

Energy, Environment and Tribal Provisions in the Bipartisan Infrastructure Package

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Earlier this week, President Joe Biden signed the \$1.2 trillion Infrastructure Investment and Jobs Act (H.R.3684) into law.

On Nov. 5, the House passed the bill by a vote of 228-206. Thirteen Republicans joined most Democrats to support the bill, while six Democrats voted against the package. Earlier this year, in August, the Senate passed the legislation by a vote of 69-30, with 19 Republicans joining all Democrats to support the bill.

Congressional Democrats continue to negotiate on the contents and path forward for their reconciliation legislation, the Build Back Better Act. The House of Representatives may advance the bill as soon as this week. After passing the House, the bill may be considered by the Senate. Given current rhetoric and ongoing internal debate on the size and contents of the reconciliation bill, the timeline for final passage is currently unclear.

In the coming weeks and days, more information will become available regarding the process to apply for funds made available through the Infrastructure Investment and Jobs Act. Energy, environment and tribal provisions included in the bill President Biden signed into law yesterday are listed below.

DIVISION A – SURFACE TRANSPORTATION

TITLE I – FEDERAL-AID HIGHWAYS

Subtitle A – Authorizations and Programs

Sec. 11101. Authorization of Appropriations.

Authorizes \$578.5 million for the Tribal Transportation Program (TTP) for fiscal year 2022.

- Future funding includes:
 - \$589.9 million for fiscal year 2023;
 - \$602.5 million for fiscal year 2024;
 - \$612.9 million for fiscal year 2025; and
 - \$627.9 million for fiscal year 2026.

Provides \$355 million for each of fiscal years 2022 through 2026 for nationally significant federal lands and tribal projects under the

Fixing America's Surface Transportation (FAST) Act. Provides \$16 million for the Tribal Transportation Facility Bridge Program in fiscal year 2022.

- Future funding includes:
 - \$18 million for fiscal year 2023;
 - \$20 million for fiscal year 2024;
 - \$22 million for fiscal year 2025; and
 - \$24 million for fiscal year 2026.

Sec. 11127. Nationally Significant Federal lands and Tribal Projects Program.

Reduces the eligibility threshold for the Nationally Significant Federal Lands and Tribal Projects program within the Department of Transportation so projects with an estimated cost of \$12.5 million may qualify. The federal cost share for tribal projects under the program shall be 100%. Provides that 50% of amounts for the program shall be used for eligible projects on tribal transportation facilities.

Sec. 11128. Tribal high priority projects program.

Sets aside \$9 million from TTP program funds for each of fiscal years 2022 through 2026 for the Tribal High Priority Projects program. Provides an additional \$30 million for the program in each of fiscal years 2022 through 2026.

Subtitle C – Project Delivery and Process Improvement

Sec. 11318. Categorical exclusion for certain gathering lines located on Federal land and Indian land.

Provides a categorical exclusion under the National Environmental Policy Act (NEPA) for gathering lines and associated field compression or pumping units located on federal or Indian land that service oil or gas wells if the gathering line and associated field compression or pumping unit:

- Are located within a field or unit for which an approved land use plan or an environmental document prepared under NEPA analyzed transportation of oil, natural gas or produced water from one or more oil or gas wells as a reasonably foreseeable activity;
- Are located adjacent to or within (i) any existing disturbed area; or (ii) an existing corridor for a right-of-way; and
- Would reduce (i) emissions of methane that would be vented flared, or unintentionally emitted, for gathering lines transporting methane; or (ii) the vehicular traffic that would otherwise service the field or unit.

TITLE IV – INDIAN AFFAIRS

Sec. 14002. Environmental reviews for certain tribal transportation facilities.

Provides for expedited NEPA reviews for tribal transportation safety projects that correct or improve hazardous road locations or address highway safety problems, aligning the Department of the Interior’s process for expediting environmental reviews for tribal transportation safety projects with that of the Department of Transportation.

Sec. 14003. Programmatic agreements for tribal categorical exclusions.

Directs the Interior and Transportation secretaries to enter into programmatic agreements with tribes that establish efficient procedures for carrying out environmental reviews for projects eligible for assistance under the TTP. These agreements may include allowing tribes to determine whether projects are categorically excluded under NEPA and shall require tribes to maintain adequate capability to carry out applicable agency responsibilities and set forth the responsibilities of the tribe for making categorical exclusion determinations.

Sec. 14004. Use of certain tribal transportation funds.

Removes the 3% cap on TTP funding that may be set aside for the improvement of deficient bridges.

Sec. 14005. Bureau of Indian Affairs road maintenance program.

Provides \$50 million for the Bureau of Indian Affairs Road Maintenance Program in fiscal year 2022.

- Future funding includes:
 - \$52 million in fiscal year 2023;
 - \$54 million in fiscal year 2024;
 - \$56 million in fiscal year 2025; and
 - \$58 million in fiscal year 2026.

Sec. 14006. Study of road maintenance on Indian land.

Directs the Interior Secretary to study and address the deferred maintenance backlog of roads on Indian land.

Sec. 14007. Maintenance of certain Indian reservation roads.

Authorizes U.S. Customs and Border Protection to transfer funds to the Bureau of Indian Affairs to maintain or repair roads under BIA’s jurisdiction.

Sec. 14008. Tribal transportation safety needs.

Directs the Transportation Secretary to develop best practices and establish a standardized motor vehicle crash report form. Requires BIA to use the Incident Management Analysis and Reporting System form of the applicable state to report motor vehicle crash data. Modifies the set-aside amount for the Tribal Transportation Program Safety Fund from 2% to 4%.

Sec. 14009. Office of Tribal Government Affairs.

Creates a new assistant secretary for tribal government affairs within the Department of Transportation and a new Office of Tribal Government Affairs.

Subtitle D – Climate Change

11401. Grants for charging and fueling infrastructure.

Directs the Secretary of Transportation to establish a grant program to deploy electric vehicle (EV) charging infrastructure, hydrogen fueling infrastructure, propane fueling infrastructure and natural

gas fueling infrastructure along designated alternative fuel corridors. Eligible entities include states and political subdivisions of states, metropolitan planning organizations, local governments, special purpose districts or public authorities with a transportation function, Indian tribes and territories. This section also sets aside 50% of program funds to deploy this fueling infrastructure in rural areas, low- and moderate-income neighborhoods, and communities with a low ratio of private parking spaces to households or a high ratio of multifamily dwellings to single-family homes. The program is authorized \$300 million for fiscal year 2022; \$400 million for fiscal year 2023; \$500 million for fiscal year 2024; \$600 million for fiscal year 2025; and \$700 million for fiscal year 2026.

25006. Electric vehicle working group.

Establishes an electric vehicle working group led by the secretaries of Energy and Transportation. The working group shall consist of at least one representative from the following federal agencies:

- Department of Transportation;
- Department of Energy;
- Environmental Protection Agency;
- Council on Environmental Quality; and
- General Services Administration.

Additionally, the group must have at least one representative from the following non-federal entities:

- A manufacturer of light-duty electric vehicles or the relevant components of light-duty electric vehicles;
- A manufacturer of medium- and heavy-duty vehicles or the relevant components of medium- and heavy-duty electric vehicles;
- A manufacturer of electric vehicle batteries;
- An owner, operator or manufacturer of electric vehicle charging equipment;
- The public utility industry;
- A public utility regulator or association of public utility regulators;
- The transportation fueling distribution industry;
- The energy provider industry;
- The automotive dealing industry;
- The for-hire passenger transportation industry;
- An organization representing units of local government;
- An organization representing regional transportation or planning agencies;
- An organization representing state departments of transportation;
- An organization representing state departments of energy or state energy planners;
- The intelligent transportation systems and technologies industry;
- Labor organizations representing workers in transportation manufacturing, construction or operations;
- The trucking industry;
- Tribal governments; and

- The property development industry.

The working group shall submit a series of reports to Congress on the barriers and opportunities to scaling EV deployment, examples of successful public and private models and demonstration projects that encourage electric vehicle adoption, and the estimated costs and benefits of the working group’s recommendations.

TITLE V – RESEARCH AND INNOVATION

25012. Advanced transportation research.

Establishes the Advanced Research Projects Agency – Infrastructure (ARPA-I) to ensure the U.S. is a leader in deploying advanced infrastructure, as well as lower the long-term costs of infrastructure development; reduce the lifecycle impacts of transportation infrastructure on the environment; improve the safe, secure and efficient movement of goods and people; and promote the resilience of infrastructure from physical and cyber threats. The definition of “infrastructure” includes pipelines. ARPA-I will provide assistance to infrastructure research projects that advance early-stage research with practical application to transportation infrastructure; translate techniques, processes and technologies from the conceptual phase to testing or demonstration; develop advanced manufacturing processes and technologies for the domestic manufacturing of novel transportation-related technologies; and accelerate transformational technological advances in areas where industry is unlikely to carry out projects due to technical and financial uncertainty. Project assistance may include grants, contracts, cooperative agreements, cash prizes or other similar forms of funding.

