bird collisions.

The Solar Energy Technologies Office is directed to collaborate with the Office of Indian Energy Policy and Programs to advance demonstration, field testing, financing, and deployment of distributed solar and energy storage technologies for households and communities in Tribal nations that lack connection to the electric grid.

The Department is encouraged to cooperate with industry and academia in its research and development efforts. The Department is encouraged to research ways to accelerate zoning for solar projects while balancing local government interests and access for project developers. The Committee encourages research and development efforts to target grid storage improvements, demand-response and load-shaping technologies, and modeling and planning tools for distributed energy resources.

Wind Energy.—The recommendation provides not less than \$12,000,000 for distributed wind technologies. The Department is encouraged to continue investment in research, competitiveness improvement, soft costs, workforce development, and deployment. Further, the Department is encouraged to distribute funding to expand geographic distribution of benefits for rural communities, farmers, businesses, and U.S. workers, with an emphasis on displaced fossil fuel workers.

The recommendation provides not less than \$60,000,000 for offshore wind, including to support competitive solicitation of offshore wind demonstration projects. The Department is directed to support innovative offshore wind demonstration projects to optimize

their development, design, construction methods, testing plans, and economic value proposition.

The recommendation provides \$6,000,000 for Centers of Excellence focused on the offshore wind energy engineering, infrastructure, supply chain, transmission, and other pertinent issues required to support offshore wind in the United States. The university-based Centers will develop regional and national strategies to support research, curriculum development, and fellowships aimed at increasing U.S. university offshore wind workforce development capacity in order to accelerate and maximize the effectiveness, reliability, and sustainability of U.S. offshore wind deployment and operation with partners from institutions of higher education, research institutions, national laboratories, the private sector, and state and local-level public sector representatives relevant to emerging commercial scale offshore wind deployments.

The recommendation provides \$4,000,000 for work on advanced manufacturing of large offshore wind blades and components and \$1,000,000 for the Wind for Schools program.

The recommendation provides \$5,000,000 for the Wind Energy Technologies Office and the Water Power Technologies Office 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 marine energy and floating offshore wind technologies to support sustainable, scalable aquaculture production.

The recommendation provides up to \$30,000,000 for demonstration activities of onsite manufacturing of turbine system components to enable turbine construction with blade length greater than 75 meters.

The Committee is aware of and supports the ongoing work of the Wind Turbine Radar Interference Mitigation working group managed by the Wind Energy Technologies Office. The Department is directed to provide to Committee not later than 180 days after enactment of this Act a report on the efforts of the working group. The report should include the status of testing, certification and deployment of mitigation options by radar type and department or agency; remaining steps and timelines before mitigation options currently being developed or tested could be available for deployment; identification of resource gaps to achieve deployment of mitigation options currently being tested; identification of mitigation options that are not currently being considered due to resource constraints but may be promising with additional resources and prioritization; and mitigation options that have been dismissed along with an explanation of why the option is not considered viable.

Water Power.—The recommendation provides not less than \$69,000,000 for Hydropower Technologies and up to \$137,000,000 for Marine Energy. The Department is encouraged to consider the use of existing authorities to waive cost share for water power technology research, development, demonstration, and deployment activities as appropriate.

The recommendation provides \$5,000,000 to continue industry-led research, development, demonstration, and deployment efforts of innovative technologies for fish passage and invasive fish species

removal at hydropower facilities, as well as analysis of hydrologic climate science and water basin data to understand the impact of climate change on hydropower.

The recommendation provides up to \$10,000,000 for small hydropower innovation, testing, and initiatives, including industry-led competitive solicitations for advanced turbine demonstrations, improved environmental performance and sustainability, operational efficiency, and standardized or modular project deployment applications.

The Committee remains supportive of the Department's ongoing scoping activities toward establishing a network of hydropower testing facilities. The recommendation provides up to \$5,000,000 for design and engineering based on the outcome of the scoping analysis. Further, the Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on its strategy for establishing these facilities.

The recommendation provides \$10,000,000 for the purposes of sections 242 and 243 of the Energy Policy Act of 2005.

The recommendation provides not less than \$24,000,000 for the Powering the Blue Economy initiative. The Committee supports the Department's growing investment and focus on its Powering the Blue Economy, including cross-cutting initiatives within the Department and with other federal partners that integrate marine energy harvesting, energy storage, and continuous, wide area environmental monitoring. The Department is directed to continue leveraging existing core capabilities within its national laboratories to execute this work, in partnership with universities and industry.

Within available funds, the recommendation provides up to \$20,000,000 to address infrastructure needs at marine energy technology testing sites, including general plant projects, and support for planning activities for the staged development of an ocean current test facility. The Committee recognizes the challenges of decarbonizing remote communities and the maritime sector. The Department 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.

The recommendation provides 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 recommendation provides up to \$24,000,000 for foundational research activities led by universities and other research institutions affiliated with the National Marine Energy Centers.

The recommendation provides up to \$10,000,000 to continue development and construction of an open water, fully energetic, grid connected wave energy test facility. The recommendation provides up to \$5,000,000 for the Department to continue its support of operations at the Atlantic Marine Energy Center to accelerate the transition of wave and tidal energy technologies to market. The recommendation provides up to \$8,000,000 for continuation of the

Testing Expertise and Access for Marine Energy Research initiative.

The recommendation 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 hydro projects.

The Department is encouraged to continue efforts for increased grid reliability, integration of other energy resources, and energy-water systems resilience, such as hybridized hydropower and battery storage applications, microgrids, and machine learning.

The Committee supports the efforts of the Department to promote irrigation modernization as an opportunity for promoting thriving agriculture, decarbonization, sustainable water management, and rural community wellbeing. The Department is directed to build on the pre-engineering design tool for irrigation modernization and conduct demonstration and deployment activities.

The Committee recommends the Department continue 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 emergence of Ocean Thermal Energy Conversion (OTEC) and Sea Water Air Conditioning (SWAC) systems in the United States and the potential to produce sustainable electricity, reduce carbon dioxide emissions, and diversify fuel options while creating job opportunities. The Committee also recognizes the Department of Defense's investment in SWAC and OTEC technologies for Guam and other military bases in the Indo-Pacific region. The Department is directed to provide to the Committee not later than 180 days after enactment of this Act a report on the feasibility of incorporating engineering within SWAC and OTEC that would enhance open-ocean aquaculture and serve to stimulate biological productivity in nutrient-poor off-shore waters as a means of accelerating capture and sequestration of atmospheric carbon dioxide as well as stimulating offshore fisheries. This report shall include completed, ongoing, and planned OTEC and SWAC projects in non-contiguous states and U.S. territories. The report shall also include recommendations to address barriers to expanding OTEC and SWAC technologies.

Geothermal Technologies.—The Department is directed to focus on all stages of research and development, market transformation activities to advance geothermal strategies, and implementation of the recommendations outlined in the GeoVision study.

The recommendation provides up to \$75,000,000 for enhanced geothermal system demonstrations and next-generation geothermal demonstration projects in diverse geographic areas. The Department is encouraged to consider at least one demonstration projects in an area with no obvious surface expression or to develop deep, direct use geothermal technologies to distribute geothermal heat through an integrated energy system or district heating system. Further, the Department is encouraged to consider at least one such super-hot rock demonstration that showcases innovative drilling methods, such as energy drilling, to depths of 10 kilometers or more.

The recommendation provides not less than \$20,000,000 for research, development, and demonstration efforts in super-hot rock geothermal technology.

The recommendation provides not less than \$20,000,000 for Low Temperature and Coproduced Resources, including research, development, and demonstration for activities such as critical mineral recovery, deep-direct use, thermal storage, and closed-loop systems.

The Committee notes the emergence of geothermal systems in the United States and the potential to produce sustainable electricity, reduce carbon emissions, and diversify energy options while creating business and job opportunities. The Department is directed to conduct investigations of geothermal resource prospects to the degree necessary for determination of potential generation capacity as well as the technical and economic viability to serve as a renewable, secure source of electrical, space conditioning, and thermal processing needs as appropriate to demands for Department of Defense installation lands as well as immediately adjacent public lands located in non-contiguous states and U.S. territories.

ENERGY EFFICIENCY

Advanced Manufacturing.—The recommendation provides \$25,000,000 for the Energy-Water Desalination Hub and not less than \$5,000,000 for improvements in the steel industry.

The Committee notes that industrial drying processes consume approximately 10 percent of the process energy used in the manufacturing sector. The recommendation provides \$10,000,000 to improve the efficiency of industrial drying processes.

The Committee recognizes the potential for energy savings in water and wastewater treatment systems, which are among the country's largest industrial electricity users. The Committee appreciates the Department's work on technical assistance in this area and provides \$5,000,000 to expand the technical assistance provided for water and wastewater treatment. The Department is directed to provide to the Committee not later than 120 days after enactment of this Act a briefing on its plan to ensure the technical assistance is aligned with the related programs operated by the U.S. Environmental Protection Agency and the U.S. Department of Agriculture to assist communities that seek to upgrade systems to utilize energy efficient and alternative energy improvements at these facilities. The Department is directed to summarize its efforts to work with key stakeholders in this area, including wastewater and drinking water providers, to maximize the investment of these dollars to high priority targets. In addition, the recommendation provides \$20,000,000 for research and development on technologies to achieve energy efficiency of water and wastewater treatment plants, including the deployment of alternative energy sources, as appropriate.

The recommendation provides \$10,000,000 for the development of advanced tooling for lightweight automotive components to lead the transition to electric vehicle and mobility solutions to meet the national urgency for market adoption. The Department is directed to further foster the partnership between the Manufacturing Demonstration Facility and universities and industry located in areas where existing industry is clustered to accelerate technology de-

ployment and increase the competitiveness of U.S. manufacturing industries.

The recommendation provides up to \$20,000,000 to continue development of additive manufacturing involving nanocellulose feedstock materials made from forest products. The Department is directed to conduct this work in partnership with the Manufacturing Demonstration Facility (MDF) in order to leverage expertise and capabilities for large scale additive manufacturing.

The recommendation provides not less than \$20,000,000 for the Advanced Manufacturing Office to work in coordination with Hydrogen and Fuel Cell Technologies Office to support high-impact activities for the development and deployment of hydrogen and fuel cell technologies, including on the economic use of low-carbon hydrogen for industrial processes.

The recommendation provides up to \$25,000,000 for a competitive solicitation to accelerate development of manufacturing processes needed for micro-battery technologies. The Department is encouraged to support awards that include strong end user participation and a clear path to market adoption.

The recommendation provides \$25,000,000 for the Manufacturing Demonstration Facility (MDF) and the Carbon Fiber Technology Facility. Within available funds for MDF, the recommendation provides \$5,000,000 for the development of processes for hybrid materials solutions with prescribed microstructural and mechanical properties to enable precise property profiles for born qualified and certified components.

The recommendation provides not less than \$10,000,000 for conversion and retooling of manufacturing industrial facilities, such as authorized by section 132 of the Energy Independence and Security Act of 2007 and section 712 of the Energy Policy Act of 2005, to support the domestic auto industry and to retain American competitiveness in building the vehicles of the future.

The recommendation provides \$20,000,000 for process-informed science, design, and engineering materials and devices in harsh environments, including nuclear environments, and to demonstrate integrated energy systems applied to decarbonized steel making and refractory materials, including net zero or high-temperature hydrogen-based decarbonization. The recommendation provides \$10,000,000 for continued research for dynamic catalyst science coupled with data analytics.

The recommendation provides not less than \$20,000,000 for electric vehicle battery manufacturing. The Department is directed to prioritize funding to partnerships and consortiums that include private industry, universities, and nonprofit organizations with expertise in electric vehicle manufacturing, electric vehicle workforce development, and regional innovation development.

The recommendation provides \$10,000,000 for research, development, and demonstration activities that will enable U.S. manufacturers to increase the recovery, recycling, reuse, and remanufacturing of plastics, metals, electronic waste, and fibers.

The recommendation provides up to \$10,000,000 for technical assistance grants, in coordination with the Building Technologies Office, to enable small- and medium-sized businesses to create independently verified and comparable assessments of the lifecycle

emissions impact of construction materials using environmental product declarations. The Department is encouraged to work with the U.S. Environmental Protection Agency, National Institute of Standards and Technology, General Services Administration, and Office of Federal Procurement Policy on any efforts related to assessing lifecycle emissions of different materials and products.

The recommendation provides up to \$25,000,000 for the Industrial Assessment Centers (IAC). The Department is encouraged to support regions that are currently designated as underserved through the IAC program.

The recommendation provides \$13,000,000 to provide ongoing support for the Combined Heat and Power (CHP) Technical Assistance Partnerships (TAP) and related CHP activities.

Recent advancements in machine learning have opened the door to increase the efficiency and sustainability of gold and silver metal extraction. The recommendation provides up to \$10,000,000 for the issuance of a competitive solicitation for industry-led teams to improve the efficiency and sustainability of gold and silver extraction through artificial intelligence and machine learning.

The recommendation provides up to \$10,000,000 for efforts to promote Strategic Energy Management practices and up to \$30,000,000 for competitive grants to companies for the hiring or designation of plant energy managers. The Department is encouraged to focus efforts related to Strategic Energy Management on small- and medium-sized manufacturing. The recommendation provides up to \$55,000,000 for the Better Plants program to offer comprehensive assessment and engagements to the largest greenhouse gas emitting manufacturing facilities. The recommendation provides up to \$60,000,000 for competitive grants to provide cost-share payments to manufacturing plants for the installation of underutilized, existing low-carbon technologies. The recommendation provides up to \$30,000,00 for support of the development and adoption of smart manufacturing practices directed toward small- and medium-sized manufacturers. The recommendation provides up to \$55,000,000 for research, development, and deployment to develop and promote the adoption of technologies that can dramatically reduce the greenhouse gas emissions from process heating applications.

The recommendation provides up to \$20,000,000 for the development of transformative processes for manufacturing-related carbon dioxide separation and utilization. The Department is directed to coordinate with the Office of Fossil Energy and Carbon Management as it proceeds with this work. The Department is encouraged to support research and development on carbon capture, utilization, and storage with an emphasis on utilization within industry processes and materials, low-carbon fuels, transformative technology that will allow deep industrial decarbonization, materials efficiency and circular economy, carbon intensity definitions and labeling across key product groups, and the steel industry.

The Department is directed to carry out activities in accordance with title VI of the Energy Act of 2020. The Committee supports the expanded use of smart manufacturing technologies across a broad range of industrial users and encourages the Department to

continue activities to lower the adoption hurdles of these emerging and transformative technologies.

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 Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on the potential benefits and considerations of renewing or extending existing CEMI agreements, including extensions of not less than five years.

The Department is encouraged to coordinate with the Solar Energy Technologies Offices on the use of solar technologies for long-duration storage and process heat for industrial applications.

The Committee remains supportive of the Critical Materials Energy Innovation Hub.

To remain competitive, the U.S. aerospace industry must continually increase efficiencies to meet increasing production rate demands. The Committee recognizes the Department's success in partnering with industry to solve its most challenging problems, including the development and deployment of artificial intelligence and machine learning. The Department is encouraged to continue to support the application of machine learning to increase efficiencies in large-scale, high-rate aerospace manufacturing.

Silicon carbide ceramic matrix composites have been proven as a capable material for high temperature applications. The Department is encouraged to continue its efforts regarding silicon carbide components.

The Department is directed to provide to the Committee not later than 30 days after enactment of this Act a briefing on the status of its decarbonization roadmaps in key technology areas to guide research and development at the Department to achieve significant, economical greenhouse gas emission reductions by 2050, including energy efficiency, process electrification, industrial electrification technologies, and carbon capture.

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 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 to the Committee not less than 30 days after enactment of this Act.

The Committee supports the Department's efforts to develop the next generation of energy and manufacturing entrepreneurs through the Lab-Embedded Partnership Programs. The Department is directed to brief the Committee not later than 90 days after enactment of this Act on the status of existing programs and the potential for establishing additional programs at national laboratories or DOE sites.

The Committee encourages continued efforts at the Lithium Research Center to convert lithium chloride to lithium hydroxide. The Department is encouraged to support activities for the purposes of developing and building capabilities to process lithium ore into cathode-grade material of lithium hydroxide.

Building Technologies.—The recommendation provides not less than \$60,000,000 for Commercial Building Integration, not less than \$60,000,000 for Residential Buildings Integration, and not less than \$60,000,000 for Equipment and Building Standards. Within available funds for Equipment and Building Standards, the recommendation provides not less than \$10,000,000 for Building Energy Codes to increase training, including certifications, and provide technical assistance to states, local governments, regional collaboratives, workforce development providers, homebuilders, office builders, architects, 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. Within available funds, the recommendation supports smart building acceleration, as authorized in section 1007 of the Energy Act of 2020, and the Department is directed to prioritize these activities.

The recommendation provides up to \$40,000,000 to expand efforts to accelerate adoption of electric heat pumps. The recommendation provides up to \$50,000,000 for activities to accelerate grid-enabled buildings and reduce barriers to dynamic, responsive building energy use that can meet customers' needs and support a reliable electric grid.

The Department is directed to develop programs to support a skilled, robust, diverse, and nationally representative energy efficiency and building electrification workforce. The recommendation provides up to \$30,000,000 for these activities. The Department is encouraged to collaborate with the Department of Education and the Department of Labor on educational and worker training programs. Further, the Department is encouraged to develop strategies and activities to increase adoption of energy-saving and emissions-reducing technologies for low-income households, multifamily buildings, and minority communities.

The recommendation provides up to \$40,000,000 for solid-state lighting, including field evaluations that examine the potential of advanced, tunable lighting to deliver health, wellness, and productivity benefits, in addition to greater energy efficiency. If the Secretary finds solid-state lighting technology eligible for the Twenty-First Century Lamp prize, specified under 655 of the Energy Independence and Security Act of 2007, \$5,000,000 shall be made available to fund the prize or additional projects for solid-state lighting research and development.

The recommendation provides \$5,000,000 for the establishment of a Heat Pump Consortium to integrate and deploy heat pump technologies in a joint industry partnership. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on how the consortium will incorporate thermal heat pump technologies.

The Committee notes that natural gas and propane gas currently play a role in meeting energy needs of U.S. homes and commercial

buildings. While the Department is encouraged to focus its natural gas and propane gas activities on energy efficiency efforts, including applications that integrate with renewables, the Department is directed to phase down all research, development, and commercialization work related to gas systems and appliances. Further, the Department is encouraged to study the future market commercialization of combined heat and power, including integration with renewables, and how the commercialization will increase energy efficiency efforts nationwide.

The Department is directed to continue to fulfill its statutory obligation to promulgate natural gas appliance standards and to provide support for building energy codes development and adoption.

The Department is encouraged to continue to invest in transactive energy and control research, development, and demonstration activities to allow buildings, energy generation and storage assets, and the electrical grid to seamlessly interact to enhance reliability, security, and efficiency of the nation's electrical distribution systems. The effort should be implemented at an existing, successful development and demonstration platform at a university center. The Department is encouraged to emphasize the integration of renewable energy assets, such as photovoltaics, associated hardware and software development, and the establishment of a living and learning laboratory that integrates training of new and current professionals.

The Department is directed to expand its work 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 used to facilitate widespread deployment and dissemination of information and best practices through direct engagement with builders, labor organizations, equipment manufacturers, smart grid technology and systems suppliers, integrators, state and local governments, and other market transformation activities. The Department is encouraged to support deep whole-house energy efficiency retrofits, including outreach, engagement, and training to private sector contractors, and encouraged to continue efforts to advance smart home technology.

The Building Technologies Office is encouraged to collaborate with other offices throughout the Department, especially including efforts pertaining to improved building-to-grid interactions and integration of energy storage and renewable energy.

The Department is directed to provide to the Committee not later than 120 days after enactment of this Act a briefing outlining the opportunities and challenges in deploying energy efficient building technologies to public buildings and buildings that host providers, such as food banks, serving community needs. The briefing should estimate the resource potential, outline mechanisms that could be employed to overcome the challenges of wide-spread deployment of energy efficient technologies, and the potential role of other federal agencies.

Within available funds for Emerging Technologies, the Committee encourages activities for heating, ventilation, and air condi-

tioning (HVAC) and refrigeration research, development, and demonstration, to include heat pumps, heat pump water heaters, and boilers. The Department should focus 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.

Federal Energy Management Program.—The recommendation provides 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 recommendation provides not less than \$2,000,000 for workforce development and the Performance Based Contract National Resource Initiative. The fiscal year 2020 Act directed the Department to provide a report that outlines the types of technical and financial expertise the Department is suited to provide and includes an analysis of the available infrastructure work that can be accomplished through performance-based contracts over a 10-year period and the resources necessary to achieve this goal. The Committee is still awaiting this report and directs the Department to provide this report not later than 15 days after enactment of this Act.

The Department is directed to establish an improved process to assist in guiding infrastructure investments through energy performance contracts management, including, but not limited to, Energy Savings Performance Contracts (ESPCs) and Utility Energy Savings Contracts (UESCs), to effectively and efficiently reduce energy costs, reduce greenhouse gas emissions, and improve facilities. The Department is directed to conduct a solicitation for the Indefinite Delivery, Indefinite Quantity in fiscal year 2022 if additional funds are available for these activities that were not included in this Act. The Department is directed to ensure the availability of sufficient acquisition staffing resources to address energy saving measures, as well as to streamline and find efficiencies in the approval of projects to continue to provide climate, resilience, and economic benefits.

Weatherization and Intergovernmental Programs.—Within available funds for Training and Technical Assistance, the recommendation provides \$500,000 for technical assistance to continue the Sustainable Wastewater Infrastructure of the Future Accelerator.

Within available funds for the Weatherization Assistance Program (WAP), the recommendation provides \$3,000,000 to support community-scale weatherization. The Department is directed to make these funds available directly to WAP grantees that present targeted and innovative use of these dollars to model methods for WAP integration with the various other weatherization programs, including but not limited to the HOME Investment Partnership Program, Low-Income Home Energy Assistance Program, and private utility supported weatherization funds. The grants shall be used to weatherize multiple homes as part of an integrated weatherization approach or for community groups as they attempt to take a broader approach to weatherization at mobile home communities, multi-family units, or in communities that share a common small-scale alternative energy resource. These community-scale grants may also test new models for effectively enrolling multiple

individuals across a targeted community or incorporating the broader health impacts of weatherization as WAP organizations attempt to enroll individuals across a neighborhood or multi-home approach. The Department is directed to regularly brief the Committee on progress to implement these community-scale weatherization grants.

The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing relating to ongoing efforts at the Department to collaborate with partners at Department of Health and Human Services, the Department of Housing and Urban Development, and the Department of Veterans Affairs. Interagency collaboration among federal agencies could be particularly helpful for identifying and weatherizing residences under the various agencies' weatherization programs. The Department is encouraged to work collaboratively with other federal agencies and to outline ways the various weatherization and home assistance programs can better integrate assistance for structurally deficient but weatherable residences.

The Committee recognizes that WAP is particularly important for bringing energy efficiency to communities that most need it. The Committee notes the importance of WAP to directly fund building retrofits and its important role focusing on equity, including moderating energy demand and the cost burden faced by low-income communities. The Committee also recognizes the importance of the State Energy Program's (SEP) support for a wide range of state energy initiatives, including energy audits, building retrofits, and alternative vehicles purchasing. The Committee notes that SEP also ensures the safety, security, and resilience of the grid in the face of increasing weather events.

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 obligate funds recommended for WAP and SEP to states, tribes, and other direct grantees not later than 60 days after enactment of this Act. The Committee is concerned with the reduction of staff at the Office of Weatherization and Intergovernmental Programs and directs the Department to achieve staffing levels that will allow it to provide robust training, technical assistance, and oversight for WAP and SEP.

In consultation with the Department of Housing and Urban Development, the Department is encouraged to investigate how the federal government can act immediately to fund, support, and expand state and local efforts to decarbonize low- and moderate-income housing through beneficial electrification of heating and cooling, including as part of efforts to conduct healthy, deep energy retrofits in such housing. The Department is further encouraged to collaborate with the Department of Housing and Urban Development to outline potential implementation pathways to achieve healthy, deep energy retrofits of 10 to 15 million low-income homes, including in all federally subsidized housing, by 2030, including the installation of all-electric systems to lower energy bills and elimi-

nate carbon emissions. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a written status update on these activities.

Weatherization Readiness Fund.—The Committee supports the creation of a new Weatherization Readiness Fund to enable more low-income households to receive Weatherization Assistance Program support by providing funds to address structural and health and safety issues to reduce the frequency of deferred homes that are not weatherization ready when WAP work crews enter the home to perform retrofit services.

Local Government Clean Energy Workforce Program.—The Committee supports the Local Government Clean Energy Workforce Program to provide competitive awards, on-site capacity, peer exchanges, and technical assistance to support the development and deployment of transformative clean energy programs that create good paying jobs working with qualifying local governments and tribal nations, with a focus on energy communities and disadvantaged or small-to-medium jurisdictions.

The Department is encouraged to consider projects that implement best practices to advance energy efficiency adoption, building and vehicle electrification, grid modernization, distributed electricity generation, and workforce development at the local level. These activities should include work with and support for organizations that convene and support municipal governments.

Build Back Better Challenge Grants.—The Committee supports the proposed Build Back Better Challenge Grants program. The Department is directed to support novel state-, local-, and Tribal-level approaches that encourage early action and novel methods for clean energy deployment, prioritizing investments that meet energy needs at the local level and are inclusive in elevating impoverished, disenfranchised, marginalized, or overburdened communities. The Department is directed to conduct this program on a competitive basis where entities apply to the Department. Eligible entities shall include states, local governments, communities, U.S. territories, and tribes. The Department is directed to provide to the Committee not later than 30 days after enactment of this Act and prior to obligation of any funds a briefing on its implementation plan for the Build Back Better Challenge Grants program.

The Committee recognizes the importance of these investments to deploy clean energy technologies to help communities address climate change, criteria air pollutants, and energy resiliency from climate-related weather events. The Department is encouraged to consider clean energy microgrids that support critical community infrastructure, to prioritize projects in environmental justice communities, to require eligible entities to prioritize contracts to implement grants for minority-owned and operated entities or women-owned and operated entities, and to require that funded projects pay wages at rates not less than those prevailing on similar construction, alteration, installation, or repair work in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.

The Department is encouraged to consider grants to units of local government to develop building energy efficiency retrofit programs

to conduct energy efficiency audits and purchase energy efficiency upgrades for residential and commercial properties.

The Department is encouraged to support projects that combine geothermal technologies with other emissions reduction technologies, such as solar, buildings, and efficiency technologies.

The Committee believes it is critical that there is access to funding and support that helps to prevent future electricity disruptions, including support for local communities. The Department is encouraged to provide grants to entities for activities and infrastructure that ensure the electric grid is safe and secure from events that may disrupt it.

The Department is encouraged to consider projects that implement best practices to advance energy efficiency adoption, building and vehicle electrification, grid modernization, distributed electricity generation, and workforce development at the local level. These activities should include work with and support for organizations that convene and support municipal governments.

The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a report on how the Department is implementing the Build Back Better Challenge Grants program.

CORPORATE SUPPORT

Facilities and Infrastructure.—The Committee supports efforts on the Energy Materials and Processing at Scale facility, Advanced Research in Integrated Energy Systems, and computing infrastructure.

Program Direction.—The Committee appreciates the Department’s aggressive strategy to ensure that EERE is appropriately staffed to execute and oversee the funds provided by the Committee. The Committee expects continued, regular updates on its progress.

Strategic Programs.—The recommendation provides not less than \$3,000,000 for Technology-to-Market, not less than \$10,000,000 for Strategic Analysis, and not less than \$4,500,000 for Communications and Outreach.

CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE

Appropriation, 2021	\$156,000,000
Budget estimate, 2022	201,000,000
Recommended, 2022	177,000,000
Comparison:	
Appropriation, 2021	+21,000,000
Budget estimate, 2022	-24,000,000

The Cybersecurity, Energy Security, and Emergency Response program leads the Department’s efforts to secure the nation’s energy infrastructure against all hazards, reduce the risks of and impacts from cyber events and other disruptive events, and assist with restoration activities. A reliable and resilient power grid is critical to the nation’s economic competitiveness and leadership.

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

The Department is directed to include an itemization of funding levels below the control point in future budget submissions.

The nation continues to face global cybersecurity threats from nations such as Iran, Russia, and North Korea that have launched documented cyberattacks on the country. Because of their unique location and geography, island states and territories host a disproportionate amount of our national security and defense forces, putting island states and territories and the electric grid infrastructure at risk. Remote island communities also face the added burden of not being able to integrate with mainland infrastructure and are excluded from designations and programs such as the Defense Critical Electrical Infrastructure, which may otherwise afford these communities with additional resources. The Committee encourages the Department to work with electric cooperatives, public utility districts, investor-owned utilities, and municipal utilities serving island communities to plan and build out needed cybersecurity infrastructure. The Department is directed to submit to the Committee not later than 180 days after enactment of this Act a report assessing the current vulnerabilities of island communities and how the Department can provide resources and technical assistance to mitigate vulnerabilities.

In light of documented cyber targeting of utilities, including by state actors, the Committee encourages the Department to incorporate pilot programs with private sector participants to demonstrate active defense cybersecurity protection.

The Committee is concerned about the substantial and growing threat from cybersecurity attacks to the electrical grid. The Committee supports the Department's efforts to identify and develop defenses for these new cyber threats, including developing proof of concept algorithms that can be tested across a full range of attacks in both testbed and real environments. The recommendation provides not less than \$2,000,000 for digital twin projects to enable essential collaborator participation and their integration into the effort.

The recommendation provides up to \$20,000,000 for the Cyber Testing for Resilient Industrial Control System (CyTRICS) program.

Risk Management Technology and Tools.—The recommendation provides up to \$10,000,000 for consequence-driven cyber-informed engineering and \$4,000,000 for 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. This activity should be conducted in coordination with the Office of Electricity.

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 recommendation includes not less than \$2,000,000 to continue the establishment of a network of university-based, regional energy cybersecurity centers. The centers should address inter-related research and development challenges of cybersecurity and critical energy infrastructure and develop a trained, globally competitive workforce. The centers should be distributed regionally

across the country to leverage regional utilities, national laboratories, and regulatory bodies and take into account the distinctive characteristics of each region’s electricity system, network of oil and gas infrastructure, and workforce expertise. The Department is directed to coordinate these activities with the Office of Electricity and the Office of Energy Efficiency and Renewable Energy.

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.

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.

ELECTRICITY

Appropriation, 2021	\$211,720,000
Budget estimate, 2022	327,000,000
Recommended, 2022	267,000,000
Comparison:	
Appropriation, 2021	+55,280,000
Budget estimate, 2022	-60,000,000

The Office of Electricity advances technologies and provides operational support to increase the efficiency and technological advancement of the nation’s electricity delivery system. The power grid employs aging technologies at a time when power demands and the deployment of new energy technologies are imposing new stresses on the system. This program aims to develop a modern power grid by advancing resilient power distribution systems, intelligent and high-efficiency grid components, and energy storage systems.

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

The Department is directed to include an itemization of funding levels below the control point in future budget submissions.

Transmission Reliability and Resilience.—The recommendation provides not less than \$1,000,000 for sensors and analytics technologies.