DIVISION C – TRANSIT

Sec. 30006. Formula grants for rural areas.

Provides that 5% of funds appropriated for rural public transportation formula grants shall be set aside for public transportation on Indian reservations. Provides that 20% of funds shall be awarded competitively and 80% shall be distributed according to a formula.

DIVISION D - ENERGY

TITLE I - GRID INFRASTRUCTURE RESILIENCY AND RELIABILITY

Subtitle A – Grid Infrastructure and Resiliency

Sec. 40101. Preventing outages and enhancing the resilience of the electricity industry.

Establishes a grant program to support activities that harden the electric grid, reduce the risk of power lines causing wildfires, and decrease the likelihood and consequences of disruptive events. Eligible recipients include electric grid operators, electricity storage operators, electricity generators, transmission owners or operators, distribution providers, fuel suppliers and other relevant entities. Thirty percent of program funds are set aside for small utilities that sell not more than 4 million megawatt hours of electricity per year. Eligible entities must match 100% of grant funds, though small utilities will only be required to match one-third of grant funds.

Establishes a formula grant program for states and tribes to award subgrants to eligible entities for the above activities, with states and tribes providing 15% in matching funds. States and tribes must set aside a percentage of grant funds for small utilities that sell not more than 4 million megawatt hours of electricity per year in an amount not less than the percentage of all customers in the state or tribe served by these entities. Grant funds may not be used for the construction of a new electric generation facility cybersecurity, or large-scale battery storage that is not used for enhancing system adaptive capacity. Fifty percent of program funds shall be used for direct grants to eligible entities, and the remaining 50% will be used for grants to states and tribes.

Provides \$5 billion for the grant program for fiscal years 2022 through 2026.

Sec. 40102. Hazard mitigation using disaster assistance.

Expands the eligible use of hazard mitigation assistance under the Stafford Act to include mitigating wildfire damage, such as through the installation of fire-resistant power wires and infrastructure and the undergrounding of wires.

Sec. 40103. Electric grid reliability and resilience research, development and demonstration.

Establishes a competitive federal financial assistance program to support innovative approaches to transmission, storage and distribution infrastructure hardening and new approaches to regional grid resilience. Eligible recipients include states, a partnership of two or more states, tribes, local governments and public utility commissions. Cost-sharing requirements under the Energy Policy Act of 2005 shall apply to assistance provided through this program. Provides \$5 billion for the program for the period of fiscal years 2022 through 2026.

Directs the Secretary of Energy to provide financial assistance to rural and remote areas to support the cost-effectiveness of energy generation, transmission or distribution systems; siting or upgrading transmission and distribution lines; reducing greenhouse gas emissions from energy generation; providing or modernizing electric generation facilities; and increasing energy efficiency. Authorizes \$1 billion for the program for the period of fiscal years 2022 through 2026.

Requires the Secretary of Energy to develop an energy infrastructure resilience assessment in coordination with the Secretary of Homeland Security, the Federal Energy Regulatory Commission (FERC), the North American Electric Reliability Corporation (NERC) and energy infrastructure stakeholders within 180 days. The assessment shall include an inventory of easily transported high-voltage recovery transformers and any efforts carried out by industry to share transformers and equipment, develop plans for next-generation transformers, and plan for surge and long-term manufacturing of transformer designs.

Sec. 40104. Utility demand response.

Amends the Public Utility Regulatory Policies Act to require state electric utility regulators to consider whether to promote demand-response and demand-flexibility practices to reduce electricity consumption during periods of peak demand and whether to establish rate mechanisms to recover the costs of promoting these practices. Regulators would be required to begin consideration within one year of enactment and complete consideration within two years. Expands the list of optional features of state energy conservation plans under the National Energy

Conservation Policy Act to include programs that promote the installation and use of demand-response technology and demand-response practices.

Sec. 40105. Siting of interstate electric transmission facilities.

Directs the Department of Energy to study capacity constraints and consult with affected Indian tribes when designating National Interest Electric Transmission Corridors. Expands the list of criteria the department must consider when making this designation to include geographic areas that are experiencing electric energy transmission capacity constraints and congestion or areas expected to experience constraints or congestion. Empowers FERC to issue permits for construction or modification of interstate transmission facilities if a state commission withholds or denies an application seeking approval for the siting of such facilities, though FERC must consider whether the applicant has engaged in good faith consultations with states and non-federal entities before exercising this authority.

Sec. 40106. Transmission Facilitation Program.

Establishes a \$2.5 billion revolving loan fund program to facilitate the construction of electric power transmission lines and related facilities, increase transmission capacity of existing transmission lines, or connect isolated microgrids to an existing transmission, transportation or telecommunications infrastructure corridor in Alaska, Hawaii or a U.S. territory. The Department of Energy may enter into capacity contracts with loan recipients to buy up to 50% of the planned capacity for up to 40 years, which the department may sell once the project has ensured financial viability. To carry out the program, \$10 million is authorized for each of fiscal years 2022 through 2026. The interest rate paid on loans shall be fixed by the department. The department may also enter into public-private partnerships with entities developing projects if the project is located in a National Interest Electric Transmission Corridor or if the project is necessary to accommodate an actual or projected increase in demand for electric transmission capacity across more than one state or transmission planning region. Priority shall be given to projects that use technology that enhances the capacity, efficiency, resiliency or reliability of an electric power transmission system; will improve the resilience and reliability of a transmission system; facilitate interregional transfer capacity that supports strong and equitable economic growth; and contribute to national or subnational goals to lower electricity sector greenhouse gas emissions.

Sec. 40107. Deployment of technologies to enhance grid flexibility.

Expands the list of qualifying Smart Grid investments under the Energy Independence and Security Act to include expenses for:

- Data analytics that enable software to engage in Smart Grid functions; software and devices that allow buildings to engage in demand flexibility or Smart Grid functions;
- Operational fiber and wireless broadband communications networks to enable data flow between distribution system components for utility communications;
- The purchase and installation of advanced transmission technologies such as dynamic line rating, flow control devices, advanced conductors, network topology optimization, or other technologies to increase the operational transfer capacity of a transmission network; and

- The ability to redirect or shut power off to minimize blackouts and damage resulting from extreme weather or natural disasters.

Expands the definition of “smart grid functions” to include:

- The ability to use data analytics and software-as-a-service to provide flexibility by improving the visibility of the electrical system to grid operators that can help quickly rebalance the system with autonomous controls;
- The ability to provide energy storage to meet fluctuating electricity demand, provide voltage support and integrate intermittent generation sources, including vehicle-to-grid technologies;
- The ability of hardware, software and associated protocols applied to existing transmission facilities to increase the operational transfer capacity of a transmission network;
- The ability to anticipate and mitigate impacts of extreme weather or natural disasters on grid resiliency;
- The ability to facilitate the integration of renewable energy resources, electric vehicle charging infrastructure, and vehicle-to-grid technologies; and
- The ability to reliably meet increased demand from electric vehicles and the electrification of appliances and other sectors.

Appropriates \$3 billion for the program, available through Sept. 30, 2026.

Sec. 40109. State energy program.

Amends the list of mandatory components of state energy conservation plans to include activities to support transmission and distribution planning, including support for local governments and Indian tribes; feasibility studies for transmission line routes and alternatives; preparation of necessary project design and permits; and outreach to affected stakeholders. Modifies the list of optional components of state energy conservation plans to include programs to increase transportation energy efficiency, including programs to help reduce carbon emissions in the transportation sector by 2050 and accelerate the use of alternative transport fuels for and electrification of state vehicle fleets, taxis and ridesharing services, mass transit, school buses, ferries and privately owned vehicles. Authorizes \$500 million for the period between fiscal years 2022 and 2026 for the State Energy Program.

Sec. 40110. Power marketing administration transmission borrowing authority.

Increases the borrowing authority of the Bonneville Power Administration (BPA) by \$10 billion to aid the financing of the construction, acquisition and replacement of the Federal Columbia River Power System. Requires the BPA to issue an updated financial plan that considers the projected and planned use and allocation of its borrowing authority across mission responsibilities.

Sec. 40111. Study of codes and standards for use of energy storage systems across sectors.

Directs the Secretary of Energy to conduct a study of types and the commercial applications of codes and standards applied to stationary and mobile energy storage systems, in addition to those that move between stationary and mobile applications such as electric vehicle batteries.

Sec. 40112. Demonstration of electric vehicle battery second-life applications for grid services.

Directs the Department of Energy to establish a demonstration project for second-life applications of electric vehicle batteries as aggregated energy storage installations to provide storage services to the grid.

Subtitle B - Cybersecurity

Sec. 40121. Enhancing grid security through public-private partnerships.

Requires the Secretary of Energy, in coordination with the Secretary of Homeland Security, the heads of other agencies, the Electric Reliability Organization and industry stakeholders, to carry out a program to promote and advance the physical security and cybersecurity of electric utilities, with priority given to utilities with fewer resources. The energy secretary must submit a report to Congress within one year on how to improve the cybersecurity of electricity distribution systems using policies and procedures created by the program.

Sec. 40122. Energy Cyber Sense program.

Creates a voluntary Energy Cyber Sense program to test the cybersecurity of products and technologies intended for use in the energy sector, including the bulk-power system.

Sec. 40123. Incentives for advanced cybersecurity technology investment.

Directs FERC to establish incentive-based rate treatments for the transmission of electricity in interstate commerce and the sale of electricity at wholesale in interstate commerce by encouraging investments in advanced cybersecurity technology and participation in cybersecurity threat information sharing systems.

Sec. 40124. Rural and municipality utility advanced cybersecurity grant and technical assistance program.

Establishes a grant program to provide funding and technical assistance for eligible utilities to detect, respond to and recover from cybersecurity threats. Priority is given to entities with limited cybersecurity resources; own assets critical to the reliability of the bulk-power system; or own defense critical electric infrastructure. Provides \$250 million for the period of fiscal years 2022 through 2026.

Sec. 40125. Enhanced grid security.

Creates a research, development and demonstration program to develop advanced cybersecurity applications and technologies for the energy sector. Will identify and mitigate vulnerabilities including impacts from weather and fuel supply and dependencies on other infrastructure. Provides \$250 million for the period of fiscal years 2022 through 2026.

Establishes an energy sector operational support for a cyber-resilience program to test the emergency response capabilities of the Department of Energy and the coordination of the department with other agencies, the National Laboratories and the private sector. Authorizes \$50 million for this program through fiscal year 2026.

Creates a program to increase the functional preservation of electric grid operations or natural gas and oil operations in the face of natural and human-made threats and hazards. Provides \$50 million for the program through fiscal year 2026.

Sec. 40126. Cybersecurity plan.

Authorizes the secretary of energy to require that recipients of any award or funding under this division to submit cybersecurity plans that demonstrate the recipient's cybersecurity maturity in the context of the project.

TITLE II - SUPPLY CHAINS FOR CLEAN ENERGY TECHNOLOGIES

Sec. 40201. Earth Mapping Resources Initiative.

Codifies the Earth Mapping Resources Initiative to accelerate efforts at the U.S. Geological Survey (USGS) to map domestic mineral resources, with priority given to the mapping and assessment of critical minerals. Provides \$320 million through 2026 for the program.

Sec. 40202. National Cooperative Geologic Mapping Program.

Adds an abandoned mine land and mine waste geological mapping component to the National Cooperative Geologic Mapping Program to ensure mine waste is catalogued and characterized for the occurrence of critical minerals. Extends the authorization of the program through 2031.

Sec. 40203. National Geological and Geophysical Data Preservation Program.

Directs the National Geological and Geophysical Data Preservation Program to preserve samples to track geochemical signatures from critical minerals for use in provenance tracking frameworks.

Sec. 40204. USGS energy and minerals research facility.

Establishes a research facility to support energy and minerals research within USGS. Provides \$167 million for the program.

Sec. 40205. Rare earth elements demonstration facility.

Authorizes \$140 million for the Department of Energy to demonstrate the feasibility of a full-scale rare earth element extraction and separation facility and refinery.

Sec. 40206. Critical minerals supply chains and reliability.

Directs the secretaries of the departments of Interior and Agriculture to complete federal permitting and review processes with maximum efficiency for critical minerals projects on federal land through:

- Establishing and adhering to timelines and schedules for decisions on applications, leases, licenses, permits and other use authorizations;
- Establishing clear, quantifiable permitting performance goals and tracking progress against these goals;
- Engaging in early collaboration among agencies, project sponsors and affected stakeholders to address the interest of these parties and minimize delays;

- Ensuring transparency and accountability by using cost-effective information technology to collect and disseminate information regarding projects and agency performance;
- Engaging in early and active collaboration with state, local and tribal governments;
- Providing demonstrable investments in the performance of federal permitting and review processes, including lower costs and more timely decisions;
- Expanding and institutionalizing federal permitting and review process improvements that have proven effective;
- Developing mechanisms to better communicate priorities and resolve disputes among agencies at the national, regional, state and local levels; and
- Developing other practices, such as preapplication procedures.

Requires an annual report summarizing the implementation of these permitting improvement measures and comparing the United States to other countries in terms of permitting efficiency for critical minerals projects.

Sec. 40207. Battery processing and manufacturing.

Establishes a grant program within the Department of Energy Office of Fossil Energy to ensure the nation has a viable battery materials processing industry to supply the North American battery supply chain and expand advanced battery manufacturing capability. Grant amounts shall be at least \$50 million for battery material processing demonstration projects; \$100 million for battery material processing facility construction projects; and \$50 million for projects that retool, retrofit or expand one or more existing domestic battery material processing facilities. Priority is given to entities that are located and owned in the United States, deploy North American intellectual property and content, represent consortia or industry partnerships, and will not use battery material supplied by or originating from foreign entities of concern. Authorizes \$3 billion for the program through fiscal year 2026.

Creates a battery manufacturing and recycling grant program within the Office of Energy Efficiency and Renewable Energy for advanced battery component manufacturing, advanced battery manufacturing or recycling. Grant amounts shall be at least \$50 million for demonstration projects for advanced battery component manufacturing, advanced battery manufacturing, and recycling; \$100 million for the construction of commercial-scale facilities for advanced battery component manufacturing, advanced battery manufacturing, and recycling; and \$50 million for retooling, retrofitting or expanding existing facilities for advanced battery component manufacturing, advanced battery manufacturing, and recycling. Priority is given to entities that are located and owned in the United States, deploy North American intellectual property and content, represent consortia or industry partnerships, will not use battery material supplied by or originating from foreign entities of concern, and will not export recovered components to foreign entities of concern. Authorizes \$3 billion for the program through fiscal year 2026.

Directs the Secretary of Energy to continue the Lithium-Ion Battery Recycling Prize Competition. Authorizes \$10 million to increase the number of winners in the competition and increase the prize awarded to each winner.

Establishes a battery recycling research, development and demonstration grant program for the development of innovative approaches to increase battery reuse and recycling. Eligible entities

include institutes of higher education, National Laboratories, federal and state research agencies, nonprofit organizations, industrial entities, manufacturing entities, private battery-collection entities, battery producers and retailers, and state and municipal governments. Authorizes \$60 million for the program through fiscal year 2026.

Establishes a state and local government grant program to assist with the establishment or enhancement of state battery collection, recycling and reprocessing programs. The non-federal cost share of projects funded through the program is 50%. Authorizes \$50 million for the program through fiscal year 2026.

Establishes a grant program for retailers that sell batteries or battery-containing products to establish collection systems for these batteries and products for reuse, recycling or disposal. Authorizes \$15 million for the program through fiscal year 2026.

Creates a task force on extended battery producer responsibility to develop a framework that addresses battery recycling goals, cost structures for mandatory recycling, reporting requirements, product design, collection models and transportation of collected materials; provides sufficient flexibility to allow producers to determine cost-effective strategies for compliance with the framework; and outlines regulatory pathways for effective recycling. The task force must submit a report within one year outlining the framework developed and recommendations for enforcement and effective recycling.

Sec. 40208. Electric drive vehicle battery recycling and second-life applications program.

Expands an existing electric vehicle battery second-life applications grant program to include battery recycling in order to improve recycling rates. Establishes an alternative supply chain for critical minerals found in electric drive vehicle batteries. Grants shall be awarded for research and development of solutions to increase battery recycling, maximize recovery of critical minerals and extend the lifecycle of electric vehicle batteries. Provides \$200 million for the program through fiscal year 2026.

Sec. 40209. Advanced Energy Manufacturing and Recycling Grant Program.

Establishes a grant program to enable small and medium-size manufacturers to build new or retrofit existing facilities to produce or recycle advanced energy products in communities where coal mine or coal power plants have shut down. Priority will be given to projects that reduce greenhouse gases and create domestic jobs. Authorizes \$750 million for the program through fiscal year 2026.

Sec. 40210. Critical minerals mining and recycling research.