The fiscal year 2021 Act directed the Department to conduct a case study on regional, wide-spread deployment of dynamic line rating technologies to assess the potential benefits and costs. The

Committee is still awaiting this case study and directs the Department to provide the report not later than 60 days after enactment of this Act.

The fiscal year 2021 Act directed the Department to provide a report on ways to maximize utilization of the existing electricity delivery system by enabling dynamic line ratings, dynamically controlling the flow of electricity, and optimizing electricity delivery system topology. The Committee is still awaiting this report and directs the Department to provide the report not later than 30 days after enactment of this Act.

The fiscal year 2021 Act directed the Department to provide a report summarizing the results of a 12-month non-contact sensor monitory study. The Committee is still awaiting this report and directs the Department to provide the report not later than 30 days after enactment of this Act.

Energy Delivery Grid Operations Technology.—The recommendation provides up to \$10,000,000 for the DarkNet project.

Resilient Distribution Systems.—The recommendation provides up to \$10,000,000 for the COMMANDER (Coordinated Management of Microgrids and Networked Distributed Energy Resources) National Test Bed to establish a data link for a back-up operations center that can benefit utility companies across the country and support the North American Energy Resilience Model.

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 developing the innovative technologies, tools, and techniques to modernize the distribution portion of the electricity delivery system. Resilient Distribution Systems pursues strategic investments to improve reliability, resilience, outage recovery, and operational efficiency, building upon previous and ongoing grid modernization efforts. In addition to emerging fuel technologies for distributed grids, the Committee recommends that currently available distributed fuels, such as propane fueled microgrids, be evaluated.

Public, open-source decentralized technologies like blockchain in combination with digital identities are positioned to enable innovation for advanced digital solutions that solve various market pain points associated with the registration, scheduling, dispatch/activation, measurement/verification, and financial settlement of energy customers and their devices. These digital solutions may help grid operators, electric utilities, and energy companies and their customers to capture the full potential of investments in grid modernization. The Committee directs the Department to coordinate research about the opportunity and needs for new digital solutions built with public, open-source decentralized technologies to support electric grid modernization efforts.

The recommendation provides not less than \$15,000,000 for demonstration projects with the Grid Sensors and Sensor Analytics program. The demonstration activities may focus on utilizing data from advanced sensors that are deployed on existing transmission

and distribution lines to predict or detect vegetation contact to mitigate wildfires and wildfire impacts. Further, the demonstration activities may focus on measuring the condition of utility poles in terms of their position, impacts, the presence of high temperatures, and measuring the condition of conductors at the attachment points to utility poles in terms of their position and impacts. Data from the sensors should be utilized to provide useful and immediate analytics to improve the safety of the general public and improve electrical distribution network performance indices. The demonstration activities may also include post-weather or fire event assessments on what assets have been compromised and need replacement.

Energy Storage.—The recommendation provides not less than \$10,000,000 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, lithium-grid scale batteries and their components.

The Committee continues to support at least one pilot energy storage project that demonstrates business model innovation targeted at cost-effective deployment through aggregation in rural electric cooperatives and municipal utilities. The Department is encouraged to focus on reducing the soft costs of novel project design and optimization and developing legal and power purchase model agreements that can be replicated in cooperatives elsewhere in the nation, reducing future costs for deployment of energy storage projects. As a part of this pilot, the Committee recommends funding of at least one project for demonstration through the deployment and optimization of on-grid storage assets.

Cyber R&D.—The recommendation provides up to \$5,000,000 for 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. This activity should be conducted in coordination with the Office of Cybersecurity, Energy Security, and Emergency Response.

Transformer Resilience and Advanced Components.—The recommendation includes up to \$5,000,000 for the Grid Research Integration and Demonstration Center to advance technologies in support of modernizing the electric delivery system and understanding the nation's electricity infrastructure using real-time data.

The recommendation provides up to \$2,000,000 to further assess composite utility poles in controlled and field tests. The fiscal year 2021 Act directed the Department to submit to the Committee a report that assesses the performance of composite poles. The Committee is still awaiting this report and directs the Department to provide the report not later than 90 days after enactment of this Act.

NUCLEAR ENERGY

Appropriation, 2021	\$1,507,600,000
Budget estimate, 2022	1,850,500,000
Recommended, 2022	1,675,000,000
Comparison:	
Appropriation, 2021	+167,400,000
Budget estimate, 2022	-175,500,000

Nuclear power generates approximately one-fifth of the nation's electricity and continues to be an important zero carbon-emissions energy source. The Department of Energy's Nuclear Energy (NE) program invests in research, development, and demonstration activities that develop the next generation of clean and safe reactors, further improve the safety and economic viability of our current reactor fleet and contribute to the nation's long-term leadership in the global nuclear power industry.

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

Advanced nuclear technologies hold potential for reliable, safe, emission-free energy. The Department is encouraged to prioritize funds on activities related to advancing the goal to demonstrate private-sector advanced reactor designs and fuel types by the late 2020s.

Nuclear Energy University Program (NEUP).—Since 2009, the Department has allocated up to 20 percent of funds appropriated to certain 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 Department is directed to continue this practice, including determining which programs are appropriate consistent with previous years, with not less than \$40,000,000 for R&D activities performed at U.S. colleges and universities. The Department is directed to provide to the Committee not later than 180 days after enactment of this Act a briefing on progress in addressing concerns and implementing improvements recommended by the Nuclear Engineering Department Heads Organization. The Department is directed to provide to the Committee quarterly briefings on the status of NEUP and the university work being funded.

Integrated University Program.—The Committee is alarmed by the statistics highlighting the severe shortage of highly trained nuclear specialists and the lack of academic programs to train and prepare individuals for work in the nuclear sector. The recommendation includes \$6,000,000 to continue the Integrated University Program, which is critical to ensuring the nation's nuclear science and engineering workforce in future years.

Thorium Molten-Salt Reactor Program.—The Committee is aware of both interest in and concerns with thorium molten-salt reactors (TMSR). The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a report indicating whether the Department is working with any other nations to develop TMSR programs. The report should also include suggestions and considerations for Congress regarding the development of a domestic TMSR program, including the potential benefits

and challenges of the technology, necessary infrastructure investments, fuel cycle considerations, proliferation issues, and the potential for using the federal U-233 supply and any resulting impacts to cleanup milestones or costs of cleanup or security activities related to the supply.

NUCLEAR ENERGY ENABLING TECHNOLOGIES

Crosscutting Technology Development.—The recommendation includes \$5,000,000 to support and expand research collaborations, which may include a consortium, between research universities and national laboratories utilizing existing capabilities and infrastructure focused on the benefits, as well as vulnerabilities of digital instrumentation for existing and future nuclear reactors, including the use of new approaches, such as predictive analytics, machine learning, and artificial intelligence, to improve reactor safety and performance and address cybersecurity issues. The recommendation includes not less than \$5,000,000 to continue activities related to materials development, including through public-private partnerships, to develop new materials the nuclear industry will need in the future. The recommendation provides \$10,000,000 for integrated energy systems and \$5,000,000 to support the Gateway for Accelerated Innovation in Nuclear (GAIN) program.

Nuclear Science User Facilities.—The recommendation includes not less than \$10,000,000 for computational support and \$3,000,000 for Nuclear Materials Discovery and Qualification.

Transformational Challenge Reactor.—The Transformational Challenge Reactor (TCR) program provided a platform to help demonstrate the ability to reduce the deployment costs and timelines for nuclear energy systems and enhanced the development of technologies that provided the ability to manufacture small and micro advanced reactor components using additive manufacturing techniques. Acknowledging the tremendous recent advances that have been made in microreactor research and development, the TCR effort ended in fiscal year 2021. The Department is directed to support crosscutting research initiated under TCR through the Crosscutting Technology Development program.

FUEL CYCLE RESEARCH AND DEVELOPMENT

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 \$50,000,000, including \$2,000,000 for Mining, Shipping, and Transportation; \$33,000,000 for Advanced Nuclear Fuel Availability; and not less than \$15,000,000 within Material Recovery and Waste Form Development.

Advanced Nuclear Fuel Availability.—The Committee supports establishment of an 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 conduct these activities in a manner that will encourage, rather than discourage, the private sector commercialization of HALEU production. The fiscal year 2020 Act directed the Department to provide an evaluation

on the anticipated demand for HALEU, the timing of that demand, and options for meeting that demand. The Committee is still awaiting this report. Section 2001(b)(2) of the Energy Act of 2020 requires the Department to submit to Congress a report on a program to support the availability of HALEU for civilian domestic demonstration and commercial use. The Department is directed to submit these reports to the Committee not later than 30 days after enactment of this Act and not less than 60 days prior to the obligation of more than 75 percent of these funds. The Department is directed to disburse these funds on a competitive basis.

The Department is directed to provide to the Committee not later than 30 days after enactment of this Act the Alternate Fuels Report required by section 2001(b)(3) of the Energy Act of 2020.

Material Recovery and Waste Form Development.—The recommendation provides not less than \$15,000,000 for EBR II Processing for HALEU.

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 recommendation provides not less than \$10,000,000 for further development of silicon carbide ceramic matrix composite fuel cladding for light water reactors. The Department is directed to provide to the Committee not later than 60 days after enactment of this Act a table summarizing the allocation of fiscal year 2022 funds.

Used Nuclear Fuel Disposition R&D.—The recommendation provides \$5,000,000 for advanced reactor used fuel disposition to address used fuel from TRISO-fueled and metal-fueled advanced reactors, with specific focus on near-term implementation challenges such as used fuel packaging at potential advanced reactor sites.

Integrated Waste Management System.—The Department is directed to continue site preparation activities at stranded sites, to evaluate the re-initiation of regional transport, and undertake transportation coordination efforts.

REACTOR CONCEPTS RESEARCH, DEVELOPMENT, AND DEMONSTRATION

Advanced Small Modular Reactor RD&D.—The recommendation provides funds for ongoing demonstration activities.

Light Water Reactor Sustainability.—The recommendation provides not less than \$10,000,000 to support new or previously awarded hydrogen demonstration projects.

Advanced Reactor Technologies.—The recommendation provides not less than \$15,000,000 for Advanced Reactor Concepts Industry Awards and \$25,000,000 for MW-scale reactor research and development, including \$9,000,000 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.

The recommendation provides up to \$5,000,000 for the research and development of advanced isotope separation process for Molten Salt Reactors (MSRs) to ensure the ongoing development of the isotope separation process needed to provide required materials for inherently safe, Generation IV MSRs, as well as a domestic source of lithium isotopes for nuclear reactors.

ADVANCED REACTORS DEMONSTRATION PROGRAM

The Committee notes the importance of the deployment of advanced reactors to the nation’s ability to regain its leadership in nuclear energy and the contribution of nuclear energy to meeting climate goals. The Committee is encouraged by the Department’s pace of activities in establishing the Advanced Reactors Demonstration Program (ARDP). This program will help facilitate the accelerated development and deployment of advanced reactors. The Department is directed to continue to ensure the program moves forward expeditiously. The Department is directed to continue to focus resources on partners capable of project delivery in the next five to seven years. 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 ARDP awards.

National Reactor Innovation Center.—The recommendation provides up to \$48,000,000 for capital design and construction activities for demonstration reactor test bed preparation at Idaho National Laboratory supporting reactor demonstration activities. The Department shall submit a Construction Project Data Sheet for each such applicable project that is expected to exceed the minor construction threshold.

INFRASTRUCTURE

ORNL Nuclear Facilities Operations and Maintenance.—The recommendation provides \$20,000,000 for ORNL Nuclear Facilities Operations and Maintenance for the continued safe operations and maintenance of the Oak Ridge National Laboratory hot cells.

INL Facilities Operations and Maintenance.—The recommendation provides \$290,000,000 for INL Facilities Operations and Maintenance to support the reliability and sustainability of the Materials and Fuels Complex (MFC) and the Advanced Test Reactor (ATR).

Idaho Sitewide Safeguard and Security.—The recommendation provides \$149,800,000 for Idaho Sitewide Safeguards and Security.

FOSSIL ENERGY AND CARBON MANAGEMENT

Appropriation, 2021	\$750,000,000
Budget estimate, 2022	890,000,000
Recommended, 2022	820,000,000
Comparison:	
Appropriation, 2021	+70,000,000
Budget estimate, 2022	– 70,000,000

The Fossil Energy and Carbon Management advances carbon reduction and mitigation in sectors and applications that are difficult to decarbonize, including the industrial sector, with technologies and methods such as carbon capture and storage, hydrogen, and direct air capture, while assisting in facilitating the transition toward a net-zero carbon economy and rebuilding a U.S. critical minerals supply chain.

The Committee supports the budget request, which refocuses funding from traditional fossil combustion-centric activities to climate-centric activities.

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

Consistent with direction provided in previous fiscal years, the Committee does not support the closure of any National Energy Technology Laboratory (NETL) site and provides no funds to plan, develop, implement, or pursue the consolidation or closure of any of the NETL sites.

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 and expects the Department to proceed with awards expeditiously.

The recommendation provides \$500,000 to support feasibility and operational planning for large-scale biomass production for the purposes of bioenergy with carbon capture and storage.

Special Recruitment Programs.—The Committee supports the Department's efforts to offer undergraduate, graduate, and post-graduate students majoring in scientific, technology, engineering, and mathematics (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.

Solid Oxide Fuel Cell Systems & Hydrogen.—The recommendation provides not less than \$105,000,000 for the research, development, and demonstration of solid oxide fuel cell systems and hydrogen.

CCUS AND POWER SYSTEMS

Carbon capture, utilization, and storage (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.

The Committee encourages the Department to continue to support the Clean Energy Research Consortium: Advanced Coal Technology Consortium program.

The Committee recognizes the benefits of developing carbon capture technologies across multiple sources and directs the Department to invest in a portfolio of carbon capture technologies and applications. The Committee directs the Department to use its existing authorities to fund technologies that significantly improve the efficiency, effectiveness, costs, emissions reductions and environmental performance of carbon dioxide captured from coal, natural gas, industrial facilities, and other sources to produce fuels and other valuable products.

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, including within significant basalt formations, 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.

The fiscal year 2020 Act directed the Department to provide a report and briefing on the recommendations for program structures that could best support and maximize the impact of expanded research, development, and demonstration efforts in three areas: decarbonization of the industrial sector, direct air capture, and carbon utilization. The Committee is still awaiting this report and briefing and directs the Department to provide the report and briefing to the Committee not later than 15 days after enactment of this Act.

The Department is encouraged to develop educational partnerships, including at Hispanic Serving Institutions and other Minority Serving Institutions, focused on carbon capture and storage, methane capture and storage, and emission mitigation technologies. The fiscal year 2021 Act directed the Department to provide a report detailing possible education partnerships in these areas. The Committee is still awaiting this report and directs the Department to provide the report to the Committee not later than 30 days after enactment of this Act.

The Committee is supportive of the Department's research to develop advanced sorbent materials to optimize direct air carbon capture and integrate the use of captured carbon as feedstock in high pH algal cultivation to maximize the production of biofuels and bio-products.

As industrial deployment of CCUS technology expands, the demand for the transportation of captured carbon oxides is anticipated to increase significantly. In preparation to meet this demand, the Department, in collaboration with the Department of Transportation, is directed to review existing freight transportation infrastructure and the capacity of the various modes of freight transportation to provide cost-effective service. The Department is directed to provide to the Committee not later than 180 days after enactment of this Act a report of the findings of the review. This report should ensure that anticipated short- and long-term freight transportation demand associated with the expanded industrial deployment of CCUS technology is met. Additionally, the report should include analysis of locations where CCUS projects are likely to be located and where carbon sequestration or utilization is likely to occur and the unique aspects of those areas for freight transpor-

tation infrastructure. Finally, in conducting this review, the Department shall consult with stakeholders, including representatives from the various modes of freight transportation.

Carbon Capture.—The Committee encourages the Department to focus its efforts on improving the efficiency and decreasing the costs of carbon capture technologies, demonstrating carbon capture technologies, and identifying how these technologies can be integrated with business models and operations.

The recommendation provides up to \$50,000,000 to support front-end engineering and design studies, including for the development of a first-of-its-kind carbon capture project at an existing natural gas combined cycle plant. The Department is encouraged to prioritize entities that are primarily engaged in the generation of electricity from natural gas in competitive power markets.

The recommendation provides not less than \$10,000,000 for research and optimization of carbon capture technologies at industrial facilities and not less than \$12,000,000 for research and optimization of carbon capture technologies for natural gas power systems.

The Department is directed to increase CCUS public-private partnerships and natural gas-based carbon capture research program opportunities at Hispanic Serving Institutions and other Minority Serving Institutions. The Committee strongly encourages the Department to prioritize funding to institutions successfully employing carbon capture technology within natural gas power plants. The Department is directed to provide to the Committee not later than 180 days after enactment of this Act a report on these efforts.

The recommendation provides up to \$10,000,000 to assist communities in the design and construction of pilot-scale equipment and systems necessary to demonstrate carbon capture, utilization, and storage at waste to energy plants.

Within available funds, the Department is directed to support research, development, and demonstration activities of technology for carbon capture chemical looping and hydrogen production. Chemical looping is a next-generation carbon capture and hydrogen production technology being pursued by a number of companies and universities around the world. This technology offers several advantages over earlier carbon capture technologies such as post-combustion amine scrubbing and oxy-fuel combustion, including: applicability to a wide range of fuels used in both power and industrial plants, including coal, pet coke, natural gas/methane, biomass and any syngas; significantly reduced levelized cost of electricity compared to other CCUS technologies; and a wide range of uses as a platform technology, including both carbon capture for clean, zero emission power generation and hydrogen production.

Carbon Dioxide Removal.—Carbon dioxide removal will be an important tool to achieve net-zero emissions economy-wide by 2050, and the Committee supports the Department's continued efforts focused on carbon dioxide removal technologies. Within available funds, the recommendation provides \$5,000,000 for a competitive solicitation for a study of the development of a direct air capture facility co-located with a geothermal energy resource. The Department is encouraged to give priority to entities that are engaged in the generation of electricity from geothermal resources in competi-

tive power markets, and the Department is directed to coordinate this activity with the Geothermal Technologies Office.

Carbon Utilization.—The recommendation supports carbon utilization for research, development, and demonstration activities to advance valuable and innovative uses of captured carbon, including biological utilization by the conversion of carbon dioxide to higher-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, the recommendation provides up to \$10,000,000 for research and development of carbon utilization using algal systems.

Carbon Storage.—Within available funds, the recommendation provides not less than \$30,000,000 for CarbonSAFE and not less than \$20,000,000 for the Regional Initiatives.

The Department is encouraged to recognize the importance of expanding regional geological characterization, collecting and analyzing data, and addressing regional monitoring, permitting, and policy challenges, as well as the value of this work in supporting broadscale commercial deployment efforts, including the assurance of environmental integrity in storage projects. Further, the Department is encouraged to facilitate development and deployment of monitoring technologies at carbon capture utilization and storage projects with considerable progress toward commercial implementation. The Department is encouraged to give attention to technologies that promise near real-time results or employ big data, machine learning, and artificial intelligence to better address issues such as leak detection, monetization of credits, and permit compliance.

Advanced Energy and Hydrogen Systems.—The recommendation provides not less than \$30,000,000 for Advanced Turbines to carry out research, development, and technology demonstration to improve the efficiency of gas turbines used in power generation systems, aviation, and other applications. The Committee encourages the Department to give priority to promising turbine technologies developed under Phase I awards from previous years. The Department is encouraged to support research and development activities for lithographic molding processes.

The recommendation provides up to \$50,000,000 for materials research and development. The Department is encouraged to support the Advanced Ultrasupercritical Program to fabricate, qualify, and develop domestic suppliers capable of producing components from high temperature materials. Further, the Department is encouraged to support the Extreme Environments Materials Multi-Laboratory Consortium and the development of advanced ceramics under the Materials that Withstand Harsh Environments and Extend Service Lifetimes. 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.

Minerals Sustainability.—The Mineral Sustainability subprogram will support domestic supply chain networks required for the economically, environmentally, and geopolitical sustainable production of critical minerals.

Within available funds, the recommendation provides not less than \$23,000,000 for research and development activities, as authorized by section 7001 of the Energy Act of 2020, to develop advanced separation technologies for the extraction and recovery of rare earth elements and other critical materials from coal and coal byproducts, as well as mitigate any potential environmental and public health impacts of such activities.

Supercritical Transformational Electric Power (STEP) Generation.—Within available funds, the Committee supports efforts, consistent with the original scope of work, to complete the necessary design and construction of the 10-MW pilot and to conduct the necessary testing for the facility. The Committee remains concerned about repeated cost overruns for the project, and the Department is directed to brief the Committee prior to any change to scope or cost profile of the project. The recommendation provides additional funds for 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.

NATURAL GAS TECHNOLOGIES

The recommendation provides not less than \$26,000,000 for Emissions Mitigation from Midstream Infrastructure and not less than \$13,000,000 for Emissions Quantification from Natural Gas Infrastructure. Within available funds, the recommendation supports activities to develop and demonstrate an integrated methane monitoring platform to enable early detection of leaks at natural gas production sites, which may include autonomous, real-time, low-cost optical methane sensors and imagers on unmanned aerial systems, integration of carbon emissions data from geospatial satellites, and new multidimensional data modeling and predictive capabilities using machine learning tools.

The Department is encouraged to explore technologies, including in coordination with public-private partnerships, that curtail methane gas emissions from flaring and venting in shale formations. The fiscal year 2020 Act directed the Department to provide a report on these activities. The Committee is still awaiting this report and directs the Department to provide the report not later than 15 days after enactment of this Act.

Environmentally Prudent Development.—The recommendation provides not less than \$5,000,000 for research and development aimed to reduce the environmental impact of produced water and opportunities to reprocess produced water at natural gas or oil development sites. The Department is encouraged to support research and technology development to develop natural resources in the most environmentally friendly way possible, including technologies that can minimize the environmental impact of resource recovery such as reduced surface footprints, water resource demand, and fugitive methane emissions. The Committee encourages the Department to consider the Field Test Sites in conducting this work.

The recommendation provides up to \$5,200,000 for the Risk Based Data Management System. The fiscal year 2021 Act directed the Department to provide a plan on how to fully transition the functionality and responsibility of the Risk Based Data Manage-

ment System to states. The Committee is still awaiting this report and directs the Department to provide the report not later than 30 days after enactment of this Act.

The Department is encouraged to support university research and field investigations in the Gulf of Mexico to confirm the nature, regional context, environmental impacts, and hydrocarbon system behavior of gas hydrate deposits.

The Committee acknowledges the Department’s investment in research and development on unconventional fossil energy technologies, including for field laboratories. The fiscal year 2021 Act directed the Department to submit to the Committee a report assessing the potential of using solid propellant fuel to generate gas, which will drive hydraulic systems to shut off unwanted flows or blow outs of oil or gas from onshore or offshore wells. The Committee is still awaiting this report and directs the Department to provide the report not later than 30 days after enactment of this Act.

Within existing funds, the Department is encouraged to coordinate with other agencies and states to maximize the benefits and minimize the environmental impacts of U.S. unconventional natural gas liquids production.

Natural Gas Hydrogen Research.—The recommendation provides not less than \$20,000,000 for natural gas utilization, hydrogen, sustainable fuels, and chemicals. The Department is encouraged to support research and development to effectively utilize natural gas for decarbonization solutions, including activities focused on natural gas conversion to low-carbon chemicals and derivatives, such as ammonia and hydrogen, and comprehensive planning of the infrastructure required to store and transport them.

The fiscal year 2021 Act directed the Department to develop a research plan for natural gas utilization for purposes in addition to power generation and direct use applications. The Committee is still awaiting this report and directs the Department to provide the report to the Committee not later than 30 days after enactment of this Act. The Department is directed to provide to the Committee not less than 90 days after enactment of this Act a briefing on how technologies included in the research plan for natural gas utilization can transition from lower-carbon technologies to carbon-neutral or carbon-negative technologies.

NETL INFRASTRUCTURE

Within available funds for NETL Infrastructure, the Department is directed to prioritize funds for Joule, site-wide upgrades for safety, and addressing and avoiding deferred maintenance.

NAVAL PETROLEUM AND OIL SHALE RESERVES

Appropriation, 2021	\$13,006,000
Budget estimate, 2022	13,650,000
Recommended, 2022	13,650,000
Comparison:	
Appropriation, 2021	+644,000
Budget estimate, 2022	---

The Naval Petroleum and Oil Shale Reserves no longer serve the national defense purpose envisioned in the early 1900’s, and con-

sequently the National Defense Authorization Act for fiscal year 1996 required the sale of the government's interest in the Naval Petroleum Reserve 1 (NPR-1). To comply with this requirement, the Elk Hills field in California was sold to Occidental Petroleum Corporation in 1998. Following the sale of Elk Hills, the transfer of the oil shale reserves, and transfer of administrative jurisdiction and environmental remediation of the Naval Petroleum Reserve 2 (NPR-2) to the Department of the Interior, the Department retained one Naval Petroleum Reserve property, the Naval Petroleum Reserve 3 (NPR-3) in Wyoming (Teapot Dome field). The Department issued a disposition plan for NPR-3 in June 2013 and began implementation of the plan in fiscal year 2014. Transfer of NPR-3 to a new owner occurred in fiscal year 2015.

The Committee supports the Department's proposal for the Office of Cybersecurity, Energy Security, and Emergency Response to manage activities of the Naval Petroleum and Oil Shale Reserves.

STRATEGIC PETROLEUM RESERVE

Appropriation, 2021	\$188,000,000
Budget estimate, 2022	197,000,000
Recommended, 2022	197,000,000
Comparison:	
Appropriation, 2021	+9,000,000
Budget estimate, 2022	---

The mission of the Strategic Petroleum Reserve is to store petroleum to reduce the adverse economic impact of a major petroleum supply interruption to the United States and to carry out obligations under the international energy program.

The Committee directs the Department to maintain the Northeast Gasoline Supply Reserve.

The Committee supports the Department's proposal for the Office of Cybersecurity, Energy Security, and Emergency Response to manage the Strategic Petroleum Reserve.

No funding is requested for the establishment of a new regional petroleum product reserve, and no funding is provided for this purpose. Further, the Department may not establish any new regional petroleum product reserves unless funding for such a proposed regional petroleum product reserve is explicitly requested in advance in an annual budget request and approved by Congress in an appropriations Act.

The Committee notes that regional supply disruptions of petroleum products were examined in the first installment of the Quadrennial Energy Review. If the Department further examines issues related to potential regional shortages of petroleum products, the Department is encouraged to explore options for expanded salt cavern storage of petroleum products, including in the western United States.

SPR PETROLEUM ACCOUNT

Appropriation, 2021	\$1,000,000
Budget estimate, 2022	7,350,000
Recommended, 2022	7,350,000
Comparison:	
Appropriation, 2021	+6,350,000
Budget estimate, 2022	---

The SPR Petroleum Account funds Strategic Petroleum Reserve acquisition, transportation, and drawdown activities.

The Committee supports the Department’s proposal for the Office of Cybersecurity, Energy Security, and Emergency Response to manage the Strategic Petroleum Reserve.

NORTHEAST HOME HEATING OIL RESERVE

Appropriation, 2021	\$6,500,000
Budget estimate, 2022	---
Recommended, 2022	6,500,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	+6,500,000

The acquisition and storage of heating oil for the Northeast began in August 2000 when the Department of Energy, through the Strategic Petroleum Reserve account, awarded contracts for the lease of commercial storage facilities and acquisition of heating oil. The purpose of the reserve is to assure home heating oil supplies for the Northeastern States during times of very low inventories and significant threats to the immediate supply of heating oil. The Northeast Home Heating Oil Reserve was established as a separate entity from the Strategic Petroleum Reserve on March 6, 2001.

The Committee supports the Department’s proposal for the Office of Cybersecurity, Energy Security, and Emergency Response to manage the Northeast Home Heating Oil Reserve.

ENERGY INFORMATION ADMINISTRATION

Appropriation, 2021	\$126,800,000
Budget estimate, 2022	126,800,000
Recommended, 2022	129,087,000
Comparison:	
Appropriation, 2021	+2,287,000
Budget estimate, 2022	+2,287,000

The Energy Information Administration is a quasi-independent agency within the Department of Energy established to provide timely, objective, and accurate energy-related information to the Congress, the executive branch, state governments, industry, and the public.

The Committee encourages the Department to continue important data collection, analysis, and reporting activities on energy use and consumption, including the Commercial Buildings Energy Consumption Survey and the Residential Buildings Energy Consumption Survey.

The fiscal year 2021 Act directed the Department to provide a report on how the Energy Information Administration can supply increased data regarding the electricity consumption and emissions for retail electricity suppliers, and for cities, within city limits, served by an electric utility. The Committee is still awaiting this report and directs the Department to provide the report not later than 30 days after enactment of this Act.

NON-DEFENSE ENVIRONMENTAL CLEANUP

Appropriation, 2021	\$319,200,000
Budget estimate, 2022	338,860,000
Recommended, 2022	333,863,000
Comparison:	
Appropriation, 2021	+14,663,000
Budget estimate, 2022	-4,997,000

Non-Defense Environmental Cleanup includes funds to manage and remediate sites used for civilian, energy research, and non-defense related activities. These past activities resulted in radioactive, hazardous, and mixed waste contamination that requires remediation, stabilization, or some other action.

Small Sites.—The Committee provides \$124,340,000 for small sites, of which \$21,340,000 is for the Energy Technology Engineering Center (ETEC), \$11,000,000 is for Idaho National Laboratory, \$5,000,000 is for Lawrence Berkeley National Laboratory, and \$67,000,000 is for Moab.

ETEC.—The Committee is pleased with the progress of building demolition, including the recent agreement between the Department and the State of California to demolish the remaining buildings on site. The Committee remains concerned about the pace of soil and water remediation and acknowledges the need for compliance with the 2007 Consent Order and 2010 Administrative Order on Consent. The Committee expects the Department of Energy to prioritize the expenditure of funds needed to timely initiate and complete the required demolition of buildings in Area IV of the site and the cleanup of soil and water resources. The Committee encourages the Department to continue working with the State of California on cleanup of the Site. The Department is directed to continue to act in accordance with applicable laws, orders, regulations, and agreements with the state of California.

URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND

Appropriation, 2021	\$841,000,000
Budget estimate, 2022	831,340,000
Recommended, 2022	831,340,000
Comparison:	
Appropriation, 2021	-9,660,000
Budget estimate, 2022	---

The Uranium Enrichment Decontamination and Decommissioning Fund was established by the Energy Policy Act of 1992 to fund the cleanup of gaseous diffusion plants at Portsmouth, Ohio; Paducah, Kentucky; and the East Tennessee Technology Park in Oak Ridge, Tennessee.

Portsmouth Site.—The recommendation for Community and Regulatory Support includes \$500,000 above the budget request for the Department to establish a community liaison and to provide technical and regulatory assistance to the local community and surrounding counties. The Department is directed to continue its air and ground water monitoring efforts and increase the frequency of reporting results in a transparent manner. The Department is directed to develop a comprehensive land use plan in conjunction

with the surrounding counties that establishes a vision and coordinated objectives for the long-term use of the Portsmouth Site.

The Committee understands that a third-party effort is underway to collect environmental samples in the area. When the sampling effort is complete, the Department is directed to consult with the Agency for Toxic Substances and Disease Registry and provide to the Committee a briefing on the results.