Creates a critical minerals mining and recycling research grant program to support basic research to advance critical minerals mining, recycling and reclamation strategies and technologies and reduce national reliance on minerals subject to supply disruptions. Eligible recipients include institutions of higher education, National Laboratories, nonprofit organizations and consortia of these entities that work with private industry.

Creates the National Science and Technology Council Critical Minerals Subcommittee to coordinate federal efforts to ensure secure and reliable supplies of critical minerals to the United States.

Establishes a grant program to finance pilot projects for the development, processing or recycling of critical minerals and metals in the United States. Award amounts are not to exceed \$10 million. Thirty percent of grant awards shall be for the secondary recovery of critical minerals and metals. Authorizes \$100 million for the program in each of fiscal years 2021 through 2024.

Sec. 40211. 21st century energy workforce advisory board.

Establishes an advisory board to support and develop a skilled energy workforce, with the board submitting a report within one year and every two years thereafter with its recommendations. The board shall have between 10 and 15 members, with at least one member representing a labor organization.

TITLE III – FUELS AND TECHNOLOGY INFRASTRUCTURE INVESTMENTS

Subtitle A - Carbon Capture, Utilization, Storage, and Transportation Infrastructure

Sec. 40302. Carbon utilization program.

Establishes a grant program to develop standards and certifications to facilitate the commercialization of products that use or are derived from anthropogenic carbon dioxides, formed in coordination with federal agencies and standard-setting organizations. Eligible entities will receive grant funding to use carbon products that demonstrate significant reductions in lifecycle greenhouse gas emissions.

- The program is authorized:
 - \$41 million for fiscal year 2022;
 - \$65.25 million for fiscal year 2023;
 - \$66.56 million for fiscal year 2024;
 - \$67.94 million for fiscal year 2025; and
 - \$69.38 million for fiscal year 2026.

Sec. 40303. Carbon capture technology program.

Adds a front-end engineering and design program for carbon dioxide transport infrastructure necessary to enable deployment of carbon capture, utilization and storage technologies and by adding activities under the front-end engineering and design program by \$100 million for the period of fiscal years 2022 through 2026.

Sec. 40304. Carbon dioxide transportation infrastructure finance and innovation.

Creates the Carbon Dioxide Transportation Infrastructure Finance and Innovation (CIFIA) Program. Eligible projects would be for common carrier carbon dioxide transportation infrastructure or associated equipment, including pipeline, shipping, rail or other equipment, that transport or handle carbon dioxide captured from anthropogenic sources or ambient air. The estimated cost of projects must equal or exceed \$100 million. Recipients of financing or grants must be creditworthy and have a reasonable prospect of repaying the federal credit instrument for the project. Financial assistance provided by the program must be determined to (i) attract public or private investment;

or (ii) enable the project to proceed at an earlier date than it would otherwise or reduce the lifecycle costs of the project. The maximum amount of secured loans or grants under the program shall not exceed 80% of project costs. The final maturity date of secured loans under the program shall be the earlier of 35 years after project completion or the end of the useful life of the project. All iron, steel and manufactured goods used on the pipeline must be produced in the United States.

The program is authorized:

- \$600 million for each of fiscal years 2022 and 2023; and
- \$300 million for each of fiscal years 2024 through 2026.

Sec. 40306. Secure geologic storage permitting.

Authorizes \$5 million in funding for the permitting of Class VI wells for the injection of carbon dioxide for the purpose of geologic sequestration in accordance with the requirements of the Safe Drinking Water Act and the Federal Requirements Under the Underground Injection Control (UIC) Program for Carbon Dioxide (CO₂) Geologic Sequestration (GS) Wells for each of fiscal years 2022 through 2026.

A grant program is created for states to establish and operate underground injection control programs for Class VI wells. \$50 million is provided for each of fiscal years 2022 through 2026.

Sec. 40307. Geologic carbon sequestration on the Outer Continental Shelf.

The Outer Continental Shelf Lands Act is amended by allowing the Department of the Interior to permit projects directly related to the injection of a carbon dioxide stream into sub-seabed geologic formations for the purpose of long-term carbon sequestration.

Sec. 40308. Carbon removal.

This section authorizes funding for projects that contribute to the development of four regional direct air capture hubs. Grants will be given to projects that accelerate commercialization of, and demonstrate the removal, processing, transport, sequestration and utilization of, carbon dioxide captured from the atmosphere. Projects must have the capacity to utilize at least 1 million metric tons of carbon dioxide from the atmosphere annually. Appropriates \$3.5 billion for fiscal years 2022 through 2026.

Subtitle B - Hydrogen Research and Development

Sec. 40313. Clean hydrogen research and development program.

This section expands the scope of the Department of Energy's hydrogen research and development program. The goals of the program are to advance research and development to demonstrate and commercialize the use of clean hydrogen in the transportation, utility, industrial, commercial and residential sectors; and to demonstrate a standard of clean hydrogen production in the transportation, utility, industrial, commercial and residential sectors by 2040.

Eligible activities under the program are expanded to include:

- Establishing a series of technology cost goals aimed at reaching a clean hydrogen production standard;

- Producing hydrogen from diverse energy sources, including fossil fuels with carbon capture, renewable energy resources, nuclear energy and hydrogen-carrier fuels;
- The use of clean hydrogen in industrial applications;
- The use of clean hydrogen for use as a fuel source for both residential and commercial comfort heating and hot water requirements;
- The safe and efficient delivery of hydrogen or hydrogen-carrier fuels, including transmission by pipelines, tanks and other distribution methods, and convenient and economic refueling of vehicles;
- Advanced vehicle, locomotive, maritime vessel, or plane technologies;
- Storage of hydrogen or hydrogen-carrier fuels;
- Development of safe, durable, affordable and efficient fuel cells;
- The ability of domestic clean hydrogen equipment manufacturers to manufacture commercially available competitive technologies in the United States;
- The use of clean hydrogen in the transportation sector, including in light-, medium- and heavy-duty vehicles; and
- The development of appropriate, uniform codes and standards for the safe and consistent deployment and commercialization of clean hydrogen production, processing, delivery and end-use technologies.

Sec. 40314. Additional clean hydrogen programs.

Regional clean hydrogen hubs: Creates a program to support the development of at least four regional clean hydrogen hubs that demonstrably aid the achievement of the clean hydrogen production standard; demonstrate the production, processing, delivery, storage and end-use of clean hydrogen; and can be developed into a national clean hydrogen network. Appropriates \$8 billion for fiscal years 2022 through 2026.

The following criteria are established for regional hubs:

- At least one regional clean hydrogen hub shall demonstrate the production of clean hydrogen from fossil fuels;
- At least one regional clean hydrogen hub shall demonstrate the production of clean hydrogen from renewable energy;
- At least one regional clean hydrogen hub shall demonstrate the production of clean hydrogen from nuclear energy;
- At least one regional clean hydrogen hub shall demonstrate the end-use of clean hydrogen in the electric power generation sector;
- At least one regional clean hydrogen hub shall demonstrate the end-use of clean hydrogen in the industrial sector;
- At least one regional clean hydrogen hub shall demonstrate the end-use of clean hydrogen in the residential and commercial heating sector;
- At least one regional clean hydrogen hub shall demonstrate the end-use of clean hydrogen in the transportation sector; and

- At least two regional clean hydrogen hubs shall be located in the regions of the United States with the greatest natural gas resources.

National clean hydrogen strategy and roadmap: This section requires the Secretary of Energy to develop a national strategy to facilitate the widescale production, processing, delivery, storage and use of clean hydrogen. The initial roadmap should be submitted to Congress 180 days after the date of enactment and again once every three years.

The strategy shall focus on:

- Producing clean hydrogen from natural gas, coal, renewable energy sources, nuclear energy and biomass;
- Identifying barriers, pathways and opportunities to transition to a clean hydrogen economy;
- Identifying economic opportunities for the production, processing, transport, storage and use of clean hydrogen that exist in major shale natural gas-producing regions and for merchant nuclear power plants operating in deregulated markets;
- Identifying environmental risks from clean hydrogen technology deployment;
- Approaches that reflect geographic diversity;
- Identifying opportunities to use existing infrastructure, including all components of the natural gas infrastructure system, for clean hydrogen deployment; and
- Identifying geographic zones or regions in which clean hydrogen technologies could efficiently and economically be introduced in order to transition existing infrastructure to rely on clean hydrogen, in support of decarbonizing all relevant sectors of the economy.

This section also creates a clean hydrogen manufacturing and recycling grant program. Multiyear grants shall be awarded to eligible entities for research and development of projects that advance clean hydrogen production, processing, delivery and storage, as well as projects to increase the reuse and recycling of clean hydrogen technologies. Provides \$500 million for fiscal years 2022 through 2026 for the program.

Clean hydrogen electrolysis program: Creates a program that supports improving the efficiency and reducing the cost of clean hydrogen production using electrolyzers. The goal of the program is to reduce the cost of hydrogen production to less than \$2 per kilogram by 2026. The Secretary of Energy shall award grants, contracts and cooperative agreements to federal agencies and entities deemed to be eligible by the secretary. Provides \$1 billion for fiscal years 2022 through 2026 to remain available until expended.

Sec. 40315. Clean hydrogen production qualifications.

Requires the Environmental Protection Agency and the Department of the Interior to establish an initial standard for the carbon intensity of clean hydrogen production from renewable, fossil fuel with carbon capture, nuclear and other fuel sources. Defines the term “clean hydrogen” as hydrogen produced with a carbon intensity equal to or less than 2 kilograms of carbon dioxide-equivalent per kilogram of hydrogen produced at the site of production.

Subtitle C – Nuclear Energy Infrastructure

Sec. 40321. Infrastructure planning for micro and small modular nuclear reactors.

Requires the Department of Energy to submit a report to Congress on how the department can use micro-reactors and small modular reactors to enhance energy resilience and reduce carbon emissions.

Sec. 40322. Property interests relating to certain projects and protection of information relating to certain agreements.

Allows the Department of Energy to transfer fee title or property interest acquired by the Secretary of Energy in relation to any project funded under the Advanced Reactor Demonstration Program. Extends the confidentiality of intellectual property associated with this program from five years to 30 years.

Sec. 40323. Civil nuclear credit program.

Establishes a civil nuclear credit program within the Department of Energy. The department is authorized to create a bidding process through which certified reactors may be selected to receive credits. Reactors will only be certified if: the reactor is projected to cease operations due to economic factors; the closure of the reactor would result in an increase of pollutants; and the Nuclear Regulatory Commission determines that the reactor (i) will continue to be operated in accordance with the current licensing basis, and (ii) poses no significant safety hazards. Six billion dollars is authorized for the program for the period of fiscal years 2022 through 2025.

Subtitle D - Hydropower

Sec. 40331. Hydroelectric production incentives.

Authorizes \$125 million for hydroelectric production incentives for fiscal year 2022, to remain available until expended.

Sec. 40332. Hydroelectric efficiency improvement incentives.

Authorizes \$75 million for hydroelectric efficiency improvement incentives for fiscal year 2022, to remain available until expended.

Sec. 40333. Maintaining and enhancing hydroelectric incentives.

Directs the Secretary of Energy to provide incentive payments to the owners and operators of hydroelectric facilities for capital improvements related to grid resiliency, improving dam safety, and environmental improvements. Incentive payments shall not exceed 30% of the costs of the applicable capital improvement. Facilities may not receive more than one incentive payment for capital improvements in a fiscal year, and the maximum amount of the payment shall be \$5 million. The program is authorized \$553.6 million for fiscal year 2022, to remain available until expended.

Sec. 40334. Pumped storage hydropower wind and solar integration and system reliability initiative.

Provides financial assistance to eligible entities to carry out project design, transmission studies, power market assessments and permitting for a pumped storage hydropower project to facilitate long-term storage of renewable electricity. Projects must be designed to provide a minimum of 1,000 megawatts of storage capacity and be able to provide usage in more than one organized electricity market. Appropriates \$2 million per year for fiscal years 2022 through 2026.

Sec. 40335. Authority for pumped storage hydropower development using multiple Bureau of Reclamation reservoirs.

Establishes a streamlined process under the Bureau of Reclamation for pumped storage hydropower development projects. Clarifies that certain pumped storage projects using multiple Bureau of Reclamation reservoirs shall be permitted through the bureau’s process, and not both the Federal Energy Regulatory Commission (FERC) process and the Reclamation process.

Sec. 40336. Limitations on issuance of certain leases of power privilege.

Outlines requirements for the Secretary of the Interior concerning the issuance of a lease of power privilege for a pumped storage project in Washington state.

Subtitle E – Miscellaneous

Sec. 40341. Solar energy technologies on current and former mine land.

Directs the Department of Energy to issue a report regarding the viability of siting solar energy projects on current and former mine land. The report must include information on necessary interconnection, transmission siting and the impact on local job creation.

Sec. 40342. Clean energy demonstration program on current and former mine land.

Creates a program to demonstrate the technical and economic viability of conducting clean energy projects on current and former mine land in a manner compatible with existing operations. Clean energy projects include solar, micro-grid, geothermal, direct air capture, fossil-fueled electricity generation with carbon capture, energy storage and advanced nuclear projects. Five hundred million dollars is authorized for the program for fiscal years 2022 through 2026.

Sec. 40343. Leases, easements, and rights-of-way for energy and related purposes on the Outer Continental Shelf.

Amends the Outer Continental Shelf Lands Act to allow offshore energy storage.

TITLE IV – ENABLING ENERGY INFRASTRUCTURE INVESTMENT AND DATA COLLECTION

Subtitle A - Department of Energy Loan Program

Sec. 40401. Department of Energy loan programs.

Clarifies the reasonable prospect of repayment criteria for the Title XVII Innovative Energy Loan Guarantee Program and the Advanced Technology Vehicle Manufacturing (ATVM) program. Expands eligibility for the Title XVII program to include projects that increase the domestically

produced supply of critical minerals, including through the production, processing, manufacturing, recycling or fabrication of mineral alternatives. Expands eligibility for the ATVM program to include medium- and heavy-duty vehicles, trains, aircraft, maritime vessels, and hyperloop technology.

Amends the Alaska Natural Gas Pipeline Act by removing requirements that an Alaskan natural gas pipeline transport gas to West Coast states or the continental United States in order to receive Department of Energy loan guarantees.

Subtitle B - Energy Information Administration

Sec. 40412. Data collection in the electricity sector.

Directs the Energy Information Administration to develop a dashboard on the operation of the bulk power system in the contiguous 48 states. The dashboard must include hourly operating data and a system to provide data on the operations of load-serving entities.

Sec. 40413. Expansion of energy consumption surveys.

Requires the Energy Information Administration to expand the Manufacturing Energy Consumption Survey, the Commercial Building Energy Consumption Survey and the Residential Energy Consumption Survey to increase the scope and frequency of data collection on energy end uses and services; use new data collection methods and tools to gather more comprehensive data and reduce the burden on survey respondents; report community-level economic and environmental impacts; and improve the presentation of data.

Sec. 40414. Data collection on electric vehicle integration with the electricity grids.

Directs the Energy Information Administration to expand data collection on electric vehicle integration with the electric grid.

Sec. 40415. Plan for the modeling and forecasting of demand for minerals used in the energy sector.

Directs the Energy Information Administration to create a plan in collaboration with the U.S. Geological Survey to forecast demand for energy equipment, including energy production or storage equipment that uses minerals that are or may be determined to be critical minerals.

Sec. 40416. Expansion of international energy data.

Requires the Energy Information Administration to expand and improve its international energy data resources to better understand the production and use of energy in other countries; changing patterns of energy use internationally; the relative costs and environmental impacts of energy production and use internationally; and plans for or construction of major energy facilities or infrastructure.

Sec. 40417. Plan for the National Energy Modeling System.

Requires the Energy Information Administration to create a plan to update or increase the capabilities of the National Energy Modeling System, including with respect to:

- Treating energy demand endogenously;
- Increased natural gas usage and increased market penetration of renewable energy;

- Flexible operating modes of nuclear power plants, such as load following and frequency control;
- Tools to model multiple-output energy systems that provide hydrogen, high-value heat, electricity, and chemical synthesis services, including interactions of those energy systems with the electricity grids, pipeline networks, and the broader economy;
- Demand response and improved representation of energy storage, including long-duration storage, in capacity expansion models;
- Electrification, particularly with respect to the transportation, industrial, and buildings sectors;
- Increasing model resolution to represent all hours of the year and all electricity generators;
- Wholesale electricity market design and the appropriate valuation of all services that support the reliability of electricity grids;
- Economic modeling of the role of energy efficiency, demand response, electricity storage, and a variety of distributed generation technologies;
- The production, transport, use and storage of carbon dioxide, hydrogen and hydrogen carriers;
- Greater flexibility in:
 - The modeling of the environmental impacts of electricity systems, such as emissions of greenhouse gases and other pollutants and the use of land and water resources; and
 - The ability to support climate modeling, such as the climate modeling performed by the Office of Biological and Environmental Research in the Office of Science of the Department;
- Energy technologies that are in an early stage of commercial deployment and have been identified by the Secretary of Energy as candidates for large-scale demonstration projects; and
- Increased and improved data sources and tools.