SCIENCE

Appropriation, 2021	\$7,026,000,000
Budget estimate, 2022	7,440,000,000
Recommended, 2022	7,320,000,000
Comparison:	
Appropriation, 2021	+294,000,000
Budget estimate, 2022	- 120,000,000

The Office of Science funds basic science research across national laboratories, universities, and other research institutions in support of American innovation and the Department’s energy-focused missions. Through research in physics, biology, chemistry, and other science disciplines, these activities expand scientific understanding and secure the nation’s leadership in energy innovation. This basic science research is crucial to enabling the nation to continue developing transformational energy technologies and to position itself to seize economic opportunities in the global energy markets of the future. The Office of Science is the nation’s largest supporter of basic research in the physical sciences.

The Office of Science includes the following programs: Advanced Scientific Computing Research; Basic Energy Sciences; Biological and Environmental Research; Fusion Energy Sciences; High Energy Physics; Nuclear Physics; Isotope R&D and Production; Accelerator R&D and Production; Workforce Development for Teachers and Scientists; Science Laboratories Infrastructure; Safeguards and Security; and Program Direction. The Committee has placed a high priority on funding these activities in fiscal year 2022, given the private sector is not likely to fund research whose findings either have high non-commercial value or are not likely to be commercialized in the near or medium term. This work is vital to sustaining the scientific leadership of the United States and can provide the underpinnings for valuable intellectual property in the coming decades.

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

Artificial Intelligence and Machine Learning.—The recommendation includes not less than \$115,000,000 for Artificial Intelligence and Machine Learning. As the stewards of the leadership computing facilities, the Committee encourages Advanced Scientific Computing Research to play a lead role in the Department’s artificial intelligence and machine learning activities.

Biomedical Sciences.—Collaborative research efforts between the Department and the National Institutes of Health (NIH), including the National Institute of Mental Health (NIMH), are developing breakthroughs in health research, including drug discovery, brain research, innovative neurotechnologies, diagnostic technologies, and

other biomedical research areas. The Department is encouraged to expand its relationships with NIH, including NIMH, to work together more strategically to leverage the Department's research capabilities, including instrumentation, materials, modeling and simulation, and data science. The facilities and equipment funded in this Act support applications in many areas of biomedical research. Better coordination between the Department and NIH could be instrumental in assisting to develop the nation's health, security, and technologies with novel biomedical application. The recommendation includes not less than \$2,000,000 for collaboration with NIH within the Department's data and computational mission space.

Quantum Information Sciences.—The Committee supports the Office of Science's coordinated and focused research program in quantum information science and technology. This emerging field of science promises to yield revolutionary new approaches to computing, sensing, and communication. The recommendation provides not less than \$245,000,000 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. Within available funding, the Committee encourages the Department to support a quantum internet and communications research program consistent with the Department's "America's Blueprint for the Quantum Internet" strategy. The Department is directed to continue its coordination efforts with the 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.

The Committee directs the Department to be inclusive of all quantum information science technologies to ensure the research expands all possible research applications. Funded research should be inclusive of quantum technologies, including gate, annealing, topological, photonics, trapped ion, silicon, superconducting, and other viable quantum technologies. 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. The report should outline the breakdown of research funding across the available quantum computing technologies, including gate, annealing, topological, photonics, trapped ion, silicon, superconducting, and other viable quantum technologies.

Traineeships for Underrepresented Communities.—The Committee supports the Department's efforts to diversify the nuclear physics research community by offering research traineeships to underrepresented communities pursuing STEM undergraduate degrees. The Committee encourages the Department to especially recruit undergraduate students from Historically Black Colleges and Universities, Hispanic-Serving Institutions, Tribal Colleges and Universities, and Asian American and Pacific Islander Serving Institutions. The Department is directed to provide to the Committee not less than 90 days after enactment of this Act a briefing on its efforts; data on students' socioeconomic status, race, or ethnicity; and recommendations on how to expand this program across the Office of Science and more broadly across the Department.

Reaching a New Energy Sciences Workforce.—The Committee supports the new Reaching a New Energy Sciences Workforce (RENEW) initiative for targeted efforts to increase participation and retention of underrepresented groups in the Office of Science’s research activities. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act and quarterly thereafter briefings on implementation of this program.

ADVANCED SCIENTIFIC COMPUTING RESEARCH

The Advanced Scientific Computing Research program develops and hosts some of the world’s fastest computing and network capabilities to enable science and energy modeling, simulation, and research.

High Performance Computing and Network Facilities.—The recommendation provides not less than \$160,000,000 for the Argonne Leadership Computing Facility, \$250,000,000 for the Oak Ridge Leadership Computing Facility, and not less than \$115,000,000 for the National Energy Research Scientific Computing Center at Lawrence Berkeley National Laboratory. The recommendation includes not less than \$90,000,000 to support necessary infrastructure upgrades and operations for ESnet.

Mathematical, Computational, and Computer Sciences Research.—The recommendation provides not less than \$250,000,000 for Mathematical, Computational, and Computer Sciences Research, including not less than \$15,000,000 for computational sciences workforce programs.

The recommendation includes not less than \$10,000,000 and up to \$40,000,000 for the development of AI-optimized emerging memory technology for AI-specialized hardware allowing for new computing capabilities tailored to the demands of artificial intelligence systems.

BASIC ENERGY SCIENCES

The Basic Energy Sciences program funds basic research in materials science, chemistry, geoscience, and bioscience. The science breakthroughs in this program enable a broad array of innovation in energy technologies and other industries critical to American economic competitiveness.

Research.—The recommendation provides \$130,000,000 for Energy Frontier Research Centers, \$25,000,000 for the Experimental Program to Stimulate Competitive Research, \$25,000,000 for the Batteries and Energy Storage Innovation Hub, and not less than \$20,000,000 and up to \$25,000,000 for the Fuels from Sunlight Innovation Hub. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a plan to recapitalize and modernize needed infrastructure, instrumentation, and capabilities utilized by the Energy Innovation Hubs.

The Committee encourages the Office of Science to work with the Office of Energy Efficiency and Renewable Energy to address the need to quickly scale up efforts to develop cleaner production of hydrogen at lower costs to attract industrial investment.

The recommendation provides not less than \$535,000,000 for facilities operations of the nation’s light sources, not less than \$293,000,000 for facilities operations of the high-flux neutron

sources, and not less than \$142,000,000 for facilities operations of the Nanoscale Science Research Centers (NSRC).

The recommendation provides not less than \$14,300,000 for other project costs, including \$4,300,000 for Linac Coherent Light Source-II, \$5,000,000 for Advanced Photon Source Upgrade, \$3,000,000 for Linac Coherent Light Source-II HE, and \$2,000,000 for Cryomodule Repair & Maintenance Facility. The recommendation includes \$15,000,000 for NSRC Recapitalization.

The recommendation includes \$15,000,000 for NSLS II Experimental Tools-II. Commissioned in 2014, the NSLS II is currently the nation's most powerful synchrotron x-ray light source. While it was designed to accommodate 60 beamlines, just over half will have been constructed at the completion of NEXT II. The Department is directed to provide to the Committee not later than 120 days after enactment of this Act a plan and timeline for the design and construction of the beamlines necessary to complete the build-out of the NSLS II.

BIOLOGICAL AND ENVIRONMENTAL RESEARCH

The Biological and Environmental Research (BER) program supports advances in energy technologies and related science through research into complex biological and environmental systems.

The recommendation includes not less than \$390,000,000 for Biological Systems Science and not less than \$405,000,000 for Earth and Environmental Systems Sciences.

The recommendation provides up to \$5,000,000 to support university research efforts for the design and development of AI-inspired biological robots for a broad set of applications, including environmental remediation, chemical upcycling, energy-relevant biomaterials, and enabling technologies for basic biological sciences. The Department should focus on reducing the time and scaling up the processes required to design, manufacture, and deploy new kinds of biological machines for energy and environmental missions.

The Committee continues to support the prototyping and establishment of fabricated ecosystems, automation, sensors, and computational tools to enable a predictive understanding of soil-plant-microbe interactions across molecular to ecosystem scales. The novel tools and capabilities will accelerate discovery and speed the delivery of solutions to climate change, environmental sustainability, and clean energy. The recommendation provides not less than \$6,000,000 for fabricated ecosystems and sensors. Within available funds, the recommendation includes up to \$4,000,000 for second generation SmartSoils fabricated ecosystem testbeds, new sensors, and computational tools to enable real-time connectivity between lab-controlled, instrumented SmartSoil testbeds and naturally varying field experiments. Within available funds, the recommendation includes up to \$8,000,000 to develop and test novel sensor technologies, procure second generation EcoPOD units, and create the computational and experimental infrastructures necessary to dissect field observations at atomic and molecular levels in fabricated ecosystems.

The Committee supports the Department-wide Designing the Bioeconomy Initiative and directs the Department to develop Artifi-

cial Intelligence and Machine Learning tools and Design, Build, Test, Learn systems for the discovery and annotation of genes involved in the biosynthesis of inorganic and organic/inorganic biologically produced materials. [B. Lee]

The recommendation provides not less than \$100,000,000 for the Bioenergy Research Centers and up to \$15,000,000 to continue the development of a multi-scale genes-to ecosystems approach that supports a predictive understanding of gene functions and how they scale with complex biological and environmental systems.

The recommendation includes not less than \$10,000,000 for the low-dose radiation research program. The Department is directed to complete the required contract agreement with the National Academy of Sciences (NAS) to develop a plan for and to conduct a comprehensive, multi-year independent low-dose radiation research program. The Committee intends for this research plan to include a five-year program implementation outline and funding requirements. The plan shall include recommendations for the Department and other federal agencies, including collaborations with outside organizations. The research plan shall be developed in consultation with other federal agencies and qualified personnel representing industry and public interest stakeholders.

The Committee continues to support the Department's funding for colleges and universities to examine and evaluate earth system models and validate their ability to reproduce earth systems.

The Committee continues to support the Department's investment in observational studies, modeling, and computing to reduce the uncertainty in understanding cloud aerosol effects, and the recommendation includes not less than \$15,000,000 and up to \$30,000,000 to build upon this research. Within available funds, the Department is directed to support the modernization and acceleration of the Energy, Exascale, and Earth System Model program to improve earth system prediction and climate risk management in the service of U.S. public safety, security, and economic interests, including, in coordination with the Department of Homeland Security, evaluation of the modernization and adaptation of capabilities from the National Infrastructure Simulation and Analysis Center to support climate impacts on infrastructure and communities.

The recommendation includes not less than \$100,000,000 for Environmental System Science.

The recommendation includes not less than \$30,000,000 to continue the development of observational assets and support associated research on the nation's major land-water interfaces, including the Great Lakes and the Puget Sound, that leverages national laboratories' assets as well as local infrastructure and expertise at universities and other research institutions. The Department is directed to provide to the Committee not later than 120 days after enactment of this Act a ten-year research plan, including annual budget targets and justifications, for this integrated effort. The plan should identify investments in existing and new field sites that further the establishment of a national coastal observation network.

The Committee supports activities to advance AI for Earth System Processes for integrating diverse observations and models, in-

cluding a focus on extreme hydrology in vulnerable watersheds critical for U.S. water resilience in a changing climate. The Committee supports activities to develop integrated mountainous hydroclimate modeling and observational capabilities. The 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 United States.

Existing scientific and modeling approaches for understanding water-energy systems cannot accurately simulate and predict rapid changes and feedbacks between coupled water and energy systems in an uncertain future where extremes, such as droughts, floods, heat waves, and wildfires, are becoming more frequent, intense, and widespread. The Department is directed to support Regional Data, Modeling, and Analysis Test Beds targeted to universities with research competencies in water scarcity issues in dry regions of the United States.

The Department is directed to give priority to optimizing the operation of BER user facilities and encouraged to examine needs for additional capabilities at its existing user facilities.

FUSION ENERGY SCIENCES

The Fusion Energy Sciences program supports basic research and experimentation aiming to harness nuclear fusion for energy production.

The Committee appreciates the fusion community's process to develop a comprehensive long-range strategic plan developed through a consensus process. The Committee directs the Department to follow and embrace the recommendations of the Fusion Energy Sciences Advisory Committee's "Powering the Future: Fusion and Plasmas" report, and the Committee endeavors to provide funding that reflects the prioritization developed through the community's consensus process. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on how the Department is aligning its Fusion Energy Sciences program with the recommendations of the "Powering the Future: Fusion and Plasmas" report.

Research.—The recommendation provides not less than \$20,000,000 for High Energy Density Laboratory Plasmas, including activities for LaserNetUS; not less than \$59,000,000 for NSTX-U Operations; and not less than \$33,000,000 for NSTX-U Research.

The recommendation includes up to \$45,000,000 for the Milestone-Based Development Program as authorized in section 2008 of the Energy Act of 2020. The Department is directed to support these activities at a level commensurate with the prioritization recommended in the "Powering the Future: Fusion and Plasmas" report. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing on how the authorities provided in the Milestone-Based Development Program can be applied to the prioritized activities recommended in the "Powering the Future: Fusion and Plasmas" report.

The Committee notes the long-range plan includes consideration of the development of a stellarator facility, and the Department is

directed to support these activities at a level commensurate with the prioritization in the “Powering the Future: Fusion and Plasmas” report developed through the community’s consensus process.

The recommendation provides not less than \$25,000,000 for the Materials Plasma Exposure experiment.

Construction.—The Committee recommends \$242,000,000 for the U.S. contribution to the ITER project, of which not less than \$80,000,000 is for in-cash contributions. The Committee continues to believe the ITER project represents an important step forward for energy sciences and has the potential to revolutionize the current understanding of fusion energy. The fiscal year 2021 Act directed the Department to provide to the Committee the performance baseline for the entire project, including an updated baseline for Subproject 1 and a baseline for Subproject 2. The Committee is still awaiting this information, and the Department is directed to provide this information not later than 30 days after enactment of this Act.

The Committee provides funding for the Matter in Extreme Conditions Upgrade at a level commensurate with the prioritization in the “Powering the Future: Fusion and Plasmas” report developed through the community’s consensus process.

HIGH ENERGY PHYSICS

The High Energy Physics program supports fundamental research into the elementary constituents of matter and energy and ultimately into the nature of space and time. The program focuses on particle physics theory and experimentation in three areas: the energy frontier, which investigates new particles and fundamental forces through high-energy experimentation; the intensity frontier, which focuses on rare events to better understand our fundamental model of the universe’s elementary constituents; and the cosmic frontier, which investigates the nature of the universe and its form of matter and energy on cosmic scales.

Research.—The recommendation provides not less than \$30,000,000 for the Sanford Underground Research Facility and not less than \$20,000,000 for Cosmic Microwave Background-Stage 4.

The Committee strongly encourages the Department to maintain a balanced portfolio of small-, medium-, and large-scale experiments and to ensure adequate funding for research performed at universities and the national laboratories. The Committee encourages the Department to fund facility operations at levels for optimal operations.

NUCLEAR PHYSICS

The Nuclear Physics program supports basic research into the fundamental particles that compose nuclear matter, how they interact, and how they combine to form the different types of matter observed in the universe today.

Research.—The Department is directed to give priority to optimizing operations for all Nuclear Physics user facilities.

The recommendation provides up to \$12,500,000 for the Gamma-Ray Energy Tracking Array, up to \$13,000,000 for the High Rigidity Spectrometer, and up to \$16,200,000 for MOLLER.

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 supports the FRIB Isotope Harvesting projects.

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

The Workforce Development for Teachers and Scientists program ensures that the nation has the sustained pipeline of science, technology, engineering, and mathematics (STEM) workers to meet national goals and objectives.

The Committee recommends \$35,000,000 for Workforce Development for Teachers and Scientists.

The Committee encourages the Department, in collaboration with the national laboratories, to support engagement with high schools locally and across the nation through impactful interactions with national laboratory employees, work-based learning, experiential activities, and emerging technology programs. In support of the Department's and national laboratories' diversity goals, these pre-college programs should address the specific needs of each laboratory's regional community. Programs should directly support and prioritize participation from underrepresented racial and ethnic groups in STEM and people with disabilities. The programs may also address gaps in educational programming and opportunities for students in under resourced and rural school districts.

Further, the Department is directed to submit to the Committee not later than 120 days after enactment of this Act a plan describing a five-year educational and workforce development program for expanding engagement with and support for high school, undergraduate, and graduate students as well as recent graduates, teachers, and faculty in STEM fields. This plan may include paid internships, fellowships, temporary employment, training programs, visiting student and faculty programs, sabbaticals, and research support. The plan shall also include an outreach strategy to more effectively advertise, recruit, and promote educational and workforce programs to community colleges, Minority Serving Institutions, and non-research universities.

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.

The fiscal year 2021 Act directed the Department to submit to the Committee a report on the funding levels required for operations and maintenance of Oak Ridge National Laboratory nuclear facilities. The Committee is still awaiting this report and directs the Department to provide the report not later than 15 days after enactment of this Act.

NUCLEAR WASTE DISPOSAL

Appropriation, 2021	\$27,500,000
Budget estimate, 2022	7,500,000
Recommended, 2022	27,500,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	+20,000,000

The recommendation includes \$27,500,000 for Nuclear Waste Disposal, of which \$20,000,000 is for interim storage and \$7,500,000 is for Nuclear Waste Fund (NWF) oversight activities. Funds for NWF oversight activities are derived from the NWF.

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.

The Committee also notes that spent nuclear fuel is in many cases located near Indian reservations and cities. As the Department moves forward with planning for an integrated system for the nation's spent nuclear fuel, the Committee encourages the Department to include planning for the removal of spent nuclear fuel from sites located near Indian reservations and cities.

TECHNOLOGY TRANSITIONS

Appropriation, 2021	\$---
Budget estimate, 2022	19,470,000
Recommended, 2022	19,470,000
Comparison:	
Appropriation, 2021	+19,470,000
Budget estimate, 2022	---

The budget request proposes a separate appropriation for the Office of Technology Transitions (OTT). The mission of OTT is to expand the commercial and public impact of the research investments of the Department, and OTT enhances the public return on investment in the Department's technology portfolio, including the national laboratories, through a suite of outcome-oriented activities that enable climate change mitigation, job creation, and commercialization of technologies developed by the Department.

The Committee supports funding OTT through a new, separate appropriation to increase transparency and reflect the need for multi-year funding for programmatic activities.

The recommendation provides not less than \$5,000,000 for a competitive funding opportunity for incubators supporting energy innovation clusters. These incubators should have the support of state, regional, and local entities. The Department is directed to provide to the Committee not later than 120 days after obligation of these funds a report on the impact incubators have on job creation and

workforce development, including in low-income communities and on underrepresented entrepreneurs.

CLEAN ENERGY DEMONSTRATIONS

Appropriation, 2021	\$ --
Budget estimate, 2022	400,000,000
Recommended, 2022	200,000,000
Comparison:	
Appropriation, 2021	+200,000,000
Budget estimate, 2022	- 200,000,000

The budget request proposes to establish an Office of Clean Energy Demonstrations (OCED) to accelerate the maturation of near- and mid-term clean energy technologies and systems with the goal of quicker commercial adoption and increased availability. This will be accomplished through a systematic approach that is informed by, and integrated with, existing clean energy innovation initiatives across the Department’s program and functional offices, sites, and national laboratories.

The Committee supports the establishment of an Office of Clean Energy Demonstrations. The Department is directed to conduct these 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.

ADVANCED RESEARCH PROJECTS AGENCY—ENERGY

Appropriation, 2021	\$427,000,000
Budget estimate, 2022	500,000,000
Recommended, 2022	600,000,000
Comparison:	
Appropriation, 2021	+173,000,000
Budget estimate, 2022	+100,000,000

The Advanced Research Projects Agency—Energy (ARPA-E) supports research aimed at rapidly developing energy technologies whose development and commercialization are too risky to attract sufficient private sector investment but are capable of significantly changing the energy sector to address our critical economic, environmental, and energy security challenges. The technology breakthroughs funded by ARPA-E have significant commercial impact and have received billions of dollars in private-sector funding to continue to advance those technologies toward the marketplace. Projects funded by ARPA-E include wide-ranging areas such as production processes for transportation fuel alternatives that can reduce our dependence on imported oil, low-cost electric aviation technologies, enhancing the environmental and economic potential of crop roots, and accelerating the development of commercial fusion energy.

The budget request proposes the establishment of an Advanced Research Projects Agency—Climate (ARPA-C). However, the budget request justification notes that ARPA-C will require legislation beyond the current ARPA-E authorization. The Committee notes that ARPA-E has authority “to address the energy and environmental missions of the Department,” according to section 5012 of the America COMPETES Act. This includes climate-related innova-

tions, and further, the Committee notes that ARPA-E already funds such activities. The Department is directed to conduct the proposed activities through ARPA-E. Additionally, the budget request proposes funds for other federal agencies in support of ARPA-C's mission. The Department is directed to support and coordinate any such efforts through ARPA-E.

The Committee supports the recent activities of ARPA-E aimed to support the scaling of high-risk and potentially disruptive ARPA-E funded technologies across the full spectrum of energy applications.

TITLE 17 INNOVATIVE TECHNOLOGY LOAN GUARANTEE PROGRAM

ADMINISTRATIVE EXPENSES

GROSS APPROPRIATION

Appropriation, 2021	\$32,000,000
Budget estimate, 2022	182,000,000
Recommended, 2022	32,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	- 150,000,000

OFFSETTING COLLECTIONS

Appropriation, 2021	-\$3,000,000
Budget estimate, 2022	- 3,000,000
Recommended, 2022	- 3,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

NET APPROPRIATION

Appropriation, 2021	\$29,000,000
Budget estimate, 2022	179,000,000
Recommended, 2022	29,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	- 150,000,000

The recommendation includes a net appropriation of \$29,000,000 in administrative expenses for the Loan Guarantee Program.

ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PROGRAM

Appropriation, 2021	\$5,000,000
Budget estimate, 2022	5,000,000
Recommended, 2022	5,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

The Energy Independence and Security Act of 2007 established a direct loan program to support the development of advanced technology vehicles and associated components in the United States. The program provides loans to automobile and automobile part manufacturers for the cost of re-equipping, expanding, or establishing manufacturing facilities in the United States to produce advanced technology vehicles or qualified components, and for associated engineering integration costs. The Committee remains dis-

appointed with the rescission of emergency balances included in Public Law 116–260.

TRIBAL ENERGY LOAN GUARANTEE PROGRAM

Appropriation, 2021	\$2,000,000
Budget estimate, 2022	2,000,000
Recommended, 2022	2,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

The Energy Policy Act of 2005 established a loan guarantee program for energy development to provide or expand electricity on Indian land. The Department is encouraged to take formal steps to market this program and ensure the program’s availability, benefits, and application process are made known to potential applicants who are ready to seek financing.

INDIAN ENERGY POLICY AND PROGRAMS

Appropriation, 2021	\$22,000,000
Budget estimate, 2022	122,000,000
Recommended, 2022	70,000,000
Comparison:	
Appropriation, 2021	+48,000,000
Budget estimate, 2022	-52,000,000

The Energy Policy Act of 2005 established the Office of Indian Energy and Policy Programs. The Office of Indian Energy provides technical assistance, direct and remote education, policy research and analysis, and financial assistance to Indian tribes, Alaska Native Village and Regional corporations, and Tribal Energy Resource Development Organizations.

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 applicable. The Committee encourages the Department to coordinate with other federal agencies to increase outreach about the availability of the assistance of the Office of Indian Energy Policy and Programs.

The recommendation provides not less than \$25,000,000 to advance technical assistance, demonstration, and deployment of distributed solar and energy storage technologies 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 directed to collaborate with the Office of Energy Efficiency and Renewable Energy, including the Solar Energy Technologies Office, and the Office of Electricity in issuing these funds.

DEPARTMENTAL ADMINISTRATION

GROSS APPROPRIATION

Appropriation, 2021	\$259,378,000
Budget estimate, 2022	422,378,000
Recommended, 2022	372,578,000
Comparison:	
Appropriation, 2021	+113,200,000
Budget estimate, 2022	-49,760,000

REVENUES

Appropriation, 2021	-\$93,378,000
Budget estimate, 2022	-100,578,000
Recommended, 2022	-100,578,000
Comparison:	
Appropriation, 2021	-7,200,000
Budget estimate, 2022	- - -

NET APPROPRIATION

Appropriation, 2021	\$166,000,000
Budget estimate, 2022	321,760,000
Recommended, 2022	272,000,000
Comparison:	
Appropriation, 2021	+106,000,000
Budget estimate, 2022	-49,760,000

Funding recommended for Departmental Administration provides for general management and program support functions benefiting all elements of the Department, including the National Nuclear Security Administration. The account funds a wide array of Headquarters activities not directly associated with the execution of specific programs. The recommendation includes eight reprogramming control points in this account to provide flexibility in the management of support functions. Other Departmental Administration includes Management, Project Management Oversight and Assessments, Chief Human Capital Officer, Office of Small and Disadvantaged Business Utilization, General Counsel, Office of Policy, and Public Affairs. The Department is directed to continue to submit a budget request that proposes a separate funding level for each of these activities.

Within available funds, the recommendation includes up to \$5,000,000 to leverage commercial technologies and carry out pilot projects related to implementation of the requirements under Title II of the Foundations for Evidence-Based Policymaking Act (Public Law 115-435).

Economic Impact and Diversity.—The Committee supports the Office of Economic Impact and Diversity’s role in driving new initiatives to achieve energy equity and environmental justice across the Department and recognizes the office’s increased responsibilities of implementing Executive Orders 13985, 13988, and 14008. Therefore, the recommendation provides \$20,000,000 for the Office of Economic Impact and Diversity, \$9,831,000 above fiscal year 2021 and equal to the budget request.

Chief Information Officer.—The Committee notes the importance of prioritizing funding for cybersecurity activities at a time when cyber threats to the Department’s facilities, sites, and national laboratories are increasing. Within available funds, the recommenda-

tion provides not less than \$71,800,000 for cybersecurity and secure information. In addition, the recommendation provides not less than \$55,000,000 to address the impacts of the SolarWinds incident across the Department.

International Affairs.—Within available funds, the recommendation includes \$6,000,000 to continue implementation of the U.S.-Israel Energy Cooperative Agreement and to develop the U.S.-Israel Energy Center.

The Committee is supportive of the Department’s continued work in energy cooperation with Ukraine, including providing technical assistance in developing winter action plans and the current effort to assist with a national energy resiliency plan. The Committee encourages additional work in areas of importance to both countries, including technical assistance support for Ukrainian national energy security strategies and development of low carbon sources of energy.

Other Departmental Administration.—The recommendation provides not less than \$25,000,000 for the Chief Human Capital Officer, up to \$38,000,000 for the General Counsel, not less than \$13,000,000 for Project Management Oversight and Assessments, not less than \$3,500,000 for the Office of Small and Disadvantaged Business Utilization, and not less than \$4,000,000 for Public Affairs. The Department is directed to provide to the Committee not later than 30 days after enactment of this Act the briefing required in the fiscal year 2021 Act detailing how it plans to address GAO’s high-risk concerns.

U.S. Energy and Employment Report.—The Department is directed to continue to complete an 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 shall 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 Department is directed to produce and release this report annually.

OFFICE OF THE INSPECTOR GENERAL

Appropriation, 2021	\$57,739,000
Budget estimate, 2022	78,000,000
Recommended, 2022	78,000,000
Comparison:	
Appropriation, 2021	+20,261,000
Budget estimate, 2022	— — —

The Office of the Inspector General performs agency-wide audit, inspection, and investigative functions to identify and correct management and administrative deficiencies that create conditions for existing or potential instances of fraud, waste, and mismanagement. The audit function provides financial and performance audits of programs and operations. The inspections function provides independent inspections and analyses of the effectiveness, efficiency, and economy of programs and operations. The investigative function provides for the detection and investigation of improper and illegal activities involving programs, personnel, and operations.

The Committee notes the release of the April 2021 Special Report dealing with audits of the Department’s Management and Oper-

ating (M&O) contractors, which drives the budget request increase. The Committee does not question the Inspector General’s authority to develop a new audit strategy and appreciates the attention to this matter. The Committee has heard concerns about how this strategy will be implemented. Prior to obligating any funds for the independent audit strategy, the Inspector General shall submit to the Committee a detailed implementation plan for transitioning from the Cooperative Audit Strategy to the independent audit strategy, including hiring of new federal employees, metrics for how the Office of the Inspector General will measure success, the extent of the need for access to contractor systems, and how the independent audit strategy will be phased in across the Department’s 32 M&Os. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act, and quarterly thereafter, a briefing on the implementation of the independent audit strategy.

ATOMIC ENERGY DEFENSE ACTIVITIES

The Atomic Energy Defense Activities programs of the Department in the National Nuclear Security Administration (NNSA) consist of Weapons Activities, Defense Nuclear Nonproliferation, Naval Reactors, and Federal Salaries and Expenses. Outside of the NNSA, Atomic Energy Defense Activities programs include Defense Environmental Cleanup, Defense Uranium Enrichment Decontamination and Decommissioning, and Other Defense Activities. Descriptions of each of these accounts are provided below.

NATIONAL NUCLEAR SECURITY ADMINISTRATION

The Department of Energy is responsible for enhancing U.S. national security through the military application of nuclear technology and reducing the global danger from the proliferation of weapons of mass destruction. The NNSA, a semi-autonomous agency within the Department, carries out these responsibilities. Established in March 2000, pursuant to title 32 of the National Defense Authorization Act for fiscal year 2000, the NNSA is responsible for the management and operation of the nation’s nuclear weapons complex, nuclear nonproliferation activities, and naval reactors.

The Committee encourages the NNSA to coordinate with the Department of Defense regarding a nuclear scenario wargame that includes participation of Congressional members to both participate in and observe table-top exercises and other scenario-based, non-training exercises.

WEAPONS ACTIVITIES

Appropriation, 2021	\$15,345,000,000
Budget estimate, 2022	15,484,295,000
Recommended, 2022	15,484,295,000
Comparison:	
Appropriation, 2021	+139,295,000
Budget estimate, 2022	---

Weapons Activities ensures the safety, security, reliability, and effectiveness of the nation’s nuclear weapons stockpile without nuclear explosive testing. These activities are funded by five main ele-

ments: Stockpile Management; Production Modernization; Stockpile Research, Technology, and Engineering; Infrastructure and Operations; and Security functions.

The Committee notes that the Administration is moving forward with a nuclear posture review and encourages the Administration to ensure that the review and future budget requests reflect a sustainable path forward for the NNSA so it can deliver on its budget and schedule commitments. In conducting this review, the Administration is encouraged to appropriately value the role of science and technology in sustaining the stockpile without the need for testing, which is too often marginalized in budget requests. The Committee is concerned that the focus on refurbishing and building new warheads, along with the plutonium pit production mission, has resulted in significant downward pressure on other critical activities within Defense Programs, including science and infrastructure. Continuing this unbalanced funding strategy is not sustainable. Additionally, the Committee urges the Administration to ensure that military requirements align to what the NNSA can realistically achieve.

Integrated Priorities Report.—The fiscal year 2021 Act directed the NNSA to provide with its budget request an Integrated Priorities Report (IPR). The Committee is still awaiting this report and directs the NNSA to provide the IPR not later than 30 days after enactment of this Act and with the annual budget request thereafter. In light of the NNSA's increasing and highly interdependent workload, which requires significant investments to reconstitute key capabilities and materials, recapitalize infrastructure and construct new facilities, and modernize cyber and physical security, the Committee considers the IPR critical to its oversight role.