Sec. 40418. Report on costs of carbon abatement in the electricity sector.

The administrator of the Energy Information Administration will submit to Congress a report on the potential use of levelized cost of carbon abatement or a similar metric in analyzing generators of electricity. The report shall cover:

- Identification of limitations and appropriate uses of the metric;
- Feasibility and impact of incorporating levelized cost of carbon abatement in long-term forecasts to compare technical approaches and understand real-time changes in fossil-fuel and nuclear dispatch, system-level costs of technology options to reduce emissions and costs of policy options, including current policies, regarding valid and verifiable reductions and removals of carbon; and
- Potential process to measure carbon dioxide emissions intensity per unit of output production for a range of energy sources, sectors and geographic regions.

The report will include a corresponding process to provide a framework for reporting the status and costs of carbon dioxide reduction relative to specific goals.

Sec. 40419. Harmonization of efforts and data.

Directs the administrator of the Energy Information Administration to create a system to harmonize data collection efforts with the Environmental Protection Agency, other relevant federal agencies, and state or regional credit registries.

Subtitle C - Miscellaneous

Sec. 40431. Consideration of measures to promote greater electrification of the transportation sector.

Requires states to consider measures to promote greater electrification of the transportation sector, including the establishment of rates that:

- Promote affordable and equitable electric vehicle charging options for residential, commercial and public electric vehicle charging infrastructure;
- Improve the customer experience associated with electric vehicle charging, including by reducing charging times for light-, medium- and heavy-duty vehicles;
- Accelerate third-party investment in electric vehicle charging for light-, medium- and heavy-duty vehicles; and
- Appropriately recover the marginal costs of delivering electricity to electric vehicles and electric vehicle charging infrastructure.

States shall begin consideration of these measures within one year of enactment and complete consideration within two years of enactment.

Sec. 40432. Office of public participation.

Amends the Federal Power Act by striking provisions related to the term and termination of the director of the Federal Energy Regulatory Commission's Office of Public Participation and updates the pay scale of the director.

Sec. 40433. Digital climate solutions report.

Requires the Secretary of Energy to submit a report to Congress assessing the use of digital tools and platforms as climate solutions, including:

- Artificial intelligence and machine learning;
- Blockchain technologies and distributed ledgers;
- Crowdsourcing platforms;
- The Internet of Things;
- Distributed computing for the grid; and
- Software and systems.

Sec. 40434. Study and report by the Secretary of Energy on job loss and impacts on consumer energy costs due to the revocation of the permit for the Keystone XL pipeline.

Requires the Secretary of Energy to carry out within 90 days of enactment a study that estimates the total number of jobs lost and the impact on consumer energy costs as a result of the cancellation of the Keystone XL pipeline over the 10-year period starting on the date that the executive order was issued.

Sec. 40435. Study on impact of electric vehicles.

Requires the Secretary of Energy to conduct a study on the cradle-to-grave environmental impact of electric vehicles.

Sec. 40436. Study on impact of forced labor in China on the electric vehicle supply chain.

Directs the Secretary of Energy to study the impact of forced labor in China on the electric vehicle supply chain.

TITLE V – ENERGY EFFICIENCY AND BUILDING INFRASTRUCTURE

Subtitle A – Residential and Commercial Energy Efficiency

Sec. 40501. Definitions.

“Priority state” means a state that (1) is eligible for funding under the State Energy Program, (2) is among the 15 states with the highest annual per-capita combined residential and commercial sector energy consumption or (3) is among the 15 states with the highest annual per-capita energy-related carbon dioxide emissions by state.

Sec. 40502. Energy efficiency revolving loan fund capitalization grant program.

Within one year of enactment, the Secretary of Energy shall establish a program to provide capitalization grants to states to establish a revolving loan fund. Of the \$250 million for fiscal year 2022 appropriated:

- 40% shall be for capitalization grants to states eligible under the State Energy Program; and
- 60% shall be for supplemental capitalization grants to priority states, the amount of which shall not exceed \$15 million per state.

States shall begin using capitalization grants within 180 days of receiving the grant. States that receive capitalization grants shall use them for:

- Commercial energy audits that determine the overall consumption, to identify and recommend lifecycle cost-effective opportunities to reduce consumption, estimate potential energy and cost savings, to identify periods of peak energy demand and to recommend controls to reduce or redistribute peak energy consumption;
- Residential energy audits that recommend lifecycle cost-effective opportunities to reduce energy consumption through energy-efficient lighting, heating, ventilation, air conditioning, windows, appliances and insulation; recommend controls to reduce peak energy consumption; compare the energy consumption to residential buildings in the same area and provide a Home Energy Score; and

- Commercial and residential energy upgrades and retrofits recommended in the audit and improve the physical comfort of the building, the energy efficiency, the air quality, reduce energy intensity or improve control management.

States shall also provide recipients a grant to conduct a final energy audit that assesses the total energy savings from the upgrades or retrofits. Loans shall be fully amortized by the earlier of (1) the year in which the upgrades or retrofits carried out using the loan exceed their expected useful life and (2) 15 years after those upgrades or retrofits are installed. Businesses with fewer than 500 employees are eligible for grants and technical assistance. Each state that receives a capitalization grant shall within two years submit a report that describes the number of recipients and the average capital cost of upgrades and retrofits.

Sec. 40503. Energy auditor training grant program.

The Secretary of Energy shall establish a competitive grant program to award grants to train individuals to conduct energy audits or surveys of commercial and residential buildings. Funds shall be used to cover any cost associated with individuals being trained or certified to conduct energy audits, including the wages of a trainee during the training period (up to 10% of grant funds). Authorizes \$40 million for fiscal years 2022 through 2026. Grant amounts shall not exceed \$2 million per state.

Subtitle B—Buildings

Sec. 40511. Cost-effective codes implementation for efficiency and resilience.

The Secretary of Energy shall establish within the Building Technologies Office a competitive grant program for eligible entities to enable sustained cost-effective implementation of updated building energy codes—an amendment that results in increased efficiency compared to the previously adopted building energy code. In awarding grants, the Secretary shall give priority to partnerships and consider prospective energy savings and measurement systems, the long-term sustainability of the measures and savings, prospective benefits and the capacity of entities to carry out the proposed projects. “Partnership” includes partnerships between local building code agencies, codes and standards developers, associations of builders and design and construction professionals, local and utility energy efficiency programs, consumer, energy efficiency and environmental advocates and other entities, as determined by the Secretary.

Eligible activities include: (1) enabling partnerships to provide training and materials to builders, contractors, subcontractors and building code officials; (2) collecting and disseminating data on construction codes and implementation; (3) developing and implementing a plan for highly effective codes implementation; and (4) implementing updates in energy codes for residential and commercial buildings and additions. Authorizes \$225 million for fiscal years 2022 through 2026.

Sec. 40512. Building, training, and assessment centers.

The Secretary of Energy shall provide grants to institutions of higher education and Tribal Colleges or Universities to establish building training and assessment centers to:

- Identify opportunities for optimizing energy efficiency and environmental performance in buildings;

- Promote the application of emerging concepts and technologies in commercial and institutional buildings;
- Train engineers, architects, building scientists, building energy permitting and enforcement officials and building technicians in energy-efficient design and operation;
- Assist institutions of higher education and Tribal Colleges or Universities in training building technicians;
- Promote research and development for the use of alternative energy sources and distributed generation to supply heat and power for buildings, particularly energy-intensive buildings ; and
- Coordinate with and assist state-accredited technical training centers, community colleges, Tribal Colleges or Universities and local offices of the National Institute of Food and Agriculture and ensure appropriate services are provided under this section to each region of the United States.

Authorizes \$10 million for fiscal year 2022.

Sec. 40513. Career skills training.

The Secretary of Energy shall establish award grants to eligible entities to pay the federal share, 50%, of associated career skills training programs under which students concurrently receive classroom instruction and on-the-job training for the purpose of obtaining an industry-related certification to install energy efficient buildings technologies. Eligible entities are certain nonprofit partnerships. Authorizes \$10 million for fiscal year 2022.

Sec. 40514. Commercial building energy consumption information sharing.

Within 120 days of enactment, the Energy Information Administration (EIA) Administrator and the Environmental Protection Agency (EPA) Administrator shall sign an information-sharing agreement relating to commercial building energy consumption data. The agreement shall:

- provide that the EIA and the EPA shall have access to building-specific data collected by the other;
- describe the manner in which the data shall be used; and
- examine and compare the methods by which both capture this data.

Subtitle C—Industrial Energy Efficiency

PART I—INDUSTRY

Sec. 40521. Future of industry program and industrial research and assessment centers.

Renames the Energy Intensive Industries Program as the “Future of Industry Program.” Modifies the definition of “energy-intensive industry” for purposes of the program to include water and wastewater treatment facilities.

Amends the Energy Independence and Security Act to create a new industrial research and assessment centers program. The Secretary of Energy shall provide funding to institutions of higher education-based industrial research and assessment centers to:

- Provide in-depth assessments of small- and medium-sized manufacturer plant sites to evaluate the facilities, services and manufacturing operations of the plant sites;
- Identify opportunities for optimizing energy efficiency and environmental performance, including implementation of smart manufacturing; energy management systems; sustainable manufacturing; information technology advancements for supply chain analysis, logistics, system monitoring, industrial and manufacturing processes and other purposes waste management systems;
- Promote applications of emerging concepts and technologies in small- and medium-sized manufacturers (including water and wastewater treatment facilities and federally owned manufacturing facilities);
- Promote research and development for the use of alternative energy sources to supply heat, power and new feedstocks for energy-intensive industries;
- Coordinate with appropriate federal and state research offices;
- Provide a clearinghouse for industrial process and energy efficiency technical assistance resources; and
- Coordinate with state-accredited technical training centers and community colleges, while ensuring appropriate services to all regions of the United States.

Covered projects include those recommended in an energy assessment and improve energy efficiency, material efficiency, cybersecurity or productivity or reduce waste production, greenhouse gas emissions or non-greenhouse gas pollution. Eligible entities include small- or medium-sized manufacturers—the gross annual sales of which are less than \$100 million, has fewer than 500 employees and has annual energy bills between \$100,000 and \$3.5 million—that has had an energy assessment.

The Secretary shall establish a Center of Excellence at not more than five of the highest-performing industrial research and assessment centers. A Center of Excellence shall advise the industrial research and assessment centers by:

- Mentoring new directors and staff;
- Providing training on new technologies, practices and tools;
- Assisting the centers with specialized technical opportunities;
- Identifying and coordinating with regional, state and local energy efficiency programs; and
- Facilitate coordination between the centers and other federal programs.

Each Center of Excellence shall receive at least \$500,000 in support from the Secretary each fiscal year.

The Secretary shall pay the federal share, 50%, of associated internship programs under which students work with or for industries, manufacturers and energy service providers to implement the recommendations of industrial research and assessment centers. The Small Business Administration shall expedite consideration of applications from eligible small-business concerns to implement recommendations developed by the centers.

Authorizes \$150 million for all the above.

The Secretary shall establish a grant program for implementing covered projects. The maximum amount shall not exceed \$300,000 per eligible entity. Authorizes \$400 million for fiscal years 2022 through 2026 for the implementation grants.

Sec. 40522. Sustainable manufacturing initiative.

As part of the Office of Energy Efficiency and Renewable Energy of the Department of Energy, the Secretary shall carry out on-site technical assessments to identify opportunities for:

- Maximizing the energy efficiency of industrial processes and cross-cutting systems;
- Preventing pollution and minimizing waste;
- Improving efficient use of water in manufacturing processes; and
- Conserving natural resources.

As part of the industrial efficiency programs of the Department of Energy, the Secretary shall carry out a joint industry-government partnership program to research, develop and demonstrate new sustainable manufacturing and industrial technologies and processes that maximize the energy efficiency of industrial plants, reduce pollution and conserve natural resources.

PART II—SMART MANUFACTURING

Sec. 40532. Leveraging existing agency programs to assist small and medium manufacturers.

The Secretary of Energy shall expand the scope of technologies covered by the industrial research and assessment centers of the Department (1) to include smart manufacturing technologies and practices; and (2) to equip the directors of the industrial research and assessment centers with the training and tools necessary to provide technical assistance in smart manufacturing technologies and practices, including energy management systems, to manufacturers.

Sec. 40533. Leveraging smart manufacturing infrastructure at National Laboratories.

Within 180 days of enactment, the Secretary of Energy shall conduct a study on how the department can increase access to existing high-performance computing services in the National Laboratories, particularly for small and medium manufacturers. Within one year of enactment, the Secretary shall submit a report to Congress describing the study results.

Sec. 40534. State manufacturing leadership.

The Secretary of Energy may provide financial assistance on a competitive basis to states for the establishment of programs to be used as models for supporting the implementation of smart manufacturing technologies. Funds may be used to facilitate access to high-performance computing resources for small and medium manufacturers and to provide assistance to small and medium manufacturers to implement smart manufacturing technologies and practices. The term of an award shall not exceed three years. The maximum amount of an award shall not be more than \$2 million. Each state shall match 30% of the financial assistance. Authorizes \$50 million for fiscal years 2022 through 2026.

Sec. 40535. Report.

The Secretary of Energy annually shall submit to Congress and make publicly available a report on the progress made in advancing smart manufacturing in the United States.

Subtitle D – Schools and Nonprofits

Sec. 40541. Grants for energy efficiency improvements and renewable energy improvements at public school facilities.

Directs the Secretary of Energy to provide competitive grants to public schools for energy efficiency, renewable energy and alternative-fueled vehicle upgrades and improvements. Eligible entities include local educational agencies and groups of one or more schools; nonprofits; for-profit organizations; and community partners with the knowledge and capacity to assist with energy improvements. Priority shall be given to entities that have renovation, repair and improvement funding needs; serve a high percentage of students who are eligible for free or reduced-price lunch; the partnering of a local educational agency which is designated with a school district locale code of 41, 42, or 43, as determined by the National Center for Education Statistics; and that leverage private sector investment through energy-related performance contracting. Five hundred million dollars is authorized for the period of fiscal years 2022 through 2026.

Sec. 40542. Energy efficiency materials pilot program.

Creates a pilot grant program to provide buildings owned by nonprofits with energy-efficiency materials. The definition of “energy-efficiency material” includes:

- A roof or lighting system or component of the system;
- A window;
- A door, including a security door; and
- A heating, ventilation, or air conditioning system or component of the system (including insulation and wiring and plumbing improvements needed to serve a more efficient system).

Fifty million dollars is authorized for the period of fiscal years 2022 through 2026.

Subtitle E - Miscellaneous

Sec. 40551. Weatherization assistance program.

Appropriates \$3.5 billion for the Weatherization Assistance Program authorized by the Energy Conservation and Production Act for fiscal year 2022, to remain available until expended.

Sec. 40552. Energy Efficiency and Conservation Block Grant Program.

Allows for Energy Efficiency and Conservation Block Grant Program funds to be used in programs for financing energy efficiency, renewable energy and zero emission transportation capital investments, projects and programs. Eligible programs may include loan and performance contracting programs, the leveraging of additional public and private sector funds, and programs that allow rebates, grants, or other incentives for the purchase and installation of energy efficiency, renewable energy, and zero-emission transportation measures. Provides \$550 million for fiscal year 2022, to remain available until expended.

Sec. 40553. Survey, analysis and report on employment and demographics in the energy, energy efficiency and motor vehicle sectors of the United States.

Creates an Energy Jobs Council consisting of representatives from the Energy Information Administration; members of state energy offices that serve on the State Energy Advisory Board; the Department of Commerce; the Census Bureau; the Bureau of Labor Statistics; and other federal agencies. The council shall conduct a survey of employers in the energy, energy efficiency and motor vehicles sectors to analyze employment figures and demographics in these sectors, including the number of personnel who dedicate a substantial portion of working hours to regulatory compliance matters. This section codifies the United States Energy and Employment Report created by the Department of Energy and produced by the Energy Futures Initiative since 2017.

Sec. 40554. Assisting Federal Facilities with Energy Conservation Technologies grant program.

Provides \$20 million for the existing Assisting Federal Facilities with Energy Conservation Technologies grant program. This program distributes funding through the Federal Emergency Management Agency (FEMA) to federal agencies that can be leveraged with private capital for energy and water efficiency upgrades to federal buildings.

Sec. 40555. Rebates.

Authorizes \$10 million for the Extended Product System Rebate program and an additional \$10 million for the Energy Efficient Transformer Rebate program, both of which were established by the Energy Act of 2020.

Sec. 40556. Model guidance for combined heat and power systems and waste heat to power systems.

Requires the Secretary of Energy and FERC to review existing rules and procedures relating to interconnection service and additional services throughout the United States for electric generation with nameplate capacity up to 150 megawatts connecting at either distribution or transmission voltage levels to identify barriers to the deployment of combined heat and power systems and waste heat to power systems. The Secretary and FERC shall issue model guidance within 18 months of enactment for interconnection service and additional services for consideration by state regulatory authorities and nonregulated electric utilities.

TITLE VII - METHANE REDUCTION INFRASTRUCTURE

Sec. 40601. Orphaned well site plugging, remediation and restoration.