STOCKPILE MANAGEMENT

Stockpile Management includes all activities that directly sustain and modernize the nuclear stockpile. These activities include maintenance, operations, surveillance, dismantlement, and weapon acquisition programs including life extensions, modifications, and alterations.

Stockpile Major Modernization and Sustainment Activities.—No funding is provided for the B83–1 service life extension or the W80–4 Alteration for the Sea-Launched Cruise Missile. The Committee considers these proposed investments premature pending the nuclear posture review.

Joint Nuclear Weapons Lifecycle Process.—The Committee remains concerned the existing joint nuclear weapons lifecycle process lacks modern management controls such as upfront planning, analyses of alternatives that meet GAO best practices, and earlier cost estimating. The Committee remains further concerned that some of these controls are optional and are not consolidated within one Departmental order or directive. Additionally, parts of the lifecycle process have not been exercised in decades. The Committee looks forward to receiving the Office of Cost Estimating and Program Evaluation (CEPE) Joint Nuclear Weapons Lifecycle Process assessment directed in the fiscal year 2021 Act, as well as the NNSA's briefing on its plans to incorporate CEPE's recommendations.

PRODUCTION MODERNIZATION

Production Modernization includes all activities needed to restore and modernize production capabilities. These activities include restoring and modernizing the capability to produce primaries, secondaries, and non-nuclear components.

Comprehensive Critical Materials Strategy.—The U.S. nuclear security strategy requires access to a variety of nonnuclear materials that remain critical to national security, including beryllium. The Committee is pleased that the NNSA is moving forward with upgrading its production and processing capacity for these critical non-nuclear materials, including by leveraging commercial technologies and capabilities.

Plutonium Modernization.—Within funds provided, not less than \$10,000,000 shall be for workforce development and training partnerships with Historically Black Colleges and Universities, Hispanic-Serving Institutions, and Tribal Colleges and Universities in South Carolina and New Mexico to support plutonium pit production.

Plutonium Pit Production.—The budget request proposes significant funding increases for operations and construction to support plutonium pit production. The Committee notes that the two construction projects that will support pit production at Los Alamos and Savannah River have recently achieved the Critical Decision-1 milestone with increased projected cost estimates and, in the case of Savannah River, a timeline that will stretch beyond 2030. These substantial investments and the timeline underscore the need for a resource-loaded integrated master schedule (IMS) that includes all pit production-related project and program activities. The IMS was directed by the fiscal year 2021 Act and has not been received by the Committee. The NNSA is directed to submit the IMS to the Committee not later than 15 days after enactment of this Act.

Additionally, the Committee remains concerned about contingency planning given the timeline for achieving 80 pits per year will stretch beyond 2030. Given the NNSA's continuing challenges in constructing large, complex nuclear facilities on time and on budget, coupled with the extremely constrained timeframe and planned use of expedited processes and procedures, the risk of not meeting pit production milestones remains high. The Committee has not received the contingency plan required in the fiscal year 2021 Act and directs the NNSA to provide the plan not later than 15 days after enactment of this Act. The NNSA is reminded that this plan shall be updated and submitted annually with the budget request.

University Collaboration.—The Committee notes the importance of collaborations between research universities and national laboratories as the NNSA modernizes manufacturing and production capabilities and is pleased with the progress in establishing the Center of Excellence regarding lifetime extension and materials degradation issues. The recommendation provides \$10,000,000 to continue these efforts, including developing a recruiting pipeline capability across the national security enterprise.

STOCKPILE RESEARCH, TECHNOLOGY, AND ENGINEERING

Stockpile Research, Technology, and Engineering (SRT&E) includes all activities to strengthen science-based stockpile stewardship capabilities to annually certify and assess the stockpile. These activities include assessments, advanced computing and manufacturing, experimental capabilities, and academic partnerships.

Academic Programs.—Within Academic Programs, \$40,000,000 shall be for the Minority Serving Institution Partnership Program and \$5,000,000 shall be for Tribal Colleges and Universities. The Committee encourages the NNSA to partner with ZNetUS to explore opportunities in pulsed-power high energy density research and development. The NNSA is directed to provide to the Committee not later than 120 days after enactment of this Act a briefing on its plans to work with ZNetUS to facilitate user access to national pulsed-power facilities.

Inertial Confinement Fusion (ICF) and High Yield.—Within the ICF program, the recommendation includes not less than \$350,000,000 for the National Ignition Facility, not less than \$66,900,000 for the Z Facility, and not less than \$83,000,000 for the OMEGA Laser Facility. Within funds provided for Facility Operations, not less than \$33,000,000 shall be for the NNSA to manage target development and acquisition. The Committee notes the importance of the ICF program and the aging nature of the facilities. The NNSA is directed to provide to the Committee not later than 120 days after enactment of this Act a strategic plan for recapitalizing, upgrading, and maintaining ICF facilities. This plan shall include cost estimates and a reasonable timeframe for implementation.

Advanced Simulation and Computing.—Within funds provided for Advanced Simulation and Computing, \$25,000,000 shall be for research in, and leading to the development of, memory technologies that will drive 40X performance gains beyond that achieved by exascale computing systems for critical mission applications.

Stockpile Responsiveness Program.—The fiscal year 2021 Act directed the NNSA to submit to the Committee an annual report with the budget request that includes a detailed accounting and status of each program, project, and activity within the program. The NNSA has proposed meeting this reporting requirement by expanding the annual Stockpile Stewardship and Management Plan (SSMP) as necessary. The Committee notes that the SSMP does not typically accompany the annual budget request, and therefore does not offer a useful and timely companion to the budget. The Committee reiterates the fiscal year 2021 direction and expects to receive timely updates on the status of any new and existing tasks, studies, and assessments.

SECURE TRANSPORTATION ASSET

The Secure Transportation Asset (STA) program provides safe and secure transportation of nuclear weapons, weapon components, and special nuclear material throughout the nuclear security enterprise. The STA workforce includes federal agents and program management staff.

INFRASTRUCTURE AND OPERATIONS

Infrastructure and Operations provides funding for the base operations, maintenance, and recapitalization of the NNSA’s facilities and infrastructure.

The NNSA is encouraged to accelerate activities necessary to prepare the Beta-4 facility at Y-12 for deactivation and demolition as it moves forward with the West End Protected Area Reduction project.

LEGACY CONTRACTOR PENSIONS

The Committee provides \$78,656,000 for payments into the legacy University of California contractor employee defined benefit pension plans.

DEFENSE NUCLEAR NONPROLIFERATION

Appropriation, 2021	\$2,260,000,000
Budget estimate, 2022	1,934,000,000
Recommended, 2022	2,340,000,000
Comparison:	
Appropriation, 2021	+80,000,000
Budget estimate, 2022	+406,000,000

DEFENSE NUCLEAR NONPROLIFERATION

Funding for the Office of Defense Nuclear Nonproliferation is provided across five programs: Global Material Security, Material Management and Minimization, Nonproliferation and Arms Control, Defense Nuclear Nonproliferation R&D, and Nonproliferation Construction.

In concert with the NNSA’s efforts to implement a safe, secure, and cost-effective approach to dispose of surplus plutonium, the Committee encourages efforts to engage the interagency and international partners as appropriate on mutually beneficial plutonium disposition protocols.

Global Material Security.—The recommendation includes not less than \$38,000,000 for the Green Border Security Initiative within the Nuclear Smuggling Detection and Deterrence program. The Committee recognizes the importance of improving the security of border crossings to prevent nuclear smuggling and accelerating partnerships, particularly within Eastern Europe. Within available funds for Domestic Radiological Security, the recommendation provides not less than \$25,000,000 for the Cesium Irradiator Replacement Project. The Committee notes the importance of accelerating the removal of cesium devices to permanently reduce the risk of terrorist use of a radiological dispersal device in the U.S.

Nuclear Smuggling Detection and Deterrence.—The Nuclear Smuggling Detection and Deterrence program plays a critical role in assisting partner countries to detect, disrupt, and investigate the smuggling of radioactive and nuclear materials. The Committee notes the critical importance of this program’s efforts to recapitalize equipment as necessary to meet mission needs.

Defense Nuclear Nonproliferation Research and Development (DNN R&D).—The recommendation includes funding above the budget request to advance U.S. space-based capabilities to detect nuclear detonations. The Committee notes the importance of the

University Consortia and Nonproliferation Stewardship programs and includes \$20,000,000 for the University Consortia for Nuclear Nonproliferation Research. The Committee supports the budget request for a new consortium, and the NNSA is encouraged to consider quantum-enabled nuclear security technologies for advanced nuclear systems as it works to establish a new consortium.

The fiscal year 2021 Act directed the NNSA to evaluate and brief the Committee on the establishment of a nuclear materials processing test bed capability to address proliferation concerns within the evolving civilian nuclear fuel cycle. The Committee is still awaiting this briefing and directs the NNSA to provide the briefing not later than 30 days after enactment of this Act.

The Committee supports the budget proposal to realign National Technical Nuclear Forensics R&D within DNN R&D. The fiscal year 2021 Act directed the NNSA to develop and brief the Committee on a threat-informed strategic plan for its National Technical Nuclear Forensics R&D work, with near- and long-term research and development milestones that have been coordinated with stakeholders, and describes how R&D, counterterrorism, and counterproliferation activities will be integrated. The Committee is still awaiting this briefing and directs the NNSA to provide the briefing not later than within 30 days after enactment of this Act. The NNSA is reminded that the plan shall evaluate potential mission need and benefits of establishing a low-background radiation laboratory capability with access to Category I special nuclear materials representative of both weapons and commercial uses to support activities such as accelerator-based photonuclear, neutron activation, chemistry and isotope separation, treaty verification, and technical capabilities enabling emergency response, including a cost estimate. The recommendation also includes \$20,000,000 within Nonproliferation Fuels Development to develop high-density, low-enriched fuels that could replace highly enriched uranium for naval applications.

NUCLEAR COUNTERTERRORISM AND INCIDENT RESPONSE

The NNSA’s Nuclear Counterterrorism and Incident Response programs respond to and mitigate nuclear and radiological incidents worldwide to reduce the threat of nuclear terrorism.

LEGACY CONTRACTOR PENSIONS

The Committee provides \$38,800,000 for payments into the legacy University of California contractor employee defined benefit pension plans.

NAVAL REACTORS

(INCLUDING TRANSFER OF FUNDS)

Appropriation, 2021	\$1,684,000,000
Budget estimate, 2022	1,860,705,000
Recommended, 2022	1,866,705,000
Comparison:	
Appropriation, 2021	+182,705,000
Budget estimate, 2022	+6,000,000

The Naval Reactors program is responsible for all aspects of naval nuclear propulsion from technology development through reactor operations to ultimate reactor plant disposal. The program provides for the design, development, testing, and evaluation of improved naval nuclear propulsion plants and reactor cores.

The recommendation fully funds the request to develop the Columbia-Class submarine, to refuel the S8G prototype, and continue the Spent Fuel Handling Recapitalization Project.

Naval Reactors Development.—Within available funds for Naval Reactors Development, \$92,747,000 is transferred to the Office of Nuclear Energy for Advanced Test Reactor operations.

FEDERAL SALARIES AND EXPENSES

Appropriation, 2021	\$443,200,000
Budget estimate, 2022	464,000,000
Recommended, 2022	464,000,000
Comparison:	
Appropriation, 2021	+20,800,000
Budget estimate, 2022	---

The Federal Salaries and Expenses account provides salaries, corporate planning, oversight, and management for Defense Programs, Defense Nuclear Nonproliferation, and the NNSA field offices in New Mexico, Nevada, Missouri, Tennessee, Texas, South Carolina, and California.

Human Capital Management.—The Committee notes the success of the NNSA’s partnership with its Management and Operating contractors to coordinate enterprise-wide recruiting efforts. However, the Committee remains concerned about the NNSA’s ability to meet its federal staffing requirements, a challenge that poses risk to successfully managing a nuclear modernization effort unprecedented in its scope and complexity. The NNSA is directed to continue providing the Committee monthly updates on the status of hiring and retention.

ENVIRONMENTAL AND OTHER DEFENSE ACTIVITIES

DEFENSE ENVIRONMENTAL CLEANUP

Appropriation, 2021	\$6,426,000,000
Budget estimate, 2022	6,841,670,000
Recommended, 2022	6,592,000,000
Comparison:	
Appropriation, 2021	+166,000,000
Budget estimate, 2022	-249,670,000

The Defense Environmental Cleanup account provides funding for identifying and reducing risks and managing waste at sites where the nation carried out defense-related nuclear research and production activities that resulted in radioactive, hazardous, and mixed waste contamination requiring remediation, stabilization, or some other cleanup action.

Within available funds, \$10,000,000 is provided to fund the hazardous waste worker training program.

While the budget request for Defense Environmental Cleanup included increases at some sites, those increases were at the expense of other important cleanup activities at sites including Hanford, Idaho, and Oak Ridge. The recommendation continues to fund a

balanced approach that sustains the momentum of ongoing cleanup activities more consistently across all Department cleanup sites.

Hanford Site.—The recommendation includes funds above the budget request for the Office of River Protection to support stable funding for cleanup activities at the Hanford Site.

The Department is directed to carry out maintenance and public safety efforts at historical sites, including the B Reactor. This includes facility improvements including replacement of the B Reactor roof. Within available funds, not less than \$8,500,000 is provided for the Hazardous Materials Management and Emergency Response facilities.

The Department is reminded that meeting the Consent Decree milestone for operations of Direct Feed Low Activity Waste must remain the Department's top focus within the Office of River Protection. The Committee remains concerned about the projected costs and timelines identified in the Department's 2019 Hanford Lifecycle Scope, Schedule, and Cost Report. This report estimates the total cost of Hanford cleanup to be between \$322 and \$677 billion, with a potential completion date of 2079. This timeline could leave local communities at risk for an unnecessarily long period of time, and the Committee is concerned that projected funding needs are not realistically achievable. The Department, in partnership with its regulators, tribes, and other stakeholders, is encouraged to seriously consider all cleanup options that have the potential to reduce costs and safely expedite cleanup while protecting public health and the environment. The Committee notes that the budget request includes \$7,000,000 for low level waste offsite disposal and that fiscal year 2020 funds are still available for this purpose. The Department shall provide notice to the Committee if any additional funds are proposed for this project, including the amount and source of funds.

Idaho National Laboratory.—The Committee supports the Department's efforts to analyze alternatives for the future of spent fuel facilities at Idaho to include multi-purpose canisters. The Committee encourages expediency in its review and expects regular updates from the Department. Within available funding, up to \$15,000,000 is for a road-ready, dry storage packaging pilot project using multi-purpose canisters and existing infrastructure.

Savannah River Site.—Within funds for Risk Management Operations, not less than \$3,000,000 is for disposition of spent fuel from the High Flux Isotope Reactor. The Committee supports the budget request for H-Canyon operations, which continues operations at the fiscal year 2021 level. The Committee further supports the budget request for remediation of the D-Area. The Committee notes that the transition to a separate contract for the Savannah River National Laboratory (SRNL) could impact overhead rates traditionally paid by users of the laboratory, including Departmental programs. The Department is directed to propose to the Committee not later than 60 days after enactment of this Act a method or methods for funding SRNL radiological facilities that mitigates, to the extent practicable, the impacts to overhead rates to users of the laboratory. The Department shall include an option for direct funding of these facilities and include information on the benefits to all users

of such facilities and ensure that the relevant users would pay a share proportional to their use.

Nevada.—The recommendation includes \$15,000,000 for improved real time radiography equipment to support enhanced low-level radioactive waste verification and oversight.

Waste Isolation Pilot Plant (WIPP).—The fiscal year 2021 Act directed the Department to brief the Committee on its plan for infrastructure improvements around WIPP. The Committee is still awaiting this briefing, and the Department is directed to provide the briefing not later than 15 days after enactment of this Act.

Program Direction.—The Committee places a high priority on workforce recruitment, mentoring, and training programs to prepare the next generation of federal and contractor workforce personnel. The Office of Environmental Management (EM) is encouraged to implement such programs as necessary to ensure the Department continues to meet the rigorous demands of its ongoing cleanup activities.

Technology Development.—Within Technology Development and Deployment, \$5,000,000 is provided for the National Spent Nuclear Fuel Program to address issues related to storing, transporting, processing, and disposing of Department-owned and managed spent nuclear fuel. Within these amounts, the Department shall use funding to address the need for additional assessments into material degradation that may occur as a result of multiple decades of Environmental Management spent nuclear fuel storage facilities, nuclear material measuring and monitoring in the Department’s storage systems, and other activities recommended by the U.S. Nuclear Waste Technical Review Board in its 2017 report on the Management and Disposal of U.S. Department of Energy Spent Nuclear Fuel. The Committee appreciates the Department’s work to improve worker safety and provides up to \$6,500,000 to consider exploring options to develop and deploy wearable robotic devices to enhance worker safety. The recommendation provides up to \$7,000,000 for continued work on qualification, testing, and research to advance the state-of-the-art containment ventilation systems.

DEFENSE URANIUM ENRICHMENT DECONTAMINATION AND
DECOMMISSIONING

(INCLUDING TRANSFER OF FUNDS)

Appropriation, 2021	\$- - -
Budget estimate, 2022	- - -
Recommended, 2022	831,340,000
Comparison:	
Appropriation, 2021	+831,340,000
Budget estimate, 2022	+831,340,000

The Committee recommends \$831,340,000 to fully offset the fiscal year 2022 appropriation for the Uranium Enrichment Decontamination and Decommissioning account.

OTHER DEFENSE ACTIVITIES

Appropriation, 2021	\$920,000,000
Budget estimate, 2022	1,170,000,000
Recommended, 2022	932,000,000
Comparison:	
Appropriation, 2021	+12,000,000
Budget estimate, 2022	-238,000,000

The Other Defense Activities account provides funding for the Office of Environment, Health, Safety and Security; the Office of Independent Enterprise Assessments; the Office of Legacy Management; Specialized Security Activities; Defense Related Administrative Support; and the Office of Hearings and Appeals.

The Committee again rejects the budget proposal to move the Formerly Utilized Sites Remedial Action Program (FUSRAP) from the U.S. Army Corps of Engineers (Corps) to the Department. The Congress intentionally transferred FUSRAP from the Department to the Corps in fiscal year 1998. The Department maintains ownership of and accountability for real property interests. The Committee remains pleased with the current cooperation between the Department and the Corps in carrying out the FUSRAP program and expects the Department to continue to provide its institutional knowledge and expertise to ensure the success of this program and to serve the nation and the affected communities. The Committee notes its direction to the Corps to submit its fiscal year 2023 budget request in the structure outlined in this Act.

The Committee is pleased with the Department’s progress on establishing a memorandum of understanding with the Defense Nuclear Facilities Safety Board that will provide a foundation for mutual communication, transparency, and information sharing to promote operational and interface efficiencies.

The recommendation includes \$12,000,000 above the budget request for targeted investments to defend the U.S. energy sector against the evolving threat of cyber and other attacks in support of the resiliency of the nation’s electric grid and energy infrastructure.

Runit Island, Marshall Islands.—The Committee has heard concerns that the Department is not in full compliance with the reporting requirements contained in section 2 of Public Law 112–149. The Department is directed to provide to the Committee not later than 90 days after enactment of this Act a plan to come into full compliance with Public Law 112–149. At a minimum, the plan shall include: steps required to come into compliance; technical issues associated with the effort how the Department will ensure the reports are made available to the public in the Marshall Islands, including translation of reports into Marshallese and redevelopment of outdated Department websites; and cost estimates associated with each of these items.

The Committee notes recent advances in commercially available technologies, including artificial intelligence, computer vision, and sensor fusion capabilities, may make it possible to deploy innovative technologies to detect, track and identify threats at scale to help meet force protection and physical security requirements. The Committee is aware that such initiatives are underway in federal agencies such as the Department of Defense and Customs and Bor-

der Protection. The Department is directed to conduct a review of its security requirements across the entire complex to assess how the use of artificial intelligence and commercially available technologies could improve security while reducing overall costs. The Department shall provide to the Committee not later than 180 days after enactment of this Act a report detailing its findings. The report shall include information on if and how the Department is already using artificial intelligence or commercially available technologies, include a recommendation for a pilot project at one or more sites within the complex, and include cost estimates and comparisons to current security costs.

POWER MARKETING ADMINISTRATIONS

Management of the federal power marketing functions was transferred from the Department of the Interior to the Department of Energy in the Department of Energy Organization Act of 1977 (Public Law 95–91). These functions include the power marketing activities authorized under section 5 of the Flood Control Act of 1944 and all other functions of the Bonneville Power Administration, the Southeastern Power Administration, the Southwestern Power Administration, and the power marketing functions of the Bureau of Reclamation that have been transferred to the Western Area Power Administration.

All four power marketing administrations (PMAs) give preference in the sale of their power to publicly-owned and cooperatively-owned utilities. Operations of the Bonneville Power Administration are financed principally under the authority of the Federal Columbia River Transmission System Act (Public Law 93–454). Under this Act, the Bonneville Power Administration is authorized to use its revenues to finance the costs of its operations, maintenance, and capital construction and to sell bonds to the Treasury if necessary to finance any additional capital program requirements.

Beginning in fiscal year 2011, power revenues from the Southeastern, Southwestern, and Western Area Power Administrations, which were previously classified as mandatory offsetting receipts, were reclassified as discretionary offsetting collections to directly offset annual expenses. The capital expenses of Southwestern and Western Area Power Administrations are appropriated annually.

Beginning in fiscal year 2018, the Congressional Budget Office (CBO) changed its scoring of the PMAs. The change stemmed from information on execution of language regarding purchase power and wheeling expenses and offsetting collections included in this bill each year. The Committee appreciates the PMAs' and their customers' efforts to provide additional financial information. As in previous years, to address the increased score in the short-term, the recommendation reduces the maximum level for purchase power and wheeling below the budget request.

BONNEVILLE POWER ADMINISTRATION FUND

The Bonneville Power Administration (BPA) is the Department's marketing agency for electric power in the Pacific Northwest. BPA provides electricity to a 300,000 square mile service area in the Columbia River drainage basin and it markets the power from federal

hydropower projects in the Northwest, as well as power from non-federal generating facilities in the region, and exchanges and markets surplus power with Canada and California.

Satsop Business Park, Washington.—The Committee notes the ongoing efforts to provide increased power capacity to underutilized infrastructure. Bonneville is encouraged to continue to work with the local public utility district and partners and to consider the economic development opportunities this may support.

OPERATION AND MAINTENANCE, SOUTHEASTERN POWER
ADMINISTRATION

Appropriation, 2021	\$ ---
Budget estimate, 2022	---
Recommended, 2022	---
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

The Southeastern Power Administration (SEPA) markets hydroelectric power from 22 Corps Projects to 473 customers across 10 states in the southeast. Southeastern does not own or operate any transmission facilities, so it contracts to “wheel” its power using the existing transmission facilities of area utilities.

OPERATION AND MAINTENANCE, SOUTHWESTERN POWER
ADMINISTRATION

Appropriation, 2021	\$10,400,000
Budget estimate, 2022	10,400,000
Recommended, 2022	10,400,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

The Southwestern Power Administration (SWPA) markets hydroelectric power produced at 24 Corps projects in the six-state area of Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas. SWPA operates and maintains 1,380 miles of transmission lines, along with supporting substations and communications sites.

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

Appropriation, 2021	\$89,372,000
Budget estimate, 2022	90,772,000
Recommended, 2022	90,772,000
Comparison:	
Appropriation, 2021	+1,400,000
Budget estimate, 2022	---

The Western Area Power Administration (WAPA) is responsible for marketing the electric power generated by the Bureau of Reclamation, the Corps, and the International Boundary and Water Commission. Western also operates and maintains a system of transmission lines nearly 17,000 miles long. Western provides electricity to 15 western states over a service area of 1.3 million square miles.

FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND

Appropriation, 2021	\$228,000
Budget estimate, 2022	228,000
Recommended, 2022	228,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

Falcon Dam and Amistad Dam are two international water projects located on the Rio Grande River between Texas and Mexico. Power generated by hydroelectric facilities at these two dams is sold to public utilities through WAPA. The Foreign Relations Authorization Act for Fiscal Years 1994 and 1995 created the Falcon and Amistad Operating and Maintenance Fund to defray the costs of operation, maintenance, and emergency activities. The Fund is administered by the Western Area Power Administration for use by the Commissioner of the U.S. Section of the International Boundary and Water Commission.

FEDERAL ENERGY REGULATORY COMMISSION

SALARIES AND EXPENSES

Appropriation, 2021	\$404,350,000
Budget estimate, 2022	463,900,000
Recommended, 2022	466,426,000
Comparison:	
Appropriation, 2021	+62,076,000
Budget estimate, 2022	+2,526,000

REVENUES

Appropriation, 2021	-\$404,350,000
Budget estimate, 2022	-463,900,000
Recommended, 2022	-466,426,000
Comparison:	
Appropriation, 2021	-62,076,000
Budget estimate, 2022	-2,526,000

The Committee recommendation for the Federal Energy Regulatory Commission (FERC) is \$466,426,000. Additional funds are provided for FERC to initiate an Office of Public Participation. Revenues for FERC are established at a rate equal to the budget authority, resulting in a net appropriation of \$0.

The Committee is concerned by the review process of FERC to rely on precedent agreements in determining whether to approve future natural gas pipeline projects. The Committee encourages FERC to initiate work to review its approval process to ensure that new natural gas pipelines are adequately evaluated for both need and impact.

The Committee directs FERC to provide to the Committee not later than 180 days after enactment of this Act a report on the feasibility of implementing a national reliability standard that includes inter-regional capacity requirements such as that of the European Network of Transmission System Operators for Electricity.

COMMITTEE RECOMMENDATION

The Committee's detailed funding recommendations for programs in Title III are contained in the following table.

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	B111	B111 vs. Enacted	B111 vs. Request
ENERGY PROGRAMS					
ENERGY EFFICIENCY AND RENEWABLE ENERGY					
Sustainable Transportation:					
Vehicle Technologies.....	400,000	595,000	530,000	+130,000	-65,000
Bioenergy Technologies.....	255,000	340,000	303,000	+48,000	-37,000
Hydrogen and Fuel Cell Technologies.....	150,000	197,500	195,000	+45,000	-2,500
Subtotal, Sustainable Transportation.....	805,000	1,132,500	1,028,000	+223,000	-104,500
Renewable Energy:					
Solar Energy Technologies.....	280,000	386,575	350,000	+70,000	-36,575
Wind Energy Technologies.....	110,000	204,870	170,000	+60,000	-34,870
Water Power Technologies.....	150,000	196,560	175,000	+25,000	-21,560
Geothermal Technologies.....	106,000	163,760	137,000	+31,000	-26,760
Subtotal, Renewable Energy.....	646,000	951,765	832,000	+186,000	-119,765
Energy Efficiency:					
Advanced Manufacturing.....	396,000	550,500	500,000	+104,000	-50,500
Building Technologies.....	280,000	382,000	350,000	+60,000	-32,000
Federal Energy Management Program.....	40,000	438,150	60,000	+20,000	-378,150

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Weatherization and Intergovernmental Program:					
Weatherization:					
Weatherization Assistance Program.....	310,000	390,000	375,000	+65,000	-15,000
Training and Technical Assistance.....	5,000	10,000	8,000	+3,000	-2,000
Weatherization Readiness Fund.....	---	21,000	15,000	+15,000	-6,000
Subtotal, Weatherization.....	315,000	421,000	398,000	+83,000	-23,000
State Energy Program Grants.....					
Local Government Clean Energy Workforce Program.....	62,500	62,500	70,000	+7,500	+7,500
Build Back Better Challenge Grants.....	---	25,000	20,000	+20,000	-5,000
Subtotal, Weatherization and Intergovernmental Program.....	377,500	808,500	588,000	+210,500	-220,500
Subtotal, Energy Efficiency.....	1,103,500	2,179,150	1,488,000	+394,500	-681,150
Corporate Support:					
Facilities and Infrastructure:					
National Renewable Energy Laboratory (NREL).....	130,000	167,000	152,000	+22,000	-15,000
21-EE-001, Energy Materials Processing at Scale (EHAPS).....	---	8,000	8,000	+8,000	---
Subtotal, Facilities and Infrastructure.....	130,000	175,000	160,000	+30,000	-15,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	B111	B111 vs. Enacted	B111 vs. Request
Program Direction	165,000	250,000	230,000	+65,000	-20,000
Strategic Programs.....	14,500	43,585	20,000	+5,500	-23,585
Subtotal, Corporate Support.....	309,500	468,585	410,000	+100,500	-58,585
Subtotal, Energy Efficiency and Renewable Energy..	2,864,000	4,732,000	3,768,000	+904,000	-964,000
Rescission.....	-2,240	---	---	+2,240	---
TOTAL, ENERGY EFFICIENCY AND RENEWABLE ENERGY.....	2,861,760	4,732,000	3,768,000	+906,240	-964,000
CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE					
Risk Management Technology and Tools.....	96,000	135,000	112,000	+16,000	-23,000
Infrastructure Security and Energy Restoration.....	48,000	---	---	-48,000	---
Response and Restoration.....	---	25,000	25,000	+25,000	---
Information Sharing, Partnerships and Exercises.....	---	25,000	25,000	+25,000	---
Program Direction.....	12,000	16,000	15,000	+3,000	-1,000
TOTAL, CYBERSECURITY, ENERGY SECURITY, AND EMERGENCY RESPONSE.....	156,000	201,000	177,000	+21,000	-24,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
ELECTRICITY					
Transmission Reliability and Resilience.....	48,220	37,000	30,000	-18,220	-7,000
Energy Delivery Grid Operations Technology.....	---	43,500	23,000	+23,000	-20,500
Resilient Distribution Systems.....	50,000	50,000	60,000	+10,000	+10,000
Energy Storage:					
Research.....	57,000	72,000	69,000	+12,000	-3,000
Construction: 20-0E-100 Grid Storage Launchpad.....	23,000	47,000	32,000	+9,000	-15,000
Subtotal, Energy Storage.....	80,000	119,000	101,000	+21,000	-18,000
Cyber R&D.....	---	25,000	14,000	+14,000	-11,000
Transformer Resilience and Advanced Components.....	7,500	22,500	11,000	+3,500	-11,500
DCEI Energy Mission Assurance.....	1,000	---	---	-1,000	---
Transmission Permitting and Technical Assistance.....	7,000	10,000	8,000	+1,000	-2,000
Program Direction.....	18,000	20,000	20,000	+2,000	---
TOTAL, ELECTRICITY.....	211,720	327,000	267,000	+55,280	-60,000
NUCLEAR ENERGY					
Integrated University Program.....	5,000	6,000	6,000	+1,000	---
STEP R&D.....	5,000	---	---	-5,000	---
Nuclear Energy Enabling Technologies: Crosscutting Technology Development.....	28,000	47,000	42,200	+14,200	-4,800
Joint Modeling and Simulation Program.....	35,000	35,000	35,000	---	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Nuclear Science User Facilities.....	30,000	42,000	32,000	+2,000	-10,000
Transformational Challenger Reactor.....	29,869	---	---	-29,869	---
Subtotal, Nuclear Energy Enabling Technologies..	122,869	124,000	109,200	-13,669	-14,800
Fuel Cycle Research and Development:					
Front End Fuel Cycle:					
Mining, Conversion, and Transportation.....	2,000	2,000	2,000	---	---
Civil Nuclear Enrichment.....	40,000	---	---	-40,000	---
Advanced Nuclear Fuel Availability.....	---	33,075	33,000	+33,000	-75
Subtotal, Front End Fuel Cycle.....	42,000	35,075	35,000	-7,000	-75
Material Recovery and Waste Form Development.....	25,000	35,000	30,000	+5,000	-5,000
Advanced Fuels:					
Accident Tolerant Fuels.....	105,800	115,000	110,000	+4,200	-5,000
Triso Fuel and Graphite Qualification.....	36,000	36,000	36,000	---	---
Subtotal, Advanced Fuels.....	141,800	151,000	146,000	+4,200	-5,000
Fuel Cycle Laboratory R&D.....	20,000	46,925	22,500	+2,500	-24,425
Used Nuclear Fuel Disposition R&D.....	62,500	62,500	62,500	---	---
Integrated Waste Management System.....	18,000	38,000	18,000	---	-20,000
Subtotal, Fuel Cycle Research and Development...	309,300	368,500	314,000	+4,700	-54,500
Reactor Concepts RD&D:					
Advanced Small Modular Reactor RD&D.....	115,000	115,000	145,000	+30,000	+30,000
Light Water Reactor Sustainability.....	47,000	60,000	50,000	+3,000	-10,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Advanced Reactor Technologies.....	46,000	65,000	58,000	+12,000	-7,000
Subtotal, Reactor Concepts RD&D.....	208,000	240,000	253,000	+45,000	+13,000
Versatile Test Reactor Project:					
Other Project Costs.....	43,000	55,000	---	-43,000	-55,000
21-E-200 VTR Project.....	2,000	90,000	---	-2,000	-90,000
Subtotal, Versatile Test Reactor Project.....	45,000	145,000	---	-45,000	-145,000
Advanced Reactors Demonstration Program:					
National Reactor Innovation Center.....	30,000	55,000	55,000	+25,000	---
Demonstration 1.....	80,000	108,700	108,350	+28,350	-350
Demonstration 2.....	80,000	136,650	136,650	+56,650	---
Risk Reduction for Future Demonstrations.....	40,000	50,000	75,000	+35,000	+25,000
Regulatory Development.....	15,000	15,000	15,000	---	---
Advanced Reactors Safeguards.....	5,000	5,000	5,000	---	---
Subtotal, Advanced Reactors Demonstration Program.....	250,000	370,350	395,000	+145,000	+24,650
Infrastructure:					
ORNL Nuclear Facilities O&M.....	20,000	---	20,000	---	+20,000
INL Facilities Operations and Maintenance.....	280,000	300,000	290,000	+10,000	-10,000
Research Reactor Infrastructure	11,500	15,000	15,000	+3,500	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Construction:					
16-E-200 Sample Preparation Laboratory, IML.....	26,000	41,850	35,000	+9,000	-6,850
Subtotal, Construction.....	26,000	41,850	35,000	+9,000	-6,850
Subtotal, Infrastructure.....	337,500	356,850	360,000	+22,500	+3,150
Idaho Site-wide Safeguards and Security.....					
International Nuclear Energy Cooperation.....	149,800	149,800	149,800	---	---
Program Direction.....	---	5,000	3,000	+3,000	-2,000
	75,131	85,000	85,000	+9,869	---
TOTAL, NUCLEAR ENERGY.....	1,507,600	1,850,500	1,675,000	+167,400	-175,500
FOSSIL ENERGY AND CARBON MANAGEMENT					
CCUS and Power Systems:					
Carbon Capture.....	86,300	150,000	150,000	+63,700	---
Carbon Dioxide Removal.....	40,000	63,000	51,000	+11,000	-12,000
Carbon Utilization.....	23,000	38,000	35,000	+12,000	-3,000
Carbon Storage.....	78,000	117,000	100,000	+21,000	-17,000
Advanced Energy and Hydrogen Systems.....	108,100	82,000	92,000	-16,100	+10,000
Crosscutting Research.....	32,900	36,500	35,000	+2,100	-1,500
Mineral Sustainability.....	53,000	45,000	35,000	-18,000	-10,000
STEP (Supercritical CO2).....	14,500	---	15,000	+500	---
Transformational Coal Pilots.....	10,000	---	---	-10,000	---
Subtotal, CCUS and Power Systems.....	446,800	531,500	513,000	+66,200	-18,500

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Natural Gas Technologies.....	57,000	130,000	97,200	+40,200	-32,800
Unconventional Fossil Energy Technologies from Petroleum - Oil Technologies.....	46,000	---	---	-46,000	---
Program Direction.....	61,500	66,800	65,800	+4,300	-1,000
Special Recruitment Programs.....	700	700	1,000	+300	+300
NETL Research and Operations.....	83,000	83,000	83,000	---	---
NETL Infrastructure.....	55,000	78,000	60,000	+5,000	-18,000
TOTAL, FOSSIL ENERGY AND CARBON MANAGEMENT	750,000	890,000	820,000	+70,000	-70,000
NAVAL PETROLEUM AND OIL SHALE RESERVES.....	13,006	13,650	13,650	+644	---
STRATEGIC PETROLEUM RESERVE					
Strategic Petroleum Reserve.....	188,000	197,000	197,000	+9,000	---
TOTAL, STRATEGIC PETROLEUM RESERVE.....	188,000	197,000	197,000	+9,000	---
SPR PETROLEUM ACCOUNT					
SPR Petroleum Reserve.....	1,000	7,350	7,350	+6,350	---
TOTAL, SPR PETROLEUM ACCOUNT.....	1,000	7,350	7,350	+6,350	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request

NORTHEAST HOME HEATING OIL RESERVE					
Northeast Home Heating Oil Reserve.....	6,500	---	6,500	---	+6,500

TOTAL, NORTHEAST HOME HEATING OIL RESERVE.....	6,500	---	6,500	---	+6,500
=====					
ENERGY INFORMATION ADMINISTRATION.....					
	126,800	126,800	129,087	+2,287	+2,287
NON-DEFENSE ENVIRONMENTAL CLEANUP					
Fast Flux Test Reactor Facility (WA).....	2,500	3,100	3,100	+600	---
Gaseous Diffusion Plants.....	115,584	116,203	116,203	+649	---
Small Sites.....	110,933	129,337	124,340	+13,407	-4,997
West Valley Demonstration Project.....	88,113	88,120	88,120	+7	---
Management and Storage of Elemental Mercury.....	2,100	2,100	2,100	---	---
Mercury Receipts.....	3,000	---	---	-3,000	---
Use of Mercury Receipts.....	-3,000	---	---	+3,000	---

TOTAL, NON-DEFENSE ENVIRONMENTAL CLEANUP.....	319,200	338,860	333,863	+14,663	-4,997
=====					
URANIUM ENRICHMENT DECONTAMINATION AND DECOMMISSIONING FUND					
Oak Ridge.....	134,701	105,000	105,000	-29,701	---
Nuclear Facility D&D, Paducah.....	240,000	198,995	198,995	-41,005	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Portsmouth:					
Nuclear Facility D&D, Portsmouth.....	367,193	397,311	397,311	+30,118	---
Construction:					
15-U-408 On-site Waste Disposal Facility,					
Portsmouth.....	46,639	5,000	5,000	-41,639	---
20-U-401 On-site Waste Disposal Facility (Cell					
Line 2&3).....	16,500	65,235	65,235	+48,735	---
Subtotal, Portsmouth.....	430,332	467,546	467,546	+37,214	---
Pension and Community and Regulatory Support.....	30,967	26,299	31,799	+832	+5,500
Title X Uranium/Thorium Reimbursement Program.....	5,000	33,500	28,000	+23,000	-5,500
TOTAL, UED&D FUND.....	841,000	831,340	831,340	-9,660	---
SCIENCE					
Advanced Scientific Computing Research:					
Research.....	846,055	911,000	896,000	+49,945	-15,000
Construction:					
17-SC-20 Office of Science Exascale Computing					
Project (SC-ECP).....	168,945	129,000	129,000	-39,945	---
Subtotal, Advanced Scientific Computing					
Research.....	1,015,000	1,040,000	1,025,000	+10,000	-15,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Basic Energy Sciences:					
Research.....	1,856,000	1,995,800	1,988,800	+132,800	-7,000
Construction:					
13-SC-10 LINAC coherent light source II (LCLS-II), SLAC.....	33,000	28,100	28,100	-4,900	---
18-SC-10 Advanced Photon Source Upgrade (APS-U), ANL.....	160,000	101,000	101,000	-69,000	---
18-SC-11 Spallation Neutron Source Proton Power Upgrade (PPU), ORNL.....	52,000	17,000	17,000	-35,000	---
18-SC-12 Advanced Light Source Upgrade (ALS-U), LBNL.....	62,000	75,100	75,100	+13,100	---
18-SC-13 Linac Coherent Light Source-II-High Energy (LCLS-II-HE), SLAC.....	52,000	50,000	50,000	-2,000	---
19-SC-14 Second Target Station (STS), ORNL.....	29,000	32,000	32,000	+3,000	---
21-SC-10 Cryomodule Repair and Maintenance Facility.....	1,000	1,000	1,000	---	---
Subtotal, Construction.....	389,000	304,200	304,200	-84,800	---
Subtotal, Basic Energy Sciences.....	2,245,000	2,300,000	2,293,000	+46,000	-7,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Biological and Environmental Research.....	753,000	828,000	805,000	+52,000	-23,000
Fusion Energy Sciences					
Research.....	415,000	449,000	451,000	+36,000	+2,000
Construction:					
14-SC-60 U.S. Contributions to ITER (U.S. ITER).....	242,000	221,000	242,000	---	+21,000
20-SC-61 Matter in Extreme Conditions (MEC) Petawatt Upgrade, SLAC.....	15,000	5,000	5,000	-10,000	---
Subtotal, Construction.....	257,000	226,000	247,000	-10,000	+21,000
Subtotal, Fusion Energy Sciences.....	672,000	675,000	698,000	+26,000	+23,000
High Energy Physics					
Research.....	777,065	782,000	810,000	+32,935	+28,000
Construction:					
11-SC-40 Long Baseline Neutrino Facility / Deep Underground Neutrino Experiment (LBNF/DUNE), FNAL.....	171,000	176,000	176,000	+5,000	---
11-SC-41 Muon to electron conversion experiment, FNAL.....	2,000	13,000	2,000	---	-11,000
18-SC-42 Proton Improvement Plan II (PIP-II), FNAL.....	79,000	90,000	90,000	+11,000	---
Subtotal, Construction.....	252,000	279,000	268,000	+16,000	-11,000
Subtotal, High Energy Physics.....	1,029,065	1,061,000	1,078,000	+48,935	+17,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Nuclear Physics:					
Research.....	624,700	700,000	660,000	+35,300	-40,000
Construction:					
14-SC-50 Facility for Rare Isotope Beams, MSU.....	5,300	---	---	-5,300	---
20-SC-52 Electron Ion Collider, BNL.....	5,000	20,000	5,000	---	-15,000
Subtotal, Construction.....	10,300	20,000	5,000	-5,300	-15,000
Subtotal, Nuclear Physics.....	635,000	720,000	665,000	+30,000	-55,000
Isotope R&D and Production:					
Research.....	66,000	78,000	70,000	+4,000	-8,000
Construction:					
20-SC-51 US Stable Isotope Production and Research Center, ORNL.....	12,000	12,000	12,000	---	---
Subtotal, Construction.....	12,000	12,000	12,000	---	---
Subtotal, Isotope R&D and Production.....	78,000	90,000	82,000	+4,000	-8,000
Accelerator R&D and Production.....	16,935	24,000	18,000	+1,065	-6,000
Workforce Development for Teachers and Scientists.....	29,000	35,000	35,000	+6,000	---
Science Laboratories Infrastructure:					
Infrastructure Support:					
Payment in Lieu of Taxes.....	4,650	4,820	4,820	+170	---
Oak Ridge Landlord.....	5,860	6,430	6,430	+570	---
Facilities and Infrastructure.....	29,790	17,200	21,350	-8,440	+4,150

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Oak Ridge Nuclear Operations.....	26,000	20,000	26,000	---	+6,000
Subtotal, Infrastructure Support.....	66,300	48,450	58,600	-7,700	+10,150
Construction:					
17-SC-71 Integrated Engineering Research Center, FNAL.....	10,250	10,250	10,250	---	---
18-SC-71 Energy Sciences Capability, PNNL.....	23,000	---	---	-23,000	---
19-SC-71 Science User Support Center, BNL.....	20,000	38,000	28,000	+8,000	-10,000
19-SC-73 Translational Research Capability, ORNL..	22,000	21,500	21,500	-500	---
19-SC-74 BioEPIC, LBNL.....	20,000	35,000	35,000	+15,000	---
20-SC-71 Critical Utilities Rehabilitation Project, BNL.....	20,000	26,000	20,000	---	-6,000
20-SC-72 Seismic and Safety Modernization, LBNL...	5,000	27,500	5,000	---	-22,500
20-SC-73 CEBAF Renovation and Expansion, TJNAF ...	2,000	10,000	10,000	+8,000	---
20-SC-74 Craft Resources Support Facility, ORNL ..	25,000	---	---	-25,000	---
20-SC-75 Large Scale Collaboration Center, SLAC ..	11,000	12,000	12,000	+1,000	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
20-SC-76 Tritium System Demolition and Disposal, PPPL.....	13,000	6,400	6,400	-6,600	---
20-SC-77 Argonne Utilities Upgrade, ANL.....	500	10,000	10,000	+9,500	---
20-SC-78 Linear Assets Modernization Project, LBNL	500	12,850	7,000	+6,500	-5,850
20-SC-79 Critical Utilities Infrastructure Revitalization, SLAC.....	500	10,000	5,000	+4,500	-5,000
20-SC-80 Utilities Infrastructure Project, FNAL ..	500	13,300	6,500	+6,000	-6,800
21-SC-71 Princeton Plasma Innovation Center, PPPL.	150	7,750	7,750	+7,600	---
21-SC-72 Critical Infrastructure Recovery & Renewal, PPPL.....	150	2,000	2,000	+1,850	---
21-SC-73 Ames Infrastructure Modernization.....	150	2,000	2,000	+1,850	---
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	---
Subtotal, Construction.....	173,700	246,550	190,400	+16,700	-56,150
Subtotal, Science Laboratories Infrastructure.	240,000	295,000	249,000	+9,000	-46,000
Safeguards and Security.....	121,000	170,000	170,000	+49,000	---
Program Direction.....	192,000	202,000	202,000	+10,000	---
TOTAL, SCIENCE.....	7,026,000	7,440,000	7,320,000	+294,000	-120,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
NUCLEAR WASTE DISPOSAL.....	27,500	7,500	27,500	---	+20,000
TECHNOLOGY TRANSITIONS					
Technology Transitions Programs.....	---	11,095	11,095	+11,095	---
Program Direction.....	---	8,375	8,375	+8,375	---
TOTAL, TECHNOLOGY TRANSITIONS.....	---	19,470	19,470	+19,470	---
CLEAN ENERGY DEMONSTRATIONS					
Demonstrations.....	---	386,500	192,000	+192,000	-194,500
Program Direction.....	---	13,500	8,000	+8,000	-5,500
TOTAL, CLEAN ENERGY DEMONSTRATIONS.....	---	400,000	200,000	+200,000	-200,000
ADVANCED RESEARCH PROJECTS AGENCY-ENERGY					
ARPA-E Projects.....	392,000	463,000	552,000	+160,000	+89,000
Program Direction.....	35,000	37,000	48,000	+13,000	+11,000
TOTAL, ARPA-E.....	427,000	500,000	600,000	+173,000	+100,000
ADVANCED RESEARCH PROJECTS AGENCY-CLIMATE					
ARPA-C Projects.....	---	180,000	---	---	-180,000
Program Direction.....	---	20,000	---	---	-20,000
TOTAL, ARPA-C.....	---	200,000	---	---	-200,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
TITLE 17 - INNOVATIVE TECHNOLOGY LOAN GUARANTEE PGM					
Administrative Expenses.....	32,000	32,000	32,000	---	---
Title XVII Loan Guarantee Credit Subsidy.....	---	150,000	---	---	-150,000
Offsetting Collection.....	-3,000	-3,000	-3,000	---	---
Rescission of emergency funding.....	-392,000	---	---	+392,000	---
TOTAL, TITLE 17 - INNOVATIVE TECHNOLOGY LOAN.....	-363,000	179,000	29,000	+392,000	-150,000
GUARANTEE PROGRAM					
ADVANCED TECHNOLOGY VEHICLES MANUFACTURING LOAN PGM					
Administrative Expenses.....	5,000	5,000	5,000	---	---
Rescission of emergency funding.....	-1,908,000	---	---	+1,908,000	---
TOTAL, ADVANCED TECHNOLOGY VEHICLES.....	-1,903,000	5,000	5,000	+1,908,000	---
MANUFACTURING LOAN PROGRAM					
TRIBAL ENERGY LOAN GUARANTEE PROGRAM					
Administrative Expenses.....	2,000	2,000	2,000	---	---
TOTAL, TRIBAL ENERGY LOAN GUARANTEE PROGRAM.....	2,000	2,000	2,000	---	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
INDIAN ENERGY POLICY AND PROGRAMS					
Indian Energy Program.....	17,000	116,477	64,477	+47,477	-52,000
Program Direction.....	5,000	5,523	5,523	+523	---
TOTAL, INDIAN ENERGY POLICY AND PROGRAMS.....	22,000	122,000	70,000	+48,000	-52,000
DEPARTMENTAL ADMINISTRATION					
Salaries and Expenses:					
Office of the Secretary.....	5,582	5,582	5,582	---	---
Congressional and Intergovernmental Affairs.....	5,000	6,000	6,000	+1,000	---
Chief Financial Officer.....	53,590	56,591	56,591	+3,001	---
Economic Impact and Diversity.....	10,169	20,000	20,000	+9,831	---
Chief Information Officer.....	140,200	232,258	197,000	+56,800	-35,258
Artificial Intelligence and Technology Office.....	2,500	1,500	1,000	-1,500	-500
International Affairs.....	26,825	30,500	28,000	+1,175	-2,500
Other Departmental Administration.....	159,301	193,617	182,115	+22,814	-11,502
Subtotal, Salaries and Expenses.....	403,167	546,048	496,288	+93,121	-49,760
Strategic Partnership Projects.....	40,000	40,000	40,000	---	---
Subtotal, Departmental Administration.....	443,167	586,048	536,288	+93,121	-49,760
Funding from Other Defense Activities.....	-183,789	-163,710	-163,710	+20,079	---
Total, Departmental Administration (Gross).....	259,378	422,338	372,578	+113,200	-49,760

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Miscellaneous revenues.....	-93,378	-100,578	-100,578	-7,200	---
TOTAL, DEPARTMENTAL ADMINISTRATION (Net).....	166,000	321,760	272,000	+106,000	-49,760
OFFICE OF THE INSPECTOR GENERAL					
Office of the Inspector General.....	57,739	78,000	78,000	+20,261	---
TOTAL, ENERGY PROGRAMS.....	12,444,825	18,790,230	16,848,760	+4,403,935	-1,941,470

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request

ATOMIC ENERGY DEFENSE ACTIVITIES					
NATIONAL NUCLEAR SECURITY ADMINISTRATION					
WEAPONS ACTIVITIES					
Stockpile Management:					
Stockpile Major Modernization:					
B61 Life Extension Program.....	815,710	771,664	771,664	-44,046	---
W88 Alteration Program.....	256,922	207,157	207,157	-49,765	---
W80-4 Life Extension Program.....	1,000,314	1,080,400	1,080,400	+80,086	---
W80-4 Alteration-SLCM.....	---	10,000	---	---	-10,000
W87-1 Modification Program.....	541,000	691,031	691,031	+150,031	---
W93.....	53,000	72,000	53,000	---	-19,000
Subtotal, Stockpile Major Modernization.....	2,666,946	2,832,252	2,803,252	+136,306	-29,000

Stockpile Sustainment:					
B61 Stockpile systems.....	---	---	102,679	+102,679	+102,679
W76 Stockpile systems.....	---	---	169,220	+169,220	+169,220
W78 Stockpile systems.....	---	---	94,766	+94,766	+94,766
W80 Stockpile systems.....	---	---	91,669	+91,669	+91,669
B83 Stockpile systems.....	---	---	46,456	+46,456	+46,456
W87 Stockpile systems.....	---	---	117,297	+117,297	+117,297
W88 Stockpile systems.....	---	---	142,841	+142,841	+142,841
Multi-Weapon Systems.....	---	---	363,555	+363,555	+363,555
Subtotal, Stockpile Sustainment.....	---	---	1,128,483	+1,128,483	+1,128,483

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Stockpile Sustainment.....	998,357	1,180,483	---	-998,357	-1,180,483
Weapons Dismantlement and Disposition.....	56,000	51,000	56,000	---	+5,000
Production Operations.....	568,941	568,941	568,941	---	---
Subtotal, Stockpile Management.....	4,290,244	4,632,676	4,556,676	+266,432	-76,000
Production Modernization:					
Primary Capability Modernization:					
Plutonium Modernization:					
Los Alamos Plutonium Operations.....	610,599	660,419	660,419	+49,820	---
21-D-512, Plutonium Pit Production Project, LANL	226,000	350,000	350,000	+124,000	---
Subtotal, Los Alamos Plutonium Modernization..	836,599	1,010,419	1,010,419	+173,820	---
Savannah River Plutonium Operations.....	200,000	128,000	128,000	-72,000	---
21-D-511, Savannah River Plutonium Processing Facility, SRS.....	241,896	475,000	475,000	+233,104	---
Subtotal, Savannah River Plutonium Modernization.....	441,896	603,000	603,000	+161,104	---
Enterprise Plutonium Support.....	90,782	107,098	107,098	+16,316	---
Subtotal, Plutonium Modernization.....	1,369,277	1,720,517	1,720,517	+351,240	---
High Explosives & Energetics.....	63,620	68,785	68,785	+5,165	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
HESE OPCs.....	3,750	---	---	-3,750	---
Subtotal, HE & Energetics.....	67,370	68,785	68,785	+1,415	---
Subtotal, Primary Capability Modernization.....	1,436,647	1,789,302	1,789,302	+352,655	---
Secondary Capability Modernization:					
Uranium Sustainment.....	242,732	488,097	488,097	+488,097	---
Uranium Modernization.....	---	---	---	-242,732	---
Process Technology Development.....	63,957	---	---	-63,957	---
Depleted Uranium Modernization.....	110,915	---	---	-110,915	---
Lithium Modernization.....	39,400	---	---	-39,400	---
Subtotal, Secondary Capability Modernization...	457,004	488,097	488,097	+31,093	---
Tritium and Domestic Uranium Enrichment:					
Tritium Sustainment and Modernization.....	312,109	489,017	489,017	+489,017	---
Domestic Uranium Enrichment.....	70,000	---	---	-70,000	---
HEU Downblend.....	90,000	---	---	-90,000	---
Uranium Reserve.....	75,000	---	---	-75,000	---
Subtotal, Tritium & DUE.....	547,109	489,017	489,017	-58,092	---
Non-Nuclear Capability Modernization.....	107,137	144,563	144,563	+37,426	---
Subtotal, Production Modernization.....	2,547,897	2,910,979	2,910,979	+363,082	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Stockpile Research, Technology, and Engineering:					
Assessment Science.....	---	689,578	---	---	-689,578
Primary Assessment Technologies.....	150,000	---	150,000	---	+150,000
Dynamic Materials Properties.....	130,981	---	130,981	---	+130,981
Advanced Diagnostics.....	35,989	---	35,989	---	+35,989
Secondary Assessment Technologies.....	84,000	---	84,000	---	+84,000
Enhanced Capabilities for Subcritical Experiments.....	215,579	---	215,579	---	+215,579
Hydrodynamic & Subcritical Execution Support.....	152,845	---	152,845	---	+152,845
Subtotal, Assessment Science.....	769,394	689,578	769,394	---	+79,816
Engineering and Integrated Assessments:					
Archiving & Support.....	45,760	336,766	45,760	---	-336,766
Delivery Environments.....	39,235	---	39,235	---	+39,235
Weapons Survivability.....	59,500	---	59,500	---	+59,500
Aging & Lifetimes.....	62,260	---	77,260	+15,000	+77,260
Stockpile Responsiveness.....	70,000	---	10,000	-60,000	+10,000
Advanced Certification & Qualification.....	60,649	---	60,330	-319	+60,330
Subtotal, Engineering and Integrated Assessments.....	337,404	336,766	292,085	-45,319	-44,681
Inertial Confinement Fusion.....	575,000	529,000	580,000	+5,000	+51,000
Advanced Simulation and Computing.....	732,014	747,012	747,012	+14,998	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Weapon Technology and Manufacturing Maturation:...		292,630	292,630	+292,630	---
Surety Technology.....	54,365	---	---	-54,365	---
Weapon Technology Development.....	131,692	---	---	-131,692	---
Advanced Manufacturing Development.....	111,908	---	---	-111,908	---
Subtotal, Weapon Technology and Manufacturing Maturation.....	297,965	292,630	292,630	-5,335	---
Academic Programs.....	101,912	95,645	106,912	+5,000	+11,267
Subtotal, Stockpile Research, Technology, and Engineering.....	2,813,689	2,690,631	2,788,033	-25,656	+97,402
Infrastructure and Operations: Operations: Operations of facilities.....	1,014,000	1,014,000	1,014,000	---	---
Safety and environmental operations.....	165,354	165,354	165,354	---	---
Maintenance and repair of facilities.....	667,000	670,000	670,000	+3,000	---
Subtotal, Operations.....	1,846,354	1,849,354	1,849,354	+3,000	---
Recapitalization: Infrastructure and safety.....	573,717	508,664	508,664	-65,053	---
Capability based investments.....	149,117	143,066	143,066	-6,051	---
Planning for Programmatic Construction (Pre-CD-1)....	10,000	---	---	-10,000	---
Subtotal, Recapitalization.....	732,834	651,730	651,730	-81,104	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
I&O Construction:					
Programmatic Construction:					
06-D-141 Uranium Processing Facility, Y-12.....	750,000	524,000	524,000	-226,000	---
07-D-220-04 TRU Liquid Waste Facility, LANL.....	36,687	---	---	-36,687	---
15-D-301 HE Science & Engineering Facility, PX.....	43,000	---	---	-43,000	---
15-D-302 TA-55 Reinvestment project III, LANL.....	30,000	27,000	27,000	-3,000	---
17-D-640 U1a complex enhancements project, NNSA.....	160,600	135,000	135,000	-25,600	---
18-D-620 Exascale Computing Facility Modernization Project, LLNL.....	29,200	---	---	-29,200	---
18-D-650 Tritium Finishing Facility, SRS.....	27,000	27,000	27,000	---	---
18-D-690, Lithium processing facility, Y-12	109,405	167,902	167,902	+58,497	---
21-D-510 HE Synthesis, Formulation, and Production, PX.....	31,000	44,500	36,200	+5,200	-8,300
22-D-513, Power Sources Capability, SNL.....	---	13,827	13,827	+13,827	---
Chemistry and Metallurgy Replacement (CMRR):					
04-D-125 Chemistry and metallurgy replacement project, LANL.....	169,427	138,123	138,123	-31,304	---
Subtotal, Programmatic Construction and CMRR...	1,386,319	1,077,352	1,069,052	-317,267	-8,300
Mission Enabling:					
15-D-611 Emergency Operations Center, SNL.....	36,000	---	---	-36,000	---
15-D-612 Emergency Operations Center, LLNL.....	27,000	---	---	-27,000	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
19-D-670 138kV Power Transmission System Replacement, MNSS.....	59,000	---	---	-59,000	---
22-D-514 Digital Infrastructure Capability Expansion, LLNL.....	---	8,000	8,000	+8,000	---
Subtotal, Mission Enabling.....	122,000	8,000	8,000	-114,000	---
Subtotal, I&O Construction.....	1,508,319	1,085,352	1,077,052	-431,267	-8,300
Subtotal, Infrastructure and Operations.....	4,087,507	3,586,436	3,578,136	-509,371	-8,300
Secure Transportation Asset: STA Operations and Equipment.....	225,000	213,704	213,704	-11,296	---
Program Direction.....	123,684	117,060	117,060	-6,624	---
Subtotal, Secure Transportation Asset.....	348,684	330,764	330,764	-17,920	---
Defense Nuclear Security: Defense Nuclear Security (DNS).....	763,078	824,623	811,521	+48,443	-13,102
Construction: 17-D-710 West End Protected Area Reduction Project, Y-12.....	26,000	23,000	23,000	-3,000	---
Subtotal, Defense Nuclear Security.....	789,078	847,623	834,521	+45,443	-13,102

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Information Technology and Cyber Security.....	366,233	406,530	406,530	+40,297	---
Legacy Contractor Pensions (WA).....	101,668	78,656	78,656	-23,012	---
TOTAL, WEAPONS ACTIVITIES.....	15,345,000	15,484,295	15,484,295	+139,295	---

DEFENSE NUCLEAR NONPROLIFERATION

Material Management and Minimization:					
Conversion.....	110,000	100,660	100,660	-9,340	---
Nuclear Material Removal.....	40,000	42,100	42,100	+2,100	---
Material Disposition.....	190,711	200,186	200,186	+9,475	---
Laboratory and Partnership Support.....	60,000	---	---	-60,000	---
Subtotal, Material Management and Minimization.....	400,711	342,946	342,946	-57,765	---
Global Material Security:					
International Nuclear Security.....	78,939	79,939	79,939	+1,000	---
Domestic Radiological Security.....	185,000	158,002	158,002	-26,998	---
International Radiological Security.....	90,000	85,000	95,000	+5,000	+10,000
Nuclear Smuggling Detection and Deterrence.....	175,000	175,000	198,500	+23,500	+23,500
Subtotal, Global Material Security.....	528,939	497,941	531,441	+2,502	+33,500
Nonproliferation and Arms Control.....	148,000	184,795	184,795	+36,795	---
National Technical Nuclear Forensics R&D.....	40,000	---	---	-40,000	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Defense Nuclear Nonproliferation R&D:					
Proliferation Detection.....	255,000	269,407	269,407	+14,407	---
Nuclear Detonation Detection.....	267,000	271,000	280,500	+13,500	+9,500
Nonproliferation Fuels Development.....	20,000	---	20,000	---	+20,000
Nonproliferation Stewardship Program.....	59,900	87,329	100,329	+40,429	+13,000
National Technical Nuclear Forensics.....	---	45,000	45,000	+45,000	---
Subtotal, Defense Nuclear Nonproliferation R&D.....	601,900	672,736	715,236	+113,336	+42,500
Nonproliferation Construction:					
18-D-150 Surplus Plutonium Disposition Project, SRS.....	148,589	156,000	156,000	+7,411	---
Subtotal, Nonproliferation Construction.....	148,589	156,000	156,000	+7,411	---
Nuclear Counterterrorism and Incident Response:					
Emergency Operations.....	36,000	14,597	14,597	-21,403	---
Counterterrorism and Counterproliferation.....	341,513	356,185	356,185	+14,672	---
Subtotal, Nuclear Counterterrorism and Incident Response.....	377,513	370,782	370,782	-6,731	---
Legacy contractor pensions.....	14,348	38,800	38,800	+24,452	---
Rescission.....	---	-330,000	---	---	+330,000
TOTAL, DEFENSE NUCLEAR NONPROLIFERATION.....	2,260,000	1,934,000	2,340,000	+80,000	+406,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
NAVAL REACTORS					
Naval Reactors Development.....	568,000	640,684	640,684	+72,684	---
Columbia-class Reactor Systems Development.....	64,700	55,000	55,000	-9,700	---
S8G Prototype Refueling.....	135,000	126,000	126,000	-9,000	---
Naval Reactors Operations and Infrastructure.....	530,600	594,017	594,017	+63,417	---
Program Direction.....	51,700	55,579	55,579	+3,879	---
Construction:					
14-D-901 Spent Fuel Handling Recapitalization project, NRF.....	330,000	348,705	348,705	+18,705	---
21-D-530 KL Steam and Condensate Upgrades.....	4,000	---	---	-4,000	---
22-D-531 KL Chemistry and Radiological Health Building.....	---	41,620	41,620	+41,620	---
22-D-532 KL Security Upgrades.....	---	5,100	5,100	+5,100	---
Subtotal, Construction.....	334,000	395,425	395,425	+61,425	---
Rescission.....	---	-6,000	---	---	+6,000
TOTAL, NAVAL REACTORS.....	1,684,000	1,860,705	1,866,705	+182,705	+6,000
FEDERAL SALARIES AND EXPENSES.....					
	443,200	464,000	464,000	+20,800	---
TOTAL, NATIONAL NUCLEAR SECURITY ADMINISTRATION...	19,732,200	19,743,000	20,155,000	+422,800	+412,000