Establishes a program to plug, remediate and reclaim orphaned wells located on federal land. Provides grants to the federal land management agencies and oil and gas producing states and Indian tribes to support practical and economical remedies for environmental problems caused by orphaned wells on federal land, tribal land, and state and private land. Authorizes \$250 million for orphaned well plugging and remediation on federal land; \$4.3 billion for orphaned well plugging and remediation on state land; and \$150 million for orphaned well plugging and remediation on tribal land. Funds will remain available until Sept. 30, 2030. Includes the sharing of best practices

in the management of oil and gas well inventories to ensure the availability of funds to plug, remediate and restore oil and gas well sites on cessation of operation. Appropriates \$30 million for fiscal year 2022 until Sept. 30, 2030, to conduct research and development activities in cooperation with the Interstate Oil and Gas Compact Commission to assist the federal land management agencies, states and Indian tribes in:

- Identifying and characterizing undocumented orphaned wells; and
- Mitigating the environmental risks of undocumented orphaned wells.

TITLE VII – ABANDONED MINE LAND RECLAMATION

Sec. 40701. Abandoned Mine Reclamation Fund authorization of appropriations.

Authorizes \$11.29 billion for the Abandoned Mine Reclamation Fund for fiscal year 2022, to remain available until expended. Funds shall be used for annual grants to states and tribes for abandoned mine land and water reclamation projects under the Surface Mining Control and Reclamation Act.

Sec. 40702. Abandoned mine reclamation fee.

Reduces the rates of the Abandoned Mine Reclamation Fee to 22.4 cents per ton of coal produced from surface mining, 9.6 cents per ton of coal produced from underground mining and 6.4 cents per ton of lignite coal. The fee is extended through Sept. 30, 2024.

Sec. 40703. Amounts distributed from Abandoned Mine Reclamation Fund.

Extends the dates that amounts from the Abandoned Mine Reclamation Fund are to be distributed until 2036.

Sec. 40704. Abandoned hardrock mine reclamation.

Directs the Secretary of the Interior to establish a program to inventory, assess, decommission, reclaim, respond to hazardous substance releases on, and remediate abandoned hardrock mine land. Grants shall be provided to states and tribes for activities for the remediation and reclamation of land that has been affected by past hardrock mining activities. Three billion dollars is provided for the program, with 50% going toward grants for states and tribes and 50% allocated toward abandoned hardrock mining reclamation activities on federal land.

TITLE VIII – NATURAL RESOURCES-RELATED INFRASTRUCTURE, WILDFIRE MANAGEMENT, AND ECOSYSTEM RESTORATION

Sec. 40801. Forest Service Legacy Road and Trail Remediation Program.

The Secretary of the Interior shall establish a Forest Service Legacy Road and Trail Remediation Program. Funds may be used to:

- Restore fish passage in streams at road and trail crossings;
- Decommission unauthorized, user-created roads and trails;
- Prepare previously closed National Forest System roads for long-term storage;
- Decommission previously closed National Forest System roads and trails;
- Relocate National Forest System roads and trails;

- Convert National Forest System roads to trails, while allowing for continued use for motorized and nonmotorized recreation;
- Decommission temporary roads; and
- Carry out projects on National Forest System roads, trails and bridges to improve resilience to extreme weather events, flooding and other natural disasters.

Priority shall be given to projects that:

- Protect or improve water quality in public drinking water source areas;
- Restore the habitat of a threatened, endangered, or sensitive fish and wildlife species; or
- Maintain future access to the adjacent area for the public, contractors, permittees or firefighters.

The program is authorized \$250 million for fiscal years 2022 through 2026.

Sec. 40802. Study and report on feasibility of revegetating reclaimed mine sites.

Requires the Office of Surface Mining Reclamation to submit a study on the feasibility of revegetating reclaimed mine sites.

Sec. 40803. Wildfire risk reduction.

The Department of the Interior and the Forest Service is provided \$3.37 billion for wildfire risk reduction. Of this amount:

- \$20 million shall be for entering into an agreement with the National Oceanic and Atmospheric Administration to establish and operate a program that utilizes the Geostationary Operational Environmental Satellite Program to detect and report wildfire starts;
- \$600 million shall be for the salaries and expenses of federal wildland firefighters;
- \$10 million shall be for technology and infrastructure for each Type I and Type II incident management team to maintain interoperability with respect to radio frequencies used;
- \$30 million shall be for financial assistance to states, tribes and local governments to establish and operate Reverse-911 telecommunications systems;
- \$50 million shall be for a pilot program to provide financial assistance to local government for the acquisition of slip-on tanker units to establish fleets of vehicles that can be quickly converted to be operated as fire engines;
- \$1.2 million shall be for developing and publishing a map of at-risk communities, including tribal at-risk communities;
- \$100 million shall be for preplanning fire response workshops and workforce training for staff, non-federal firefighters and Native village fire crews;
- \$20 million shall be for the Secretary of Agriculture to enter into an agreement with a Southwest Ecological Restoration Institute to:
 - Compile and display existing data for hazardous fuel reduction or wildfire prevention treatments undertaken by the departments of Interior and Agriculture;
 - Compile and display existing data for large wildfires that occur in the United States;

- Facilitate coordination and use of existing and future interagency fuel treatment data;
- Publish a report every five years showing how hazardous fuel reduction or wildfire prevention treatments and previous wildfires affect the boundaries of wildfires; and
- Carry out other related activities of a Southwest Ecological Restoration Institute;
- \$20 million shall be for activities conducted under the Joint Fire Science Program;
- \$100 million shall be for collaboration and collaboration-based activities, including facilitation, certification of collaboratives, and planning and implementing projects under the Collaborative Forest Landscape Restoration Program;
- \$500 million shall be for:
 - Conducting mechanical thinning and timber harvesting in an ecologically appropriate manner that maximizes the retention of large trees; or
 - Precommercial thinning in young growth stands for wildlife habitat benefits to provide subsistence resources;
- \$500 million shall be for community wildfire defense grants for at-risk communities;
- \$500 million shall be for planning and conducting prescribed fires and related activities;
- \$500 million shall be for developing or improving potential control locations, including installing fuelbreaks, with a focus on shaded fuelbreaks where ecologically appropriate;
- \$200 million shall be for contracting or employing crews of laborers to modify and remove flammable vegetation on federal land and for using materials from treatments to produce biochar and other wood products;
- \$200 million shall be for post-fire restoration activities implemented not later than three years after the wildfire is contained;
- \$8 million shall be for providing feedstock to firewood banks and providing financial assistance for the operation of these banks; and
- \$10 million shall be for the procurement and placement of wildfire detection and real-time monitoring equipment in areas at risk of wildfire or post-burned areas.

By Sept. 30, 2027, the Forest Service shall conduct restoration treatments and improve the Fire Regime Condition Class of 10 million acres located in the wildland-urban interface or a public drinking water source area.

Sec. 40804. Ecosystem restoration.

This section authorizes \$2.13 billion for fiscal year 2022 through 2026 for the Department of the Interior and the Forest Service to restore the ecological health of federal and private lands and waters. Of this amount:

- \$300 million shall be for:
 - Entering into contracts, including stewardship contracts or agreements, the purpose of each of which shall be to restore ecological health on not fewer than 10,000 acres of federal land, including Indian forest land or rangeland; and
 - Establishing a Working Capital Fund to fund the requirements of the above contracts;

- \$200 million shall be for states and tribes to implement restoration projects on federal land pursuant to good neighbor agreements entered into under section 8206 of the Agricultural Act of 2014 or agreements entered into under the Tribal Forest Protection Act of 2004;
- \$400 million shall be for financial assistance to facilities that purchase and process byproducts from ecosystem restoration projects;
- \$400 million shall be for grants to states, territories and tribes for implementing voluntary ecosystem restoration projects on public or private land that (i) prioritizes funding cross-boundary projects; and (ii) requires matching funding from the state, territory or tribe;
- \$50 million shall be for grants to states and tribes to establish rental programs for portable skidder bridges, bridge mats, or other temporary water crossing structures to minimize stream bed disturbance;
- \$200 million shall be for invasive species detection, prevention and eradication;
- \$100 million shall be for restoring, preparing or adapting recreation sites on federal land, including Indian forest land or rangeland;
- \$200 million shall be for the restoration of native vegetation and mitigation of environmental hazards on mined land;
- \$200 million shall be for establishing a national revegetation effort on federal and non-federal land, including to implement the National Seed Strategy for Rehabilitation and Restoration; and
- \$80 million shall be for the establishment of a collaborative-based, landscape-style restoration program to restore water quality or fish passage on federal land, including Indian forest land or rangeland.

Sec. 40805. GAO study.

Directs