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
DEFENSE ENVIRONMENTAL CLEANUP					
Closure Sites Administration.....	4,987	3,987	3,987	-1,000	---
Richland:					
River Corridor and Other Cleanup Operations.....	232,479	196,000	211,000	-21,479	+15,000
Central Plateau Remediation.....	670,000	689,776	669,676	-324	-20,100
RL Community and Regulatory Support.....	8,621	5,121	10,221	+1,600	+5,100
Construction:					
18-D-404 WESF Modifications and Capsule Storage...	15,000	8,000	8,000	-7,000	---
22-D-401 L-888, 400 Area Fire Station.....	---	15,200	15,200	+15,200	---
22-D-402 L-897, 200 Area Water Treatment Facility.	---	12,800	12,800	+12,800	---
Subtotal, Construction.....	15,000	36,000	36,000	+21,000	---
Subtotal, Richland.....	926,100	926,897	926,897	+797	---
Office of River Protection:					
Waste Treatment and Immobilization Plant					
Commissioning.....	50,000	50,000	50,000	---	---
Rad Liquid Tank Waste Stabilization and Disposition.	784,000	817,642	837,642	+53,642	+20,000
Construction:					
01-D-16 D High-level Waste Facility.....	25,000	60,000	144,358	+119,358	+84,358
01-D-16 E Pretreatment Facility.....	---	20,000	20,000	+20,000	---
18-D-16 Waste Treatment and Immobilization Plant - LBL/Direct Feed LAW.....	786,000	586,000	586,000	-200,000	---
Subtotal, Construction.....	811,000	666,000	750,358	-60,642	+84,358

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
ORP Low-level Waste Offsite Disposal.....	---	7,000	7,000	+7,000	---
Subtotal, Office of River Protection.....	1,645,000	1,540,642	1,645,000	---	+104,358
Idaho National Laboratory:					
Idaho Cleanup and Waste Disposition.....	430,000	358,925	422,842	-7,158	+63,917
Idaho Community and Regulatory Support.....	3,500	2,658	2,658	-842	---
Construction:					
22-D-403 Idaho Spent Nuclear Fuel Staging Facility	---	3,000	3,000	+3,000	---
22-D-404 Additional ICDF Landfill Disposal Cell	---	5,000	5,000	+5,000	---
and Evaporation Ponds Project.....	---	8,000	8,000	+8,000	---
Subtotal, Construction.....	---	8,000	8,000	---	---
Total, Idaho National Laboratory.....	433,500	369,583	433,500	---	+63,917
NNSA Sites and Nevada Offsites:					
Lawrence Livermore National Laboratory.....	1,764	1,806	1,806	+42	---
Separations Process Research Unit.....	15,000	15,000	15,000	---	---
Nevada.....	60,737	60,737	75,737	+15,000	+15,000
Sandia National Laboratory.....	4,860	4,576	4,576	-284	---
Los Alamos National Laboratory.....	226,000	275,119	275,119	+49,119	---
Los Alamos Excess Facilities D&D.....	---	58,381	17,000	+17,000	-41,381
LLNL Excess Facilities D&D.....	35,000	35,000	35,000	---	---
Total, NNSA Sites and Nevada Off-sites.....	343,361	450,619	424,238	+80,877	-26,381

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Oak Ridge Reservation:					
OR Nuclear Facility D&D.....	254,132	274,923	287,316	+33,184	+12,393
U233 Disposition Program.....	55,000	55,000	55,000	---	---
OR Cleanup and Disposition.....	112,471	73,725	112,471	---	+38,746
Construction:					
14-D-403 Outfall 200 Mercury Treatment Facility.....	20,500	---	---	-20,500	---
17-D-401 On-site Waste Disposal Facility.....	22,380	12,500	12,500	-9,880	---
Subtotal, Construction.....	42,880	12,500	12,500	-30,380	---
OR Community & Regulatory Support.....	5,900	5,096	5,096	-804	---
OR Technology Development and Deployment.....	5,000	3,000	3,000	-2,000	---
Total, Oak Ridge Reservation.....	475,383	424,244	475,383	---	+51,139
Savannah River Site:					
SR Site Risk Management Operations:					
SR Site Risk Management Operations.....	500,000	452,724	454,090	-45,910	+1,366
Construction:					
18-D-402 Emergency Operations Center Replacement, SR.....	6,500	8,999	8,999	+2,499	---
19-D-701 SR Security System Replacement.....	1,000	5,000	5,000	+4,000	---
20-D-402 Advanced Manufacturing Collaborative Facility (AMC).....	25,000	---	---	-25,000	---
Total, SR Site Risk Management Operations.....	532,500	466,723	468,089	-64,411	+1,366

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
SR Community and Regulatory Support.....	11,549	5,805	11,805	+256	+6,000
SR Radioactive Liquid Tank Waste Stabilization and Disposition.....	910,832	890,865	889,365	-21,467	-1,500
Construction:					
17-D-402 Saltstone Disposal Unit #7, SRS.....	10,716	---	---	-10,716	---
18-D-402 Saltstone Disposal unit #8/9.....	65,500	68,000	68,000	+2,500	---
20-D-401 Saltstone Disposal Unit #10, 11, 12.....	562	19,500	19,500	+18,938	---
Subtotal, Construction.....	76,778	87,500	87,500	+10,722	---
Savannah River Legacy Pensions.....	---	130,882	130,882	+130,882	---
Total, Savannah River Site.....	1,531,659	1,581,775	1,587,641	+55,982	+5,866
Waste Isolation Pilot Plant:					
Waste Isolation Pilot Plant.....	313,260	350,424	350,424	+37,164	---
Construction:					
15-D-411 Safety Significant Confinement Ventilation System, WIPP.....	35,000	55,000	55,000	+20,000	---
15-D-412 Exhaust Shaft, WIPP.....	55,000	25,000	25,000	-30,000	---
21-D-401 Hoisting Capability Project.....	10,000	---	---	-10,000	---
Total, Waste Isolation Pilot Plant.....	413,260	430,424	430,424	+17,164	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Program Direction.....	289,000	293,106	300,207	+11,207	+7,101
Program Support.....	12,979	62,979	22,979	+10,000	-40,000
Safeguards and Security.....	320,771	316,744	316,744	-4,027	---
Technology Development.....	30,000	25,000	25,000	-5,000	---
Subtotal, Defense Environmental Cleanup.....	6,426,000	6,426,000	6,592,000	+166,000	+166,000
Federal Contribution to the Uranium Enrichment D&D Fund.....	---	415,670	---	---	-415,670
TOTAL, DEFENSE ENVIRONMENTAL CLEANUP.....	6,426,000	6,841,670	6,592,000	+166,000	-249,670
DEFENSE UED&D.....	---	---	831,340	+831,340	+831,340
OTHER DEFENSE ACTIVITIES					
Environment, Health, Safety and Security:					
Environment, Health, Safety and Security.....	134,320	132,732	132,732	-1,588	---
Program Direction - Environment, Health, Safety and Security.....	72,000	73,588	73,588	+1,588	---
Subtotal, Environment, Health, Safety and Security	206,320	206,320	206,320	---	---
Enterprise Assessments:					
Enterprise Assessments.....	24,435	27,335	27,335	+2,900	---
Program Direction.....	54,635	56,049	56,049	+1,414	---
Subtotal, Enterprise Assessments.....	79,070	83,384	83,384	+4,314	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Specialized Security Activities.....	283,500	283,500	295,500	+12,000	+12,000
Office of Legacy Management:					
Legacy Management Activities - Defense.....	142,797	408,797	158,797	+16,000	-250,000
Program Direction - Legacy Management.....	20,262	19,933	19,933	-329	---
Subtotal, Office of Legacy Management.....	163,059	428,730	178,730	+15,671	-250,000
Defense Related Administrative Support.....	183,789	163,710	163,710	-20,079	---
Office of Hearings and Appeals.....	4,262	4,356	4,356	+94	---
TOTAL, OTHER DEFENSE ACTIVITIES.....	920,000	1,170,000	932,000	+12,000	-238,000
TOTAL, ATOMIC ENERGY DEFENSE ACTIVITIES.....	27,078,200	27,754,670	28,510,340	+1,432,140	+755,670
POWER MARKETING ADMINISTRATIONS (1)					
SOUTHEASTERN POWER ADMINISTRATION					
Operation and Maintenance					
Purchase Power and Wheeling.....	66,163	88,339	66,353	+190	-21,986
Program Direction.....	11,246	7,284	7,284	-3,962	---
Subtotal, Operation and Maintenance.....	77,409	95,623	73,637	-3,772	-21,986

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Less Alternative Financing (for PPW).....	-14,163	-13,353	-13,353	+810	---
Less Alternative Financing (for PD).....	-4,000	-100	-100	+3,900	---
Offsetting Collections (for PPW).....	-52,000	-74,986	-53,000	-1,000	+21,986
Offsetting Collections (for PD).....	-7,246	-7,184	-7,184	+62	---
TOTAL, SOUTHEASTERN POWER ADMINISTRATION.....	---	---	---	---	---
SOUTHWESTERN POWER ADMINISTRATION					
Operation and Maintenance.....	13,292	11,082	11,082	-2,210	---
Purchase Power and Wheeling.....	54,000	93,000	41,000	-13,000	-52,000
Program Direction.....	35,635	36,833	36,833	+1,198	---
Construction.....	13,267	15,901	15,901	+2,634	---
Subtotal, Operation and Maintenance.....	116,194	156,816	104,816	-11,378	-52,000
Less Alternative Financing (for O&M).....	-5,635	-4,591	-4,591	+1,044	---
Less Alternative Financing (for PPW).....	-20,000	-23,000	-23,000	-3,000	---
Less Alternative Financing (for Construction).....	-8,167	-10,901	-10,901	-2,734	---
Less Alternative Financing (for PD).....	-852	---	---	+852	---
Offsetting Collections (for PD).....	-31,483	-33,529	-33,529	-2,046	---
Offsetting Collections (for O&M).....	-5,657	-4,395	-4,395	+1,262	---
Offsetting Collections (for PPW).....	-34,000	-70,000	-18,000	+16,000	+52,000
TOTAL, SOUTHWESTERN POWER ADMINISTRATION.....	10,400	10,400	10,400	---	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
WESTERN AREA POWER ADMINISTRATION					
Operation and Maintenance:					
Construction and Rehabilitation.....	26,251	35,185	35,185	+8,934	---
Operation and Maintenance.....	77,874	81,983	81,983	+4,109	---
Purchase Power and Wheeling.....	485,890	589,677	443,677	-42,213	-146,000
Program Direction.....	253,575	267,246	267,246	+13,671	---
Subtotal, Operation and Maintenance.....	843,590	974,091	828,091	-15,499	-146,000
Less Alternative Financing (for O&M).....	-6,297	-7,122	-7,122	-825	---
Less Alternative Financing (for Construction).....	-20,353	-31,090	-31,090	-10,737	---
Less Alternative Financing (for PD).....	-48,546	-51,849	-51,849	-3,303	---
Less Alternative Financing (for PPW).....	-293,890	-273,677	-273,677	+20,213	---
Offsetting Collections (for PD).....	-145,010	-166,935	-166,935	-21,925	---
Offsetting Collections (for O&M).....	-24,744	-27,530	-27,530	-2,786	---
Purchase Power & Wheeling Financed from Offsetting (P.L. 108-447/109-103).....	-192,000	-316,000	-170,000	+22,000	+146,000
Offsetting Collections - Colorado River Dam (P.L. 98-381).....	-8,378	-9,116	-9,116	-738	---
Use of Prior-Year Balances.....	-15,000	---	---	+15,000	---
TOTAL, WESTERN AREA POWER ADMINISTRATION.....	89,372	90,772	90,772	+1,400	---
FALCON AND AMISTAD OPERATING AND MAINTENANCE FUND					
Falcon And Amistad Operation And Maintenance.....	7,302	7,545	7,545	+243	---
Offsetting Collections - Falcon and Amistad Fund....	-5,548	-5,580	-5,580	-32	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Less Alternative Financing - Falcon and Amistad Fund	-1,526	-1,737	-1,737	-211	---
TOTAL, FALCON AND AMISTAD O&M FUND	228	228	228	---	---
TOTAL, POWER MARKETING ADMINISTRATIONS	100,000	101,400	101,400	+1,400	---
FEDERAL ENERGY REGULATORY COMMISSION					
Federal Energy Regulatory Commission	404,350	463,900	466,426	+62,076	+2,526
FERC Revenues	-404,350	-463,900	-466,426	-62,076	-2,526
TOTAL, FEDERAL ENERGY REGULATORY COMMISSION	---	---	---	---	---
General Provisions					
Colorado River Basin Fund (305(b))	2,000	---	2,000	---	+2,000
Sale of Petroleum Product	---	---	---	---	---
Defense Nuclear Nonproliferation Construction Project	---	---	---	---	---
99-D-143 Rescission	---	---	-330,000	-330,000	-330,000
Naval Reactors Rescission	---	---	-6,000	-6,000	-6,000
Total, General Provisions	2,000	---	-334,000	-336,000	-334,000
GRAND TOTAL, DEPARTMENT OF ENERGY	39,625,025	46,646,300	45,126,500	+5,501,475	-1,519,800
(Total amount appropriated)	(41,927,265)	(46,982,300)	(45,462,500)	(+3,535,235)	(-1,519,800)
(Rescissions)	(-2,240)	(-336,000)	(-336,000)	(-333,760)	---

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
SUMMARY OF ACCOUNTS					
Energy Efficiency and Renewable Energy.....	2,861,760	4,732,000	3,768,000	+906,240	-964,000
Cybersecurity, Energy Security, and Emergency Response	156,000	201,000	177,000	+21,000	-24,000
Electricity.....	211,720	327,000	267,000	+55,280	-60,000
Nuclear Energy.....	1,507,600	1,850,500	1,675,000	+167,400	-175,500
Fossil Energy and Carbon Management.....	750,000	890,000	820,000	+70,000	-70,000
Naval Petroleum & Oil Shale Reserves.....	13,006	13,650	13,650	+644	---
Strategic Petroleum Reserve.....	188,000	197,000	197,000	+9,000	---
SPR Petroleum Account.....	1,000	7,350	7,350	+6,350	---
Northeast Home Heating Oil Reserve.....	6,500	---	6,500	---	+6,500
Energy Information Administration.....	126,800	126,800	129,087	+2,287	+2,287
Non-Defense Environmental Cleanup.....	319,200	338,860	333,863	+14,663	-4,997
Uranium Enrichment D&D Fund.....	841,000	831,340	831,340	-9,660	---
Science.....	7,026,000	7,440,000	7,320,000	+294,000	-120,000
Nuclear Waste Disposal.....	27,500	7,500	27,500	---	+20,000
Technology Transitions.....	---	19,470	19,470	+19,470	---
Clean Energy Demonstrations.....	---	400,000	200,000	+200,000	-200,000
Advanced Research Projects Agency-Energy.....	427,000	500,000	600,000	+173,000	+100,000
Advanced Research Projects Agency-Climate.....	---	200,000	---	---	-200,000
Title 17 Innovative technology loan guarantee program.	-363,000	179,000	29,000	+392,000	-150,000
Advanced Technology Vehicles Manufacturing Loan	---	---	---	---	---
Program.....	-1,903,000	5,000	5,000	+1,908,000	---
Tribal Energy Loan Guarantee program.....	2,000	2,000	2,000	---	---
Indian Energy Policy and Programs.....	22,000	122,000	70,000	+48,000	-52,000
Departmental administration.....	166,000	321,760	272,000	+106,000	-49,760
Office of the Inspector General.....	57,739	78,000	78,000	+20,261	---
Atomic Energy Defense Activities:					

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
National Nuclear Security Administration:					
Weapons Activities.....	15,345,000	15,484,295	15,484,295	+139,295	---
Defense Nuclear Nonproliferation.....	2,260,000	1,934,000	2,340,000	+80,000	+406,000
Naval Reactors.....	1,684,000	1,860,705	1,866,705	+182,705	+6,000
Federal Salaries and Expenses.....	443,200	464,000	464,000	+20,800	---
Subtotal, National Nuclear Security Admin.....	19,732,200	19,743,000	20,155,000	+422,800	+412,000
Defense Environmental Cleanup:					
Defense UED&D.....	6,426,000	6,841,670	6,592,000	+166,000	-249,670
Other Defense Activities.....	920,000	1,170,000	831,340	+831,340	+831,340
Total, Atomic Energy Defense Activities.....	27,078,200	27,754,670	28,510,340	+1,432,140	+755,670
Power Marketing Administrations (1):					
Southwestern Power Administration.....	10,400	10,400	10,400	---	---
Western Area Power Administration.....	89,372	90,772	90,772	+1,400	---
Falcon and Amistad Operating and Maintenance Fund.....	228	228	228	---	---
Total, Power Marketing Administrations.....	100,000	101,400	101,400	+1,400	---
Federal Energy Regulatory Commission:					
Salaries and Expenses.....	404,350	463,900	466,426	+62,076	+2,526
Revenues.....	-404,350	-463,900	-466,426	-62,076	-2,526

DEPARTMENT OF ENERGY
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
General Provision:					
Colorado River Basin Fund (305(b)).....	2,000	---	2,000	---	+2,000
Defense Nuclear Nonproliferation Construction					
Project 99-D-143 Rescission.....	---	---	-330,000	-330,000	-330,000
Naval Reactors Rescission.....	---	---	-6,000	-6,000	-6,000
Subtotal, General Provisions.....	2,000	---	-334,000	-336,000	-334,000
=====					
Total Summary of Accounts, Department of Energy...	39,625,025	46,646,300	45,126,500	+5,501,475	-1,519,800
=====					

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
(INCLUDING TRANSFERS AND RESCISSIONS OF FUNDS)

The bill includes a provision that prohibits the use of funds provided in this title to initiate requests for proposals, other solicitations or arrangements for new programs or activities that have not yet been approved and funded by the Congress; requires notification or a report for certain funding actions; prohibits funds to be used for certain multi-year “Energy Programs” activities without notification; prohibits the obligation or expenditure of funds provided in this title through a reprogramming of funds except in certain circumstances; and permits the transfer and merger of unexpended balances of prior appropriations with appropriation accounts established in this bill.

The bill continues a provision that authorizes intelligence activities of the Department of Energy for purposes of section 504 of the National Security Act of 1947.

The bill continues a provision that prohibits the use of funds in this title for capital construction of high hazard nuclear facilities, unless certain independent oversight is conducted.

The bill continues a provision that prohibits the use of funds provided in this title to approve critical decision-2 or critical decision-3 for certain construction projects, unless a separate independent cost estimate has been developed for that critical decision.

The bill includes a provision regarding authority to release refined petroleum product from the Strategic Petroleum Reserve (SPR).

The bill includes a provision to prohibit certain payments.

The bill includes a provision that rescinds certain funds from prior year appropriations.

The bill includes a provision transferring certain funds.

TITLE IV—INDEPENDENT AGENCIES

APPALACHIAN REGIONAL COMMISSION

Appropriation, 2021	\$180,000,000
Budget estimate, 2022	235,000,000
Recommended, 2022	210,000,000
Comparison:	
Appropriation, 2021	+30,000,000
Budget estimate, 2022	-25,000,000

The Appalachian Regional Commission (ARC) is a regional economic development agency established in 1965 by the Appalachian Regional Development Act (Public Law 89-4). It is composed of the governors of the 13 Appalachian states and a federal co-chair appointed by the President. Each year, the ARC provides funding for several hundred projects in the Appalachian Region in areas such as business development, education and job training, telecommunications, infrastructure, community development, housing, and transportation.

The recommendation includes \$8,000,000 for Local Development Districts.

To diversify and enhance regional business development, \$10,000,000 is provided to continue the program of high-speed

broadband deployment in distressed counties within the Central Appalachian region that have been most negatively impacted by the downturn in the coal industry.

Not less than \$15,000,000 is provided for counties within the Northern Appalachian region to support economic development, manufacturing, and entrepreneurship.

The recommendation includes \$16,000,000 for a program of basic infrastructure improvements in distressed counties in Central Appalachia.

Within available funds, the Committee provides \$65,000,000 for activities in support of the POWER Plan for activities that target resources to help communities and regions that have been affected by job losses in coal mining, coal power plant operations, and coal related supply chain industries due to the economic downturn of the coal industry. These projects will create and retain jobs, assist businesses, and prepare thousands of workers and students with globally competitive skills and opportunities in the region's manufacturing, technology, entrepreneurship, agriculture, and other emerging sectors.

The Committee supports targeted investment in impoverished areas to promote economic development in communities where it has been scarce, both in persistent poverty counties and in other high-poverty areas. Accordingly, the Commission is directed to provide to the Committee not later than 90 days after enactment of this Act an analysis of how the Commission's authorizing statute defines persistent poverty or distressed communities. This analysis should include information on the percentage of funding and a summary of activities directed to distressed communities or areas of persistent poverty. Additionally, it should include a comparison of how the Commission's definitions of persistent poverty or distressed communities compares to a definition of persistent poverty meaning that county that has had 20 percent or more of its population living in poverty over the past 30 years, as measured by the 1993 Small Area Income and Poverty Estimates, the 2000 decennial census, and the most recent Small Area Income and Poverty Estimates, or any territory or possession of the United States.

The Commission is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing regarding any activities proposed or funded relating to clean energy deployment or integration of renewable energy sources, including energy storage, and coordination with other federal agencies on these efforts.

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

SALARIES AND EXPENSES

Appropriation, 2021	\$31,000,000
Budget estimate, 2022	31,000,000
Recommended, 2022	31,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	---

The Defense Nuclear Facilities Safety Board (DNFSB) was created by the National Defense Authorization Act for fiscal year 1989. The Board, composed of five members appointed by the President, provides advice and recommendations to the Secretary of En-

ergy regarding public health and safety issues at the Department's defense nuclear facilities. The Board is responsible for reviewing and evaluating the content and implementation of the standards relating to the design, construction, operation, and decommissioning of the Department of Energy's defense nuclear facilities.

The Committee is pleased with the Board's progress on establishing a memorandum of understanding with the Department that will provide a foundation for mutual communication, transparency, and information sharing to promote operational and interface efficiencies.

DELTA REGIONAL AUTHORITY
SALARIES AND EXPENSES

Appropriation, 2021	\$30,000,000
Budget estimate, 2022	30,100,000
Recommended, 2022	30,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	- 100,000

The Delta Regional Authority (DRA) is a federal-state partnership established by the Delta Regional Authority Act of 2000 (Public Law 106-554) that serves a 252-county/parish area in an eight-state region near the mouth of the Mississippi River. Led by a federal co-chair and the governors of each participating state, the DRA is designed to remedy severe and chronic economic distress by stimulating economic development and fostering partnerships that will have a positive impact on the region's economy. The DRA seeks to help local communities leverage other federal and state programs that are focused on basic infrastructure development, transportation improvements, business development, and job training services. Under federal law, at least 75 percent of appropriated funds must be invested in distressed counties and parishes, with 50 percent of the funds for transportation and basic infrastructure improvements.

The Committee supports targeted investment in impoverished areas to promote economic development in communities where it has been scarce, both in persistent poverty counties and in other high-poverty areas. Accordingly, the DRA is directed to provide to the Committee not later than 90 days after enactment of this Act an analysis of how the DRA's authorizing statute defines persistent poverty or distressed communities. This analysis should include information on the percentage of funding and a summary of activities directed to distressed communities or areas of persistent poverty. Additionally, it should include a comparison of how the DRA's definitions of persistent poverty or distressed communities compares to a definition of persistent poverty meaning that county that has had 20 percent or more of its population living in poverty over the past 30 years, as measured by the 1993 Small Area Income and Poverty Estimates, the 2000 decennial census, and the most recent Small Area Income and Poverty Estimates, or any territory or possession of the United States.

The DRA is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing regarding any activities proposed or funded relating to clean energy deployment or in-

tegration of renewable energy sources, including energy storage, and coordination with other federal agencies on these efforts.

DENALI COMMISSION

Appropriation, 2021	\$15,000,000
Budget estimate, 2022	15,100,000
Recommended, 2022	15,000,000
Comparison:	
Appropriation, 2021	---
Budget estimate, 2022	- 100,000

The Denali Commission is a regional development agency established by the Denali Commission Act of 1998 (Public Law 105-277) to provide critical utilities, infrastructure, health services, and economic support throughout Alaska. To ensure that local communities have a stake in Commission-funded projects, local cost-share requirements for construction and equipment have been established for both distressed and non-distressed communities.

The Committee supports targeted investment in impoverished areas to promote economic development in communities where it has been scarce, both in persistent poverty counties and in other high-poverty areas. Accordingly, the Commission is directed to provide to the Committee not later than 90 days after enactment of this Act an analysis of how the Commission's authorizing statute defines persistent poverty or distressed communities. This analysis should include information on the percentage of funding and a summary of activities directed to distressed communities or areas of persistent poverty. Additionally, it should include a comparison of how the Commissions' definitions of persistent poverty or distressed communities compares to a definition of persistent poverty meaning that county that has had 20 percent or more of its population living in poverty over the past 30 years, as measured by the 1993 Small Area Income and Poverty Estimates, the 2000 decennial census, and the most recent Small Area Income and Poverty Estimates, or any territory or possession of the United States.

The Commission is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing regarding any activities proposed or funded relating to clean energy deployment or integration of renewable energy sources, including energy storage, and coordination with other federal agencies on these efforts.

NORTHERN BORDER REGIONAL COMMISSION

Appropriation, 2021	\$30,000,000
Budget estimate, 2022	30,100,000
Recommended, 2022	32,000,000
Comparison:	
Appropriation, 2021	+2,000,000
Budget estimate, 2022	+1,900,000

The Food, Conservation, and Energy Act of 2008 (Public Law 110-234) authorized the establishment of the Northern Border Regional Commission (NBRC) as a federal-state partnership intended to address the economic development needs of distressed portions of the four-state region of Maine, New Hampshire, Vermont, and New York.

The Committee supports targeted investment in impoverished areas to promote economic development in communities where it

has been scarce, both in persistent poverty counties and in other high-poverty areas. Accordingly, the Commission is directed to provide to the Committee not later than 90 days after enactment of this Act an analysis of how the Commission’s authorizing statute defines persistent poverty or distressed communities. This analysis should include information on the percentage of funding and a summary of activities directed to distressed communities or areas of persistent poverty. Additionally, it should include a comparison of how the Commission’s definitions of persistent poverty or distressed communities compares to a definition of persistent poverty meaning that county that has had 20 percent or more of its population living in poverty over the past 30 years, as measured by the 1993 Small Area Income and Poverty Estimates, the 2000 decennial census, and the most recent Small Area Income and Poverty Estimates, or any territory or possession of the United States.

Within available funds, the recommendation provides \$4,000,000 for initiatives that seek to address the decline in forest-based economies throughout the region, and \$1,250,000 for the State Capacity Grant Program.

The Commission is directed to provide to the Committee not later than 90 days after enactment of this Act a briefing regarding any activities proposed or funded relating to clean energy deployment or integration of renewable energy sources, including energy storage, and coordination with other federal agencies on these efforts.

SOUTHEAST CRESCENT REGIONAL COMMISSION

Appropriation, 2021	\$1,000,000
Budget estimate, 2022	2,500,000
Recommended, 2022	2,500,000
Comparison:	
Appropriation, 2021	+1,500,000
Budget estimate, 2022	---

The Food, Conservation, and Energy Act of 2008 (Public Law 110–234) authorized the establishment of the Southeast Crescent Regional Commission as a federal-state partnership intended to address the economic development needs of distressed portions of the seven state region in the southeastern United States not already served by a regional development agency. The Committee strongly encourages the Administration to promptly appoint a federal co-chair for the Commission.

The Committee supports targeted investment in impoverished areas to promote economic development in communities where it has been scarce, both in persistent poverty counties and in other high-poverty areas.

SOUTHWEST BORDER REGIONAL COMMISSION

Appropriation, 2021	\$250,000
Budget estimate, 2022	2,500,000
Recommended, 2022	2,500,000
Comparison:	
Appropriation, 2021	+2,250,000
Budget estimate, 2022	---

The Food, Conservation, and Energy Act of 2008 (Public Law 110–234) authorized the establishment of the Southwest Border Regional Commission (SWBRC) as a federal-state partnership in-

tended to address the economic development needs of distressed portions of the four-state region of Arizona, California, New Mexico and Texas. The Committee supports targeted investment in impoverished areas to promote economic development in communities where it has been scarce, both in persistent poverty counties and in other high-poverty areas.

The coronavirus pandemic has dramatically decreased cross-border travel, leading to widespread economic hardship along the southwest border. The Administration, therefore, is encouraged to promptly appoint a federal co-chair in order to establish key partnerships with local communities, including a focus on underserved colonias at the southwest border that include approximately 2,500,000 individuals, and to consider opportunities to establish a regional presence in or near major inland ports of entry.

NUCLEAR REGULATORY COMMISSION

SALARIES AND EXPENSES

Appropriation, 2021	\$830,900,000
Budget estimate, 2022	873,901,000
Recommended, 2022	873,901,000
Comparison:	
Appropriation, 2021	+43,001,000
Budget estimate, 2022	— — —

REVENUES

Appropriation, 2021	-\$710,293,000
Budget estimate, 2022	-745,258,000
Recommended, 2022	-745,258,000
Comparison:	
Appropriation, 2021	-34,965,000
Budget estimate, 2022	— — —

NET APPROPRIATION

Appropriation, 2021	\$120,607,000
Budget estimate, 2022	128,643,000
Recommended, 2022	128,643,000
Comparison:	
Appropriation, 2021	+8,036,000
Budget estimate, 2022	— — —

The Committee recommendation for the Nuclear Regulatory Commission (NRC) provides the following amounts:

(Dollars in thousands)

Account	FY 2021 enacted	FY 2022 request	Cmte. rec.
Nuclear Reactor Safety	\$452,849	\$477,430	\$477,430
Nuclear Materials and Waste Safety	102,864	107,337	107,337
Decommissioning and Low-Level Waste	22,771	22,856	22,856
Integrated University Program	16,000	0	16,000
Corporate Support	271,416	266,278	266,278
Total, Program Level	865,900	873,901	889,901
Savings and Carryover	-35,000	— — —	-16,000
Total	830,900	873,901	873,901

The Commission is responsible for ensuring the safety and security of the nation's commercial nuclear reactors and overseeing cer-

tain nuclear materials and radioactive waste activities. The Committee expects the Commission to hold the nuclear industry to the highest safety standards in law and in regulation.

Office of the Commission.—Within available funds, up to \$9,500,000 is included for salaries, travel, and other support costs for the Office of the Commission. These salaries and expenses shall include only salaries, benefits, and travel costs and shall not include general and administrative and infrastructure costs. The Commission shall continue to include a breakout and explanation of the Commission salaries and expenses in its annual budget requests. If the Commission wishes to change the composition of the funds requested for its salaries and expenses in future years, it must do so in an annual budget request or through a reprogramming.

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.

Integrated University Program.—The Commission is directed to use \$16,000,000 of prior-year, unobligated balances for the Integrated University Program. 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.

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.

Rulemaking.—The Commission shall list all planned rulemaking activities, including their priority, schedule, and actions taken to adhere to the backfit rule, in the annual budget request and the semi-annual report to Congress on licensing and regulatory activities.

Re-Evaluation of Nuclear Medicine Event Reporting.—Evidence shows that certain nuclear medicine extravasations may exceed medical event reporting provided in 10 C.F.R. Part 35 Subpart M. These events may harm patients through unintended radiation exposure, compromised imaging that negatively affects care, additional interventional procedures, and repeated imaging procedures. The Committee continues to encourage the Commission to consider the inclusion of significant extravasations in medical event reporting to improve safety, quality, and transparency for patients, treating physicians, and the Commission itself.

Radiopharmaceutical Training and Experience.—The Committee encourages the Commission to ensure that patient safety is at the forefront of its examination of training and experience requirements for the use of radiopharmaceuticals. This includes following the recommendations of the NRC Advisory Committee on the Medical Use of Isotopes, as well as the input of medical and scientific professionals with radiation safety expertise, to maintain important patient safeguards and ensure public health and safety.

OFFICE OF INSPECTOR GENERAL

GROSS APPROPRIATION

Appropriation, 2021	\$13,499,000
Budget estimate, 2022	13,799,000
Recommended, 2022	13,799,000
Comparison:	
Appropriation, 2021	+300,000
Budget estimate, 2022	---

REVENUES

Appropriation, 2021	-\$11,106,000
Budget estimate, 2022	-11,442,000
Recommended, 2022	-11,442,000
Comparison:	
Appropriation, 2021	-336,000
Budget estimate, 2022	---

NET APPROPRIATION

Appropriation, 2021	\$2,393,000
Budget estimate, 2022	2,357,000
Recommended, 2022	2,357,000
Comparison:	
Appropriation, 2021	-36,000
Budget estimate, 2022	---

The Committee includes \$1,146,000 within this appropriation to provide inspector general services for the Defense Nuclear Facilities Safety Board.

NUCLEAR WASTE TECHNICAL REVIEW BOARD

SALARIES AND EXPENSES

Appropriation, 2021	\$3,600,000
Budget estimate, 2022	3,800,000
Recommended, 2022	3,800,000
Comparison:	
Appropriation, 2021	+200,000
Budget estimate, 2022	---

The Nuclear Waste Technical Review Board (NWTRB) was established by the 1987 amendments to the Nuclear Waste Policy Act of 1982 to provide independent technical oversight of the Department of Energy's nuclear waste disposal program. The Committee expects the NWTRB to continue its active engagement with the Department and the Nuclear Regulatory Commission on issues involving nuclear waste disposal.

GENERAL PROVISIONS—INDEPENDENT AGENCIES

The bill continues a provision requiring the Nuclear Regulatory Commission to fully comply with Congressional requests for information.

The bill continues a provision regarding the circumstances in which the Nuclear Regulatory Commission may reprogram funds.

TITLE V—GENERAL PROVISIONS

(INCLUDING TRANSFER OF FUNDS)

The bill continues a provision that prohibits the use of funds provided in this Act to, in any way, directly or indirectly influence congressional action on any legislation or appropriation matters pending before the Congress, other than to communicate to Members of Congress as described in section 1913 of Title 18, United States Code.

The bill continues a provision consolidating the transfer authorities into and out of accounts funded by this Act. No additional transfer authority is implied or conveyed by this provision. For the purposes of this provision, the term “transfer” shall mean the shifting of all or part of the budget authority in one account to another.

The bill continues a provision prohibiting funds in contravention of E.O. 12898 of February 11, 1994, regarding environmental justice.

The bill includes a provision prohibiting funds in this Act from being used to maintain or establish computer networks unless such networks block the viewing, downloading, or exchange of pornography.

HOUSE OF REPRESENTATIVES REPORT REQUIREMENTS

The following items are included in accordance with various requirements of the Rules of the House of Representatives.

STATEMENT OF GENERAL PERFORMANCE GOALS AND OBJECTIVES

Pursuant to clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the following is a statement of general performance goals and objectives for which this measure authorizes funding:

The Committee on Appropriations considers program performance, including a program’s success in developing and attaining outcome-related goals and objectives, in developing funding recommendations.

TRANSFER OF FUNDS

Pursuant to clause 3(f)(2) of rule XIII of the Rules of the House of Representatives, the following is submitted describing the transfer of funds provided in the accompanying bill.

TITLE I—CORPS OF ENGINEERS—CIVIL

Under section 104, “General Provisions, Corps of Engineers—Civil”, \$5,400,000 under the heading “Operation and Maintenance” may be transferred to the Fish and Wildlife Service to mitigate for fisheries lost due to Corps projects.

TITLE II—BUREAU OF RECLAMATION

Under “Water and Related Resources”, \$71,217,000 is available for transfer to the Upper Colorado River Basin Fund and \$5,584,000 is available for transfer to the Lower Colorado River Basin Development Fund. Such funds as may be necessary may be

advanced to the Colorado River Dam Fund. Additionally, \$40,000,000 is available for transfer into the Blackfoot Water Settlement Implementation Fund established by section 3717 of Public Law 114–322. The amounts of transfers may be increased or decreased within the overall appropriation under the heading.

Under “California Bay-Delta Restoration”, such sums as may be necessary to carry out authorized purposes may be transferred to appropriate accounts of other participating federal agencies.

TITLE III—DEPARTMENT OF ENERGY

Under “Atomic Energy Defense Activities—National Nuclear Security Administration—Naval Reactors”, \$92,747,000 shall be transferred to “Department of Energy—Energy Programs—Nuclear Energy” for the Advanced Test Reactor.

Under “Defense Uranium Enrichment Decontamination and Decommissioning”, \$831,340,000 is deposited into the “Defense Environmental Cleanup” account and transferred to the “Uranium Decontamination and Decommissioning Fund”.

Under section 301, “General Provisions—Department of Energy,” unexpended balances of prior appropriations provided for activities in this Act may be available for appropriation accounts for such activities established pursuant to this title. Available balances may be merged with funds in the applicable established accounts and thereafter may be accounted for as one fund for the same time period as originally enacted.

Under section 308, “General Provisions—Department of Energy,” all unavailable balances from the United States Enrichment Corporation Fund shall be transferred to and merged with the Uranium Enrichment Decontamination and Decommissioning Fund.

DISCLOSURE OF EARMARKS AND CONGRESSIONALLY DIRECTED SPENDING ITEMS

The following table is submitted in compliance with clause 9 of rule XXI, and lists the congressional earmarks (as defined in paragraph (e) of clause 9) contained in the bill or in this report. Neither the bill nor the report contains any limited tax benefits or limited tariff benefits as defined in paragraphs (f) or (g) of clause 9 of rule XXI.

ENERGY AND WATER DEVELOPMENT

[Community Project Funding Items]

Agency	Account	Project	Amount	Requestor(s)
Army Corps of Engineers (Civil)	Construction	Arizona Environmental Infrastructure, AZ	\$4,000,000	Stanton
Army Corps of Engineers (Civil)	Construction	Arizona Environmental Infrastructure (City of Tolleson), AZ	638,000	Gallego
Army Corps of Engineers (Civil)	Construction	Calumet Region, IN	10,000,000	Mrvan
Army Corps of Engineers (Civil)	Construction	Carolina Beach and Vicinity, NC	11,550,000	Rouzer
Army Corps of Engineers (Civil)	Construction	City of Lorain Environmental Infrastructure Sewer Project, OH	3,375,000	Kaptur
Army Corps of Engineers (Civil)	Construction	Eorse Creek, Wayne County, WI	1,675,000	Dingell; Tlaib
Army Corps of Engineers (Civil)	Construction	Fairfax Jersey Creek, KS	4,000,000	Davids (KS)
Army Corps of Engineers (Civil)	Construction	Florida Keys Water Quality Improvement Project, FL	6,000,000	Gimenez
Army Corps of Engineers (Civil)	Construction	Fort Pierce, FL	10,549,000	Mast
Army Corps of Engineers (Civil)	Construction	Harbor/South Bay, Los Angeles, CA	3,790,000	Waters
Army Corps of Engineers (Civil)	Construction	Indiana Harbor, Confined Disposal Facility, IN	18,395,000	Mrvan
Army Corps of Engineers (Civil)	Construction	Indiana Shoreline, IN	2,700,000	Mrvan
Army Corps of Engineers (Civil)	Construction	J Bennett Johnston Waterway, LA	2,250,000	Leflow
Army Corps of Engineers (Civil)	Construction	Lakes Marion and Moultrie, SC	19,785,000	Clyburn
Army Corps of Engineers (Civil)	Construction	Midwest City, OK	5,000,000	Cole
Army Corps of Engineers (Civil)	Construction	New River, Imperial County, CA	500,000	Vargas
Army Corps of Engineers (Civil)	Construction	Pinellas County, FL	900,000	Crist
Army Corps of Engineers (Civil)	Construction	Sacramento Area Environmental Infrastructure (City of Folsom), CA	75,000	Bera
Army Corps of Engineers (Civil)	Construction	Sacramento Area Environmental Infrastructure (Orangevale), CA	75,000	Bera
Army Corps of Engineers (Civil)	Construction	San Clemente Shoreline, CA	9,306,000	Levin (CA)
Army Corps of Engineers (Civil)	Construction	South Central Pennsylvania Environmental Improvement (Confluence Borough Municipal Authority Water Quality Project), PA	3,246,000	Joyce (PA)
Army Corps of Engineers (Civil)	Construction	South Florida Ecosystem Restoration (SFER) Program, FL	350,000,000	Mast
Army Corps of Engineers (Civil)	Construction	Southern and Eastern Kentucky, KY (Martin County)	1,500,000	Rogers (KY)
Army Corps of Engineers (Civil)	Construction	Southwest Coastal Louisiana Hurricane Protection, LA	12,700,000	Higgins (LA)
Army Corps of Engineers (Civil)	Construction	Surfside-Sunset-Newport Beach, CA	15,500,000	Steel
Army Corps of Engineers (Civil)	Construction	Townsend Inlet to Cape May Inlet, NJ	15,500,000	Van Drew
Army Corps of Engineers (Civil)	Construction	Tres Rios, AZ	1,841,000	Stanton
Army Corps of Engineers (Civil)	Construction	Upper Mississippi River—Illinois WW System, IL, IA, MN, MO & WI	22,500,000	Bustos; Graves (MO); Hinson; Luetkemeyer
Army Corps of Engineers (Civil)	Construction	Willamette River at Willamette Falls, OR	6,200,000	Schraeder
Army Corps of Engineers (Civil)	Construction	Wrightsville Beach, NC	10,080,000	Rouzer
Army Corps of Engineers (Civil)	Section 103	Reel Point Preserve, Town of Shelter Island, NY	50,000	Zeldin
Army Corps of Engineers (Civil)	Section 103	Wading River Creek, Town of Riverhead, NY	50,000	Zeldin
Army Corps of Engineers (Civil)	Section 107	Lake Montauk Harbor, NY	1,000,000	Zeldin

ENERGY AND WATER DEVELOPMENT—Continued

[Community Project Funding Items]

Agency	Account	Project	Amount	Requestor(s)
Army Corps of Engineers (Civil)	Section 107	Lower St. Croix River, MN	50,000	Craig
Army Corps of Engineers (Civil)	Section 1135	Osage River Ecosystem Restoration, Tuscumbia, MO & Miller County, MO	300,000	Luetkemeyer
Army Corps of Engineers (Civil)	Section 14	Chickasaw Park Louisville/Jefferson Co. KY 14, KY	100,000	Yarmuth
Army Corps of Engineers (Civil)	Section 205	McCormick Wash, Globe, AZ	100,000	O'Halleran
Army Corps of Engineers (Civil)	Section 205	Rose and Palm Garden Washes Flood Control Project, AZ	100,000	Kirkpatrick
Army Corps of Engineers (Civil)	Section 205	Salmon River, NY	50,000	Stefanik
Army Corps of Engineers (Civil)	Investigations	Cano Martin Peña Ecosystem Restoration, PR	2,150,000	Gonzalez-Colon
Army Corps of Engineers (Civil)	Investigations	City of Norfolk, VA	650,000	Luria
Army Corps of Engineers (Civil)	Investigations	Columbia River Turning Basin Navigation Improvements, WA & OR	200,000	Herrera Beutler
Army Corps of Engineers (Civil)	Investigations	Fort Pierce, St. Lucie County, FL	1,000,000	Mast
Army Corps of Engineers (Civil)	Investigations	Great Lakes Coastal Resiliency Study, IL, IN, MI, MN, NY, OH, PA and WI	500,000	Joyce (OH); Katho
Army Corps of Engineers (Civil)	Investigations	Hartford, CT & East Hartford, CT	200,000	Larson (CT)
Army Corps of Engineers (Civil)	Investigations	Honolulu Harbor Modification Feasibility Study, HI	800,000	Case
Army Corps of Engineers (Civil)	Investigations	Houma Navigation Canal, LA	350,000	Graves (LA)
Army Corps of Engineers (Civil)	Investigations	Imperial Streams Salton Sea, CA	200,000	Ruiz; Vargas
Army Corps of Engineers (Civil)	Investigations	Kentucky River, Beatyville, KY	700,000	Rogers (KY)
Army Corps of Engineers (Civil)	Investigations	Little Colorado River, Winslow, AZ	500,000	O'Halleran
Army Corps of Engineers (Civil)	Investigations	Los Angeles River Ecosystem Restoration, CA	3,693,000	Gomez
Army Corps of Engineers (Civil)	Investigations	Lowell Creek Flood Diversion, AK	3,000,000	Young
Army Corps of Engineers (Civil)	Investigations	Lower Cache Creek, CA	2,000,000	Garamendi
Army Corps of Engineers (Civil)	Investigations	Lower Missouri Basin—Brunswick L-246, MO	500,000	Graves (MO)
Army Corps of Engineers (Civil)	Investigations	Lower Missouri Basin—Holt County, MO, Doniphan County, KS	300,000	Graves (MO)
Army Corps of Engineers (Civil)	Investigations	Lower Missouri Basin—Jefferson City L-142, MO	300,000	Luetkemeyer
Army Corps of Engineers (Civil)	Investigations	Lower Rio Grande Valley Watershed Assessment, TX	200,000	Vela
Army Corps of Engineers (Civil)	Investigations	Lower San Joaquin (Lathrop & Manteca), CA	200,000	McInerney
Army Corps of Engineers (Civil)	Investigations	Peckman River Basin, NJ	500,000	Sherrill
Army Corps of Engineers (Civil)	Investigations	Port Fourchon Belle Pass Channel, LA	1,500,000	Scalise
Army Corps of Engineers (Civil)	Investigations	Port of Iberia, LA	1,200,000	Higgins (LA)
Army Corps of Engineers (Civil)	Investigations	San Diego County Shoreline (Oceanside), CA	750,000	Levin (CA)
Army Corps of Engineers (Civil)	Investigations	San Francisco Waterfront Storm Damage Reduction Study, CA	3,000,000	Pelosi
Army Corps of Engineers (Civil)	Investigations	Santa Paula Creek, CA	900,000	Brownley
Army Corps of Engineers (Civil)	Investigations	South San Francisco Bay Shoreline (Santa Clara County), CA	1,600,000	Khanna
Army Corps of Engineers (Civil)	Investigations	St. Augustine Back Bay, FL	200,000	Rutherford
Army Corps of Engineers (Civil)	Investigations	Tampa Harbor, FL (General Re-Evaluation Report)	800,000	Castor (FL)
Army Corps of Engineers (Civil)	Investigations	Upper Turkey Creek Basin Design, Merriam, KS	500,000	Davidson (KS)

Army Corps of Engineers (Civil)	Investigations	Willamette River Environmental Dredging, OR	732,000	Blumenauer
Army Corps of Engineers (Civil)	Investigations	Wilmington Harbor Navigation Improvements, NC	500,000	Rouzer
Army Corps of Engineers (Civil)	Mississippi River and Tributaries	Channel Improvement, AR, IL, KY, LA, MS, MO & TN (Tom Lee Park)	3,000,000	Cohen
Army Corps of Engineers (Civil)	Mississippi River and Tributaries	Lower Mississippi River Comprehensive Management Study	5,000,000	Graves (LA)
Army Corps of Engineers (Civil)	Mississippi River and Tributaries	Morganza to the Gulf, LA	19,333,000	Scalise; Graves (LA)
Army Corps of Engineers (Civil)	Operation and Maintenance	Brown's Creek, NY	250,000	Garbarino
Army Corps of Engineers (Civil)	Operation and Maintenance	Burns Waterway Harbor, IN	1,561,000	Mrvan
Army Corps of Engineers (Civil)	Operation and Maintenance	Channel Islands Harbor, CA	8,000,000	Brownley
Army Corps of Engineers (Civil)	Operation and Maintenance	Comenaut Harbor, OH	2,764,000	Joyce (OH)
Army Corps of Engineers (Civil)	Operation and Maintenance	Coos Bay (Major Maintenance), OR	32,720,000	DeFazio
Army Corps of Engineers (Civil)	Operation and Maintenance	Dauphin Island Bay, AL	3,023,000	Carl
Army Corps of Engineers (Civil)	Operation and Maintenance	Fairport Harbor, OH	3,880,000	Joyce (OH)
Army Corps of Engineers (Civil)	Operation and Maintenance	Houston Ship Channel (DMMP), TX	1,500,000	Jackson Lee
Army Corps of Engineers (Civil)	Operation and Maintenance	Indiana Harbor, IN	8,196,000	Mrvan
Army Corps of Engineers (Civil)	Operation and Maintenance	Intracoastal Waterway (IWW)—Caloosahatchee River to Anclote River, FL	2,500,000	Steube
Army Corps of Engineers (Civil)	Operation and Maintenance	Intracoastal Waterway (IWW)—Jacksonville to Miami, FL	6,000,000	Mast
Army Corps of Engineers (Civil)	Operation and Maintenance	Lake Providence Harbor, LA	1,324,000	Letlow
Army Corps of Engineers (Civil)	Operation and Maintenance	Lake River, WA (Port of Ridgefield)	124,000	Herrera Beutler
Army Corps of Engineers (Civil)	Operation and Maintenance	Lockwoods Folly River, NC	1,050,000	Rouzer
Army Corps of Engineers (Civil)	Operation and Maintenance	Long Island Intracoastal Waterway, NY	8,500,000	Zeldin
Army Corps of Engineers (Civil)	Operation and Maintenance	Maurice River, NJ	4,010,000	Van Drew
Army Corps of Engineers (Civil)	Operation and Maintenance	Mount St. Helens Sediment Control, WA	918,000	Herrera Beutler
Army Corps of Engineers (Civil)	Operation and Maintenance	San Joaquin River (Port of Stockton), CA	9,675,000	McNerney
Army Corps of Engineers (Civil)	Operation and Maintenance	Santa Ana River Basin, CA	9,072,000	Calvert
Army Corps of Engineers (Civil)	Operation and Maintenance	Shoal Harbor and Compton Creek, NJ	8,000,000	Pallone
Army Corps of Engineers (Civil)	Operation and Maintenance	St. Lucie Inlet (South Jetty Rehabilitation), FL	4,800,000	Mast
Army Corps of Engineers (Civil)	Operation and Maintenance	St. Lucie Inlet, FL	5,750,000	Mast
Army Corps of Engineers (Civil)	Operation and Maintenance	St. Patrick's Creek, MD	2,070,000	Hoyer
Army Corps of Engineers (Civil)	Operation and Maintenance	St. Paul Small Boat Harbor, MN	500,000	McCollum
Army Corps of Engineers (Civil)	Operation and Maintenance	Ventura Harbor, CA	5,516,000	Brownley
Army Corps of Engineers (Civil)	Operation and Maintenance	Westport Harbor & Saugluck River, CT	2,810,000	Himes
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	East to West Conveyance Project (SJR to DMC) Appraisal Study	500,000	Harder (CA)
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Island Main Lateral Concrete Lining Project	798,000	Gonzales
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Lake Mead/Las Vegas Wash Program	3,655,000	Lee (NV)
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Lus Bamos Creek Appraisal Study	500,000	Costa

ENERGY AND WATER DEVELOPMENT—Continued
 [Community Project Funding Items]

Agency	Account	Project	Amount	Requestor(s)
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Navajo-Gallup Water Supply Project, NM	67,342,000	Leger Fernandez
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Odessa Subarea	2,000,000	Newhouse, Rodgers (WA)
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Sacramento River Basin Flood Plain Reactivation	1,000,000	Garamendi
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	Salton Sea Research Project	2,546,000	Vargas
Department of the Interior	Bureau of Reclamation—Water and Related Resources.	San Gabriel Basin Restoration Fund	10,000,000	Chui; Napolitano

CHANGES IN THE APPLICATION OF EXISTING LAW

Pursuant to clause 3(f)(1)(A) of rule XIII of the Rules of the House of Representatives, the following statements are submitted describing the effect of provisions in the accompanying bill which directly or indirectly change the application of existing law.

TITLE I—CORPS OF ENGINEERS

Language has been included under Corps of Engineers, Investigations, providing for detailed studies and plans and specifications of projects prior to construction.

Language has been included under Corps of Engineers, Construction, stating that funds can be used for the construction of river and harbor, flood and storm damage reduction, shore protection, aquatic ecosystem restoration, and related projects authorized by law, and for detailed studies and plans and specifications of such projects.

Language has been included under Corps of Engineers, Construction, providing funds from the Inland Waterways Trust Fund and the Harbor Maintenance Trust Fund.

Language has been included under Corps of Engineers, Mississippi River and Tributaries, providing funds from the Harbor Maintenance Trust Fund.

Language has been included under the Corps of Engineers, Operation and Maintenance, stating that funds can be used for: the operation, maintenance, and care of existing river and harbor, flood and storm damage reduction, aquatic ecosystem restoration, and related projects authorized by law; providing security for infrastructure owned or operated by the Corps, including administrative buildings and laboratories; maintaining authorized harbor channels provided by a state, municipality, or other public agency that serve essential navigation needs of general commerce; surveying and charting northern and northwestern lakes and connecting waters; clearing and straightening channels; and removing obstructions to navigation.

Language has been included under Corps of Engineers, Operation and Maintenance, providing funds from the Harbor Maintenance Trust Fund; providing for the use of funds from a special account for resource protection, research, interpretation, and maintenance activities at outdoor recreation areas; and allowing use of funds to cover the cost of operation and maintenance of dredged material disposal facilities for which fees have been collected.

Language has been included under Corps of Engineers, Operation and Maintenance, providing that one percent of the total amount of funds provided for each of the programs, projects, or activities funded under the Operation and Maintenance heading shall not be allocated to a field operating activity until the fourth quarter of the fiscal year and permitting the use of these funds for emergency activities as determined by the Chief of Engineers to be necessary and appropriate.

Language has been included under Corps of Engineers, Expenses, regarding support of the Humphreys Engineer Support Center Activity, the Institute for Water Resources, the United

States Army Engineer Research and Development Center, and the United States Army Corps of Engineers Finance Center.

Language has been included under Corps of Engineers, Expenses, providing that funds are available for official reception and representation expenses.

Language has been included under Corps of Engineers, Expenses, prohibiting the use of other funds in Title I of this Act for the activities funded in Expenses.

Language has been included under Corps of Engineers, Expenses, permitting any Flood Control and Coastal Emergency appropriation to be used to fund the supervision and general administration of emergency operations, repairs, and other activities in response to any flood, hurricane or other natural disaster.

Language has been included to provide for funding for the Office of the Assistant Secretary of the Army for Civil Works.

Language has been included under Corps of Engineers, General Provisions, section 101, providing that none of the funds may be available for obligation or expenditure through a reprogramming of funds except in certain circumstances.

Language has been included under Corps of Engineers, General Provisions, section 102, providing that the allocation of funds be made in accordance to the provisions of this title and report accompanying this Act.

Language has been included under Corps of Engineers, General Provisions, section 103, prohibiting the execution of any contract for a program, project or activity which commits funds in excess of the amount appropriated (to include funds reprogrammed under section 101) that remain unobligated.

Language has been included under Corps of Engineers, General Provisions, section 104, providing for transfer authority to the Fish and Wildlife Service for mitigation for lost fisheries.

Language has been included under Corps of Engineers, General Provisions, section 105, prohibiting certain dredged material disposal activities.

Language has been included under Corps of Engineers, General Provisions, section 106, prohibiting certain activities at a Corps of Engineers project.

Language has been included under Corps of Engineers, General Provisions, section 107, prohibiting funds for reorganization of the Civil Works program.

Language has been included under Corps of Engineers, General Provisions, section 108, regarding the allocation of additional funding.

TITLE II—DEPARTMENT OF THE INTERIOR

Language has been included under Bureau of Reclamation, Water and Related Resources, providing that funds are available for fulfilling federal responsibilities to Native Americans and for grants to and cooperative agreements with state and local governments and Indian tribes.

Language has been included under Bureau of Reclamation, Water and Related Resources, allowing fund transfers within the overall appropriation to the Upper Colorado River Basin Fund and the Lower Colorado River Basin Development Fund; providing that

such sums as necessary may be advanced to the Colorado River Dam Fund; allowing fund transfers to the Blackfeet Water Settlement Implementation Fund; and, transfers may be increased or decreased within the overall appropriation.

Language has been included under Bureau of Reclamation, Water and Related Resources, providing for funds to be derived from the Reclamation Fund, the Water Storage Enhancements Receipts account established by section 4011(e) of Public Law 114-322, or the special fee account established by 16 U.S.C. 6806; that funds contributed under 43 U.S.C. 395 by non-federal entities shall be available for expenditure; and that funds advanced under 43 U.S.C. 397a are to be credited to the Water and Related Resources account and available for expenditure.

Language has been included under Bureau of Reclamation, Water and Related Resources, providing that funds certain funds appropriated under this heading shall be deposited in the San Gabriel Restoration Fund established by section 110 of title I of appendix D of Public Law 106-554.

Language has been included under Bureau of Reclamation, Water and Related Resources, providing that funds may be used for high priority projects carried out by the Youth Conservation Corps, as authorized by 16 U.S.C. 1706.

Language has been included under Bureau of Reclamation, Central Valley Project Restoration Fund, directing the Bureau of Reclamation to assess and collect the full amount of additional mitigation and restoration payments authorized by section 3407(d) of Public Law 102-575.

Language has been included under Bureau of Reclamation, Central Valley Project Restoration Fund, providing that none of the funds under the heading may be used for the acquisition or lease of water for in-stream purposes if the water is already committed to in-stream purposes by a court order adopted by consent or decree.

Language has been included under Bureau of Reclamation, California Bay-Delta Restoration (CALFED), permitting the transfer of funds to appropriate accounts of other participating federal agencies to carry out authorized programs; allowing funds made available under this heading to be used for the federal share of the costs of the CALFED Program management; and requiring that CALFED implementation be carried out with clear performance measures demonstrating concurrent progress in achieving the goals and objectives of the program.

Language has been included under Bureau of Reclamation, Policy and Administration, providing that funds are to be derived from the Reclamation Fund and prohibiting the use of any other appropriation in the Act for activities budgeted as policy and administration expenses.

Language has been included under Bureau of Reclamation, Administrative Provision, providing for the purchase of motor vehicles for replacement.

Language has been included under General Provisions, Department of the Interior, section 201, providing that none of the funds may be available for obligation or expenditure through a reprogramming of funds except in certain circumstances.

Language has been included under General Provisions, Department of the Interior, section 202, regarding the San Luis Unit and the Kesterson Reservoir in California.

Language has been included under General Provisions, Department of the Interior, section 203, regarding the Omnibus Public Land Management Act of 2009.

Language has been included under General Provisions, Department of the Interior, section 204, regarding the CALFED Bay-Delta Authorization Act.

Language has been included under General Provisions, Department of the Interior, section 205, regarding the Omnibus Public Land Management Act of 2009.

Language has been included under General Provisions, Department of the Interior, section 206, regarding the Reclamation States Emergency Drought Relief Act of 1991.

Language has been included under General Provisions, Department of the Interior, section 207, regarding the Reclamation Projects Authorization and Adjustment Act of 1992.

Language has been included under General Provisions, Department of the Interior, section 208, prohibiting funds for certain activities.

TITLE III—DEPARTMENT OF ENERGY

Language has been included under Energy Efficiency and Renewable Energy for the purchase, construction, and acquisition of plant and capital equipment.

Language has been included under Cybersecurity, Energy Security, and Emergency Response for the purchase, construction, and acquisition of plant and capital equipment.

Language has been included under Electricity for the purchase, construction, and acquisition of plant and capital equipment.

Language has been included under Nuclear Energy for the purchase, construction, and acquisition of plant and capital equipment.

Language has been included under Fossil Energy Research and Development for the acquisition of interest, including defeasible and equitable interest in any real property or any facility or for plant or facility acquisition or expansion, and for conducting inquiries, technological investigations, and research concerning the extraction, processing, use and disposal of mineral substances without objectionable social and environmental costs under 30 U.S.C. 3, 1602 and 1603.

Language has been included under the Naval Petroleum and Oil Shale Reserves, permitting the use of unobligated balances.

Language has been included under Non-Defense Environmental Cleanup for the purchase, construction, and acquisition of plant and capital equipment and to allow collections to be expended for mercury storage costs.

Language has been included under Science providing for the purchase, construction, and acquisition of plant and capital equipment; and for the purchase of motor vehicles.

Language has been included under Title 17 Innovative Technology Loan Guarantee Program crediting fees collected pursuant to section 1702(h) of the Energy Policy Act of 2005 as offsetting collections to this account and making fees collected under section

1702(h) in excess of the appropriated amount unavailable for expenditure until appropriated.

Language has been included under Title 17 Innovative Technology Loan Guarantee Program prohibiting the subordination of certain interests.

Language has been included under Departmental Administration providing for the hire of passenger vehicles and for official reception and representation expenses.

Language has been included under Departmental Administration providing, notwithstanding the provisions of the Anti-Deficiency Act, such additional amounts as necessary to cover increases in the estimated amount of cost of work for others, as long as such increases are offset by revenue increases of the same or greater amounts.

Language has been included under Departmental Administration, notwithstanding 31 U.S.C. 3302, and consistent with the authorization in Public Law 95-238, to permit the Department of Energy to use revenues to offset appropriations. The appropriations language for this account reflects the total estimated program funding to be reduced as revenues are received.

Language has been included under Weapons Activities for the purchase, construction, and acquisition of plant and capital equipment; and for the purchase of not to exceed one ambulance for replacement only.

Language has been included under Defense Nuclear Non-proliferation for the purchase, construction, and acquisition of plant and capital equipment.

Language has been included under Naval Reactors for the acquisition of real property, plant, and capital equipment, facilities, and facility expansion.

Language has been included under Naval Reactors transferring certain funds to Nuclear Energy.

Language has been included under Federal Salaries and Expenses providing funding for official reception and representation expenses.

Language has been included under Defense Environmental Cleanup for the purchase, construction, and acquisition of plant and capital equipment, and for the purchase of not to exceed one passenger minivan for replacement only.

Language has been included under Defense Uranium Enrichment Decontamination and Decommissioning transferring funds to the Uranium Enrichment Decontamination and Decommissioning Fund.

Language has been included under Other Defense Activities for the purchase, construction, and acquisition of plant and capital equipment.

Language has been included under Bonneville Power Administration Fund providing funding for official reception and representation expenses and precluding any new direct loan obligations.

Language has been included under Southeastern Power Administration providing funds for official reception and representation expenses.

Language has been included under Southeastern Power Administration providing that, notwithstanding 31 U.S.C. 3302 and 16

U.S.C. 825s, amounts collected from the sale of power and related services shall be credited to the account as discretionary offsetting collections and remain available until expended for the sole purpose of funding the annual expenses of the Southeastern Power Administration; amounts collected to recover purchase power and wheeling expenses shall be credited to the account as offsetting collections and remain available until expended for the sole purpose of making purchase power and wheeling expenditures.

Language has been included under Southwestern Power Administration providing funds for official reception and representation expenses.

Language has been included under Southwestern Power Administration providing that, notwithstanding 31 U.S.C. 3302 and 16 U.S.C. 825s, amounts collected from the sale of power and related services shall be credited to the account as discretionary offsetting collections and remain available until expended for the sole purpose of funding the annual expenses of the Southwestern Power Administration; amounts collected to recover purchase power and wheeling expenses shall be credited to the account as offsetting collections and remain available until expended for the sole purpose of making purchase power and wheeling expenditures.

Language has been included under Construction, Rehabilitation, Operation and Maintenance, Western Area Power Administration, providing funds for official reception and representation expenses.

Language has been included under Construction, Rehabilitation, Operation and Maintenance, Western Area Power Administration providing that, notwithstanding 31 U.S.C. 3302, 16 U.S.C. 825s, and 43 U.S.C. 392a, amounts collected from the sale of power and related services shall be credited to the account as discretionary offsetting collections and remain available until expended for the sole purpose of funding the annual expenses of the Western Area Power Administration; amounts collected to recover purchase power and wheeling expenses shall be credited to the account as offsetting collections and remain available until expended for the sole purpose of making purchase power and wheeling expenditures.

Language has been included under Falcon and Amistad Operating and Maintenance Fund providing that, notwithstanding 68 Stat. 255 and 31 U.S.C. 3302, amounts collected from the sale of power and related services shall be credited to the account as discretionary offsetting collections and remain available until expended for the sole purpose of funding the annual expenses of the hydroelectric facilities of those dams and associated Western Area Power Administration activities.

Language has been included under Falcon and Amistad Operating and Maintenance Fund providing that the Western Area Power Administration may accept a limited amount of contributions from the United States power customers of the Falcon and Amistad Dams for use by the Commissioner of the United States Section of the International Boundary and Water Commission for operating and maintenance of hydroelectric facilities.

Language has been included under Federal Energy Regulatory Commission to permit the hire of passenger motor vehicles, to provide official reception and representation expenses, and to permit

the use of revenues collected to reduce the appropriation as revenues are received.

Language has been included under Department of Energy, General Provisions, section 301, prohibiting the use of funds to prepare or initiate requests for proposals or other solicitations or arrangements for programs that have not yet been fully funded by the Congress; requiring notification and reporting requirements for certain funding awards; limiting the use of multi-year funding mechanisms; providing that none of the funds may be available for obligation or expenditure through a reprogramming of funds except in certain circumstances; and providing that unexpended balances of prior appropriations may be transferred and merged with new appropriation accounts established in this Act.

Language has been included under Department of Energy, General Provisions, section 302, providing that funds for intelligence activities are deemed to be specifically authorized for purposes of section 504 of the National Security Act of 1947 during fiscal year 2019 until enactment of the Intelligence Authorization Act for fiscal year 2019.

Language has been included under Department of Energy, General Provisions, section 303, prohibiting the use of funds for capital construction of high hazard nuclear facilities unless certain independent oversight is conducted.

Language has been included under Department of Energy, General Provisions, section 304, prohibiting the use of funds to approve critical decision-2 or critical decision-3 for certain construction projects, unless a separate independent cost estimate has been developed for that critical decision.

Language has been included under Department of Energy, General Provisions, section 305, authorizing the Secretary of Energy to draw down and sell refined petroleum product from the Strategic Petroleum Reserve under certain circumstances.

Language has been included under Department of Energy, General Provisions, section 306, to prohibit certain payments.

Language has been included under Department of Energy, General Provisions, section 307, rescinding certain unobligated balances from prior year appropriations.

Language has been included under Department of Energy, General Provisions, section 308, transferring certain funds.

TITLE IV—INDEPENDENT AGENCIES

Language has been included under Appalachian Regional Commission, notwithstanding 40 U.S.C. 14704, providing for the hire of passenger vehicles and services authorized by section 3109 of title 5, United States Code.

Language has been included under Delta Regional Authority allowing the expenditure of funds as authorized by the Delta Regional Authority Act of 2000, notwithstanding sections 382F(d), 382M, and 382N of said Act.

Language has been included under Denali Commission allowing the expenditure of funds notwithstanding section 306(g) of the Denali Commission Act of 1998, and providing for cost-share requirements for Commission-funded construction projects in dis-

tressed and non-distressed communities, as defined by section 307 of the Denali Commission Act of 1998, as amended.

Language has been included under Denali Commission allowing funding to be available for payment of a non-federal share for certain programs.

Language has been included under Northern Border Regional Commission allowing the expenditure of funds, notwithstanding section 15751(b) of title 40, United States Code.

Language has been included under Nuclear Regulatory Commission (NRC), Salaries and Expenses, that provides for salaries and other support costs for the Office of the Commission.

Language has been included under Nuclear Regulatory Commission, Salaries and Expenses that provides for official representation expenses and permits the use of revenues from licensing fees, inspections services, and other services for salaries and expenses to reduce the appropriation as revenues are received.

Language has been included under Office of Inspector General that provides for the use of revenues from licensing fees, inspections services, and other services for salaries and expenses, notwithstanding section 3302 of title 31, United States Code, to reduce the appropriation as revenues are received.

Language has been included under Independent Agencies, General Provisions, section 401, requiring the NRC to comply with certain procedures when responding to Congressional requests for information.

Language has been included under Independent Agencies, General Provisions, section 402, providing that none of the funds for the NRC may be available for obligation or expenditure through a reprogramming of funds except in certain circumstances.

TITLE V—GENERAL PROVISIONS

Language has been included under General Provisions, section 501, prohibiting the use of funds in this Act to influence congressional action on any legislation or appropriation matters pending before the Congress.

Language has been included under General Provisions, section 502, prohibiting the transfer of funds except pursuant to a transfer made by, or transfer authority provided in this or any other appropriations Act, or certain other authorities, and requiring a report.

Language has been included under General Provisions, section 503, prohibiting funds in contravention of Executive Order No. 12898 of February 11, 1994, regarding environmental justice.

Language has been included under General Provisions, section 504, prohibiting funds from being used to maintain or establish computer networks unless such networks block the viewing, downloading, or exchange of pornography.

PROGRAM DUPLICATION

Pursuant to clause 3(c)(5) of rule XIII of the Rules of the House of Representatives, no provision of this bill establishes or reauthorizes a program of the Federal Government known to be duplicative of another federal program, a program that was included in any report from the Government Accountability Office to Congress pursu-

ant to section 21 of Public Law 111–139, or a program related to a program identified in the most recent Catalog of Federal Domestic Assistance.

COMPLIANCE WITH RULE XIII, CL. 3(e) (RAMSEYER RULE)

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, existing law in which not change is proposed is shown in roman):

[INSERT 127a]

APPROPRIATIONS NOT AUTHORIZED BY LAW

Pursuant to clause 3(f)(1)(B) of rule XIII of the Rules of the House of Representatives, the following table lists the appropriations in the accompanying bill which are not authorized:

(thousand dollars)				
Agency/Program	Last Year of Authorization	Authorization Level	Appropriation in Last Year of Authorization	Net Appropriation in this Bill
Corps FUSRAP				250,000
Reclamation, WIIN Act, Subtitle J, Sections 4007, 4009(a) and 4009(c)	2021	415,000	166,000	83,000
EERE State Energy Programs	2012	125,000	50,000	70,000
Nuclear Energy Infrastructure and Facilities	2009	145,000	245,000	290,000
Nuclear Energy Safeguards and Security	2021	137,800	149,800	149,800
Energy Information Administration	1984	not specified	55,870	129,087
Office of Science	2013	6,007,000	4,876,000	7,320,000
Departmental Administration	1984	246,963	185,682	272,000
Atomic Energy Defense Activities:				
National Nuclear Security Administration:				
Weapons Activities	2021	15,550,428	15,345,000	15,484,295
Defense Nuclear Nonproliferation	2021	2,041,000	2,260,000	2,010,000
Naval Reactors	2021	1,684,000	1,684,000	1,860,705
Federal Salaries and Expenses	2021	454,000	443,200	464,000
Defense Environmental Cleanup	2021	5,815,767	6,426,000	6,592,000
Other Defense Activities	2021	901,048	920,000	932,000
Power Marketing Administrations:				
Southwestern	1984	40,254	36,229	10,400
Western Area	1984	259,700	194,630	90,772
Federal Energy Regulatory Commission	1984	not specified	29,582	0
Defense Nuclear Facilities Safety Board	2021	28,836	31,000	31,000
Appalachian Regional Commission	2021	110,000	175,000	210,000
Denali Commission	2021	15,000	15,000	15,000
Southeast Crescent Regional Commission	2018	30,000	250	2,500
Southwest Border Regional Commission	2012	30,000	0	2,500
Nuclear Regulatory Commission	1985	460,000	448,200	131,000

¹ Program was initiated in 1972 and has never received a separate authorization

RESCISSIONS

Pursuant to clause 3(f)(2) of rule XIII of the Rules of the House of Representatives, the following table is submitted describing the rescissions recommended in the accompanying bill:

Department or Activity	Amount
Department of Energy: Defense Nuclear Nonproliferation	\$330,000,000
Department of Energy: Naval Reactors	6,000,000

COMPARISON WITH THE BUDGET RESOLUTION

Pursuant to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and section 308(a)(1)(A) of the Congressional Budget Act of 1974 (Public Law 93–344), as amended, requires the report accompanying a bill providing new budget authority to contain a statement comparing the levels in the bill to the suballocations submitted under section 302(b) of the Act for the most recently agreed to concurrent resolution on the budget for the applicable fiscal year.

[INSERT 128a]

FIVE YEAR OUTLAY PROJECTIONS

Pursuant to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and pursuant to section 308(a)(1)(B) of the Congressional Budget Act of 1974 (Public Law 93–344), as amended, the following table contains five-year projections prepared by the Congressional Budget Office of outlays associated with the budget authority provided in the accompanying bill.

[INSERT 128b]

FINANCIAL ASSISTANCE TO STATE AND LOCAL GOVERNMENTS

Pursuant to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and in accordance with section 308(a)(1)(C) of the Congressional Budget Act of 1974 (Public Law 93–344), as amended, the Congressional Budget Office has provided the following estimates of new budget authority and outlays provided by the accompanying bill for financial assistance to state and local governments.

[INSERT 128c]

COMMITTEE HEARINGS

For the purposes of cl. 3(c)(6) of rule XIII—

The following hearings were used to develop or consider the Energy and Water Development and Related Agencies Appropriations Act, 2022:

The Subcommittee on Energy and Water Development and Related Agencies held an oversight hearing on February 25, 2021, entitled “Strategies for Energy and Climate Innovation.”

The Subcommittee received testimony from:

Ms. Robin Millican, Director, Breakthrough Energy

Dr. Colin Cunliff, Senior Policy Analyst, Information Technology and Innovation Foundation

Dr. Shobita Parthasarathy, Professor of Public Policy and Director, Science, Technology, and Public Policy Program, University of Michigan

Mr. Rich Powell, Executive Director, ClearPath

The Subcommittee on Energy and Water Development and Related Agencies held an oversight hearing on March 10, 2021, entitled “Innovation and Investment in Water Resources Infrastructure.” The Subcommittee received testimony from:

Mr. Kevin DeGood, Director of Infrastructure Policy, Center for American Progress

Mr. Thomas J. Winston, President and CEO, Toledo-Lucas County Port Authority

Ms. Bidtah Becker, Associate Attorney, Navajo Tribal Utility Authority

Mr. Jason Uhley, General Manager—Chief Engineer, Riverside County Flood Control and Water Conservation District

The Subcommittee on Energy and Water Development and Related Agencies held an oversight hearing on March 17, 2021, entitled “Domestic Manufacturing for a Clean Energy Future.” The Subcommittee received testimony from:

Dr. Pat Choate, Director, Manufacturing Policy Project

Ms. Roxanne Brown, International Vice President at Large, United Steelworkers

Mr. Tim Cortes, Chief Technology Officer, Plug Power

Dr. Thomas R. Kurfess, Chief Manufacturing Officer, Interim Director—Manufacturing Science Division, Oak Ridge National Laboratory

The Subcommittee on Energy and Water Development and Related Agencies held a Member Day Hearing on May 3, 2021. The Subcommittee received testimony from:

The Honorable Bill Foster, Member of Congress

The Honorable Jenniffer González-Colón, Member of Congress

The Honorable H. Morgan Griffith, Member of Congress

The Honorable Sheila Jackson Lee, Member of Congress

The Honorable John Moolenaar, Member of Congress

The Honorable Frank Mrvan, Member of Congress

The Honorable Kim Schrier, Member of Congress

The Honorable Greg Stanton, Member of Congress

The Honorable Jefferson Van Drew, Member of Congress

The Honorable Joe Wilson, Member of Congress

The Subcommittee on Energy and Water Development and Related Agencies held a budget hearing on May 6, 2021, entitled “FY 2022 Budget Request for the Department of Energy.” The Subcommittee received testimony from:

The Honorable Jennifer M. Granholm, Secretary, Department of Energy

The Subcommittee on Energy and Water Development and Related Agencies received written testimony from public witnesses. The Subcommittee received testimony from:

Alexander Ratner, Federal Policy Manager, American Council for an Energy-Efficient Economy

Allen Segal, Director of Public Policy and Advocacy, American Society for Microbiology
 Anne Gelb, Professor, Society for Industrial and Applied Mathematics
 April Snell, Executive Director, Oregon Water Resources Congress
 Brian Pallasch, President and CEO, International Institute of Building Enclosure Consultants
 Brittany Webster, Program Manager, American Geophysical Union
 Carrie L. Billy, President and CEO, American Indian Higher Education Consortium
 Chad Berginnis, Executive Director, Association of State Floodplain Managers
 Christopher Guttman-McCabe, Chief Regulatory and Communications Officer, Anterix
 Christopher S. Harris, Executive Director, Colorado River Board of California
 Corinna Turbes, Policy Director, The Data Foundation
 Craig Piercy, Executive Director and CEO, American Nuclear Society
 Crispin Taylor, PhD, CEO, American Society of Plant Biologists
 Daniel E. Fass, M.D., CEO, Princeton Healthcare Alliance
 David Bradley, CEO, National Community Action Foundation
 David Terry, Executive Director, National Association of State Energy Officials
 Don A. Barnett, Executive Director, Colorado River Basin Salinity Control Forum
 Ellen Kuo, Associate Director, Legislative Affairs, Federation of American Societies for Experimental Biology
 Eric Eikenberg, CEO, The Everglades Foundation
 Fawn Sharp, President, National Congress of American Indians
 Genevieve Cullen, President, Electric Drive Transportation Association
 Greg Fogel, Policy Director, WaterReuse Association
 James D. Ogsbury, Executive Director, Western Governors' Association
 Jared Mott, Conservation Director, Izaak Walton League of America
 Jason Reott, Policy Manager, Alliance to Save Energy
 Jeffrey Kightlinger, General Manager, The Metropolitan Water District of Southern California
 Jennifer Schafer, Executive Director, Federal Performance Contracting Coalition
 Jeremy Takala, Chairman, Columbia River Inter-Tribal Fish Commission
 Jim B. Horan, Executive Director, Mid-West Electric Consumers Association
 Jimmy Hague, Senior Water Policy Advisor, The Nature Conservancy

Joseph Britton, Executive Director, Zero Emission Transportation Association

Julie Hill-Gabriel, Vice President, Water Conservation, National Audubon Society

Karle E. Anderson, Director of Government Relations, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America

Katrina McMurrian, Executive Director, Nuclear Waste Strategy Coalition

Kumi Premathilake, Senior Vice President, Division Vice President, Advanced Metering Infrastructure, Services, Aclara Technologies LLC

Larry Zarker, CEO, Building Performance Institute, Inc.

Maria Korsnick, President and CEO, Nuclear Energy Institute

Marisa Carrozzo, Co-Chair, Everglades Coalition

Mark Perry, Co-Chair, Everglades Coalition

Melissa Samet, Senior Water Resources Counsel, National Wildlife Federation

Michael Bindner, Principal Consultant, The Center for Fiscal Equity

Morry B. Markowitz, President, Fuel Cell and Hydrogen Energy Association

Patrick Valente, Executive Director, The Ohio Fuel Cell Coalition

Paula Szkody, President, American Astronomical Society

Robert Johnson, Senior Vice President, Hannon Armstrong

Robin LeBaron, Co-Founder, President and COO, Pearl Certification

Rolf Schmidt-Petersen, Director, New Mexico Interstate Stream Commission

Ron Blacksmith, Core System Manager, The Oglala Sioux Rural Water Supply System, Oglala Sioux Tribe

Shannon Angielski, Executive Director, Carbon Utilization Research Council, and President, Clean Hydrogen Future Coalition

Stephen Cowell, President, E4TheFuture

Steve Skodak, CEO, Building Performance Association

Susanne C. Brenner, Professor, Society for Industrial and Applied Mathematics

Suzanne L. Weekes, Executive Director, Society for Industrial and Applied Mathematics

Theodore C. Cooke, General Manager, Central Arizona Water Conservation District

Thomas R. Kuhn, President, Edison Electric Institute

Tony Stamas, President and CEO, Midland Business Alliance

Trent Tuthill, Friends of the Trinity River

Zolaikha Strong, Vice President of Government Affairs, National Hydropower Association

The Subcommittee on Energy and Water Development and Related Agencies held a budget hearing on May 24, 2021, entitled "FY 2022 Budget Request for the U.S. Army Corps of Engineers and

Bureau of Reclamation.” The Subcommittee received testimony from:

Mr. Jaime Pinkham, Acting Assistant Secretary of the Army for Civil Works, Army Corps of Engineers

Lieutenant General Scott A. Spellmon, Chief of Engineers and Commanding General, Army Corps of Engineers

Mr. David Palumbo, Deputy Commissioner of Operations, Bureau of Reclamation

[INSERT 130a]

(Full Committee Votes)

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill Enacted	Bill vs. Enacted	Bill vs. Request
TITLE I - DEPARTMENT OF DEFENSE - CIVIL					
DEPARTMENT OF THE ARMY					
Corps of Engineers - Civil					
Investigations.....	153,000	105,837	155,000	+2,000	+49,163
Construction.....	2,692,645	1,792,378	2,591,732	-100,913	+799,354
Mississippi River and Tributaries.....	380,000	269,688	370,000	-10,000	+100,312
Operation and Maintenance.....	3,849,655	2,502,901	4,817,000	+967,345	+2,314,099
Regulatory Program.....	210,000	204,400	212,000	+2,000	+7,600
Formerly Utilized Sites Remedial Action Program (FUSRAP).....	250,000	---	250,000	---	+250,000
Flood Control and Coastal Emergencies.....	35,000	35,000	---	---	---
Expenses.....	206,000	199,290	208,000	+2,000	+8,710
Office of Assistant Secretary of the Army (Civil Works).....	5,000	5,000	5,000	---	---
Rescission.....	-500	---	---	+500	---
Subtotal.....	4,500	5,000	5,000	+500	---
Water Infrastructure Finance and Innovation Program...	14,200	---	14,200	---	+14,200
Harbor Maintenance Trust Fund.....	---	1,625,856	---	---	-1,625,856
Inland Waterways Trust Fund.....	---	52,150	---	---	-52,150
Total, title I, Department of Defense - Civil...	7,795,000	6,792,500	8,657,932	+862,932	+1,865,432

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
TITLE II - DEPARTMENT OF THE INTERIOR					
Central Utah Project					
Central Utah Project Completion Account.....	21,000	20,000	20,000	-1,000	---
Bureau of Reclamation					
Water and Related Resources.....	1,521,125	1,379,050	1,792,000	+270,875	+412,950
Central Valley Project Restoration Fund.....	55,875	56,499	56,499	+624	---
California Bay-Delta Restoration.....	33,000	33,000	33,000	---	---
Policy and Administration.....	60,000	64,400	64,400	+4,400	---
Total, Bureau of Reclamation.....	1,670,000	1,532,949	1,945,899	+275,899	+412,950
=====					
Total, title II, Department of the Interior.....	1,691,000	1,552,949	1,965,899	+274,899	+412,950
=====					

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
TITLE III - DEPARTMENT OF ENERGY					
Energy Programs					
Energy Efficiency and Renewable Energy.....	2,864,000	4,732,000	3,768,000	+904,000	-864,000
Rescission.....	-2,240	---	---	+2,240	---
Subtotal.....	2,861,760	4,732,000	3,768,000	+906,240	-964,000
Cybersecurity, Energy Security, and Emergency Response Electricity.....	156,000	201,000	177,000	+21,000	-24,000
Nuclear Energy.....	211,720	327,000	267,000	+55,280	-60,000
Defense function.....	1,357,800	1,700,700	1,525,200	+167,400	-175,500
	149,800	149,800	149,800	---	---
Subtotal.....	1,507,600	1,850,500	1,675,000	+167,400	-175,500
Fossil Energy and Carbon Management.....	750,000	890,000	820,000	+70,000	-70,000
Naval Petroleum and Oil Shale Reserves.....	13,006	13,650	13,650	+644	---
Strategic Petroleum Reserve.....	188,000	197,000	197,000	+9,000	---
SPR Petroleum Account.....	1,000	7,350	7,350	+6,350	---
Northeast Home Heating Oil Reserve.....	6,500	---	6,500	---	+6,500
Energy Information Administration.....	126,800	126,800	129,087	+2,287	+2,287
Non-defense Environmental Cleanup.....	319,200	338,860	333,863	+14,663	-4,997
Mercury receipts.....	-3,000	---	---	+3,000	---
Use of Mercury receipts.....	3,000	---	---	-3,000	---
Subtotal.....	319,200	338,860	333,863	+14,663	-4,997

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Uranium Enrichment Decontamination and Decommissioning Fund.....	841,000	831,340	831,340	-9,660	---
Science.....	4,726,000	7,440,000	7,320,000	+2,584,000	-120,000
Emergency funding.....	2,300,000	---	---	-2,300,000	---
Subtotal.....	7,026,000	7,440,000	7,320,000	+294,000	-120,000
Nuclear Waste Disposal.....	27,500	7,500	27,500	---	+20,000
Technology Transitions.....	---	19,470	19,470	+19,470	---
Clean Energy Demonstrations.....	---	400,000	200,000	+200,000	-200,000
Advanced Research Projects Agency-Energy.....	427,000	500,000	600,000	+173,000	+100,000
Advanced Research Projects Agency-Climate.....	---	200,000	---	---	-200,000
Title 17 Innovative Technology Loan Guarantee Program:					
Guaranteed loan subsidy.....	---	150,000	---	---	-150,000
Administrative costs.....	32,000	32,000	32,000	---	---
Offsetting collections.....	-3,000	-3,000	-3,000	---	---
Rescission of emergency funding.....	-392,000	---	---	+392,000	---
Subtotal.....	-363,000	179,000	29,000	+392,000	-150,000
Advanced Technology Vehicles Manufacturing Loan Program.....	5,000	5,000	5,000	---	---
Rescission of emergency funding.....	-1,908,000	---	---	+1,908,000	---
Subtotal.....	-1,903,000	5,000	5,000	+1,908,000	---
Tribal Energy Loan Guarantee Program.....	2,000	2,000	2,000	---	---
Indian Energy Policy and Programs.....	22,000	122,000	70,000	+48,000	-52,000
Departmental Administration.....	259,378	422,338	372,578	+113,200	-49,760

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Miscellaneous revenues.....	-93,378	-100,578	-100,578	-7,200	---
Net appropriation.....	166,000	321,760	272,000	+106,000	-49,760
Office of the Inspector General.....	57,739	78,000	78,000	+20,261	---
Total, Energy programs.....	12,444,825	18,790,230	16,848,760	+4,403,935	-1,941,470
Atomic Energy Defense Activities					
National Nuclear Security Administration					
Weapons Activities.....	15,345,000	15,484,295	15,484,295	+139,295	---
Defense Nuclear Nonproliferation.....	2,260,000	2,264,000	2,340,000	+80,000	+76,000
Rescission.....	---	-330,000	---	---	+330,000
Subtotal.....	2,260,000	1,934,000	2,340,000	+80,000	+406,000
Naval Reactors.....	1,684,000	1,866,705	1,866,705	+182,705	---
Rescission.....	---	-6,000	---	---	+6,000
Subtotal.....	1,684,000	1,860,705	1,866,705	+182,705	+6,000
Federal Salaries and Expenses.....	443,200	464,000	464,000	+20,800	---
Total, National Nuclear Security Administration.....	19,732,200	19,743,000	20,155,000	+422,800	+412,000

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Environmental and Other Defense Activities					
Defense Environmental Cleanup.....	6,426,000	6,841,670	6,592,000	+166,000	-249,670
Defense UED&D.....	---	---	831,340	+831,340	+831,340
Other Defense Activities.....	920,000	1,170,000	932,000	+12,000	-238,000
Total, Environmental and Other Defense Activities.	7,346,000	8,011,670	8,355,340	+1,009,340	+343,670
Total, Atomic Energy Defense Activities.....	27,078,200	27,754,670	28,510,340	+1,432,140	+755,670
Power Marketing Administrations /1					
Operation and maintenance, Southeastern Power Administration.....	7,246	7,184	7,184	-62	---
Offsetting collections.....	-7,246	-7,184	-7,184	+62	---
Subtotal.....	---	---	---	---	---
Operation and maintenance, Southwestern Power					
Administration.....	47,540	48,324	48,324	+784	---
Offsetting collections.....	-37,140	-37,924	-37,924	-784	---
Subtotal.....	10,400	10,400	10,400	---	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Construction Rehabilitation, Operation and Maintenance, Western Area Power Administration.....	259,126	285,237	285,237	+26,111	---
Offsetting collections.....	-169,754	-194,465	-194,465	-24,711	---
Subtotal.....	89,372	90,772	90,772	+1,400	---
Falcon and Amistad Operating and Maintenance Fund.....	5,776	5,808	5,808	+32	---
Offsetting collections.....	-5,548	-5,580	-5,580	-32	---
Subtotal.....	228	228	228	---	---
Total, Power Marketing Administrations.....	100,000	101,400	101,400	+1,400	---
Federal Energy Regulatory Commission					
Salaries and expenses.....	404,350	463,900	466,426	+62,076	+2,526
Revenues applied.....	-404,350	-463,900	-466,426	-62,076	-2,526
Subtotal.....	---	---	---	---	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
General Provision - Department of Energy					
Colorado River Basin Fund (sec.305(b)).....	2,000	---	2,000	---	+2,000
Defense Nuclear Nonproliferation Construction Project 99-D-143 Rescission.....	---	---	-330,000	-330,000	-330,000
Naval Reactors Rescission.....	---	---	-6,000	-6,000	-6,000
Total, General Provisions.....	2,000	---	-334,000	-336,000	-334,000
=====					
Total, title III, Department of Energy.....	39,625,025	46,646,300	45,126,500	+5,501,475	-1,519,800
Appropriations.....	(39,627,265)	(46,982,300)	(45,462,500)	(+5,835,235)	(-1,519,800)
Rescissions.....	(-2,240)	(-336,000)	(-336,000)	(-333,760)	---
=====					
TITLE IV - INDEPENDENT AGENCIES					
Appalachian Regional Commission.....	180,000	235,000	210,000	+30,000	-25,000
Defense Nuclear Facilities Safety Board.....	31,000	31,000	31,000	---	---
Delta Regional Authority.....	30,000	30,100	30,000	---	-100
Denali Commission.....	15,000	15,100	15,000	---	-100
Northern Border Regional Commission.....	30,000	30,100	32,000	+2,000	+1,900
Southeast Crescent Regional Commission.....	1,000	2,500	2,500	+1,500	---
Southwest Border Regional Commission.....	250	2,500	2,500	+2,250	---

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill	Bill vs. Enacted	Bill vs. Request
Nuclear Regulatory Commission:					
Salaries and expenses.....	830,900	873,901	873,901	+43,001	---
Revenues.....	-710,293	-745,258	-745,258	-34,965	---
Subtotal.....	120,607	128,643	128,643	+8,036	---
Office of Inspector General.....	13,499	13,799	13,799	+300	---
Revenues.....	-11,106	-11,442	-11,442	-336	---
Subtotal.....	2,393	2,357	2,357	-36	---
Total, Nuclear Regulatory Commission.....	123,000	131,000	131,000	+8,000	---
Nuclear Waste Technical Review Board.....	3,600	3,800	3,800	+200	---
Total, title IV, Independent agencies.....	413,850	481,100	457,800	+43,950	-23,300

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR 2021
AND BUDGET REQUESTS AND AMOUNTS RECOMMENDED IN THE BILL FOR 2022
(Amounts in thousands)

	FY 2021 Enacted	FY 2022 Request	Bill Enacted	Bill vs. Enacted	Bill vs. Request
Grand total.....	49,524,875	55,472,849	56,208,131	+6,683,256	+735,282
Appropriations.....	(49,527,615)	(55,808,849)	(56,544,131)	(+7,016,516)	(+735,282)
Emergency appropriations.....	(2,300,000)	---	---	(-2,300,000)	---
Rescissions.....	(-2,740)	(-336,000)	(-336,000)	(-333,260)	---
Rescissions of emergency appropriations.....	(-2,300,000)	---	---	(+2,300,000)	---
Grand total less emergencies.....	49,524,875	55,472,849	56,208,131	+6,683,256	+735,282

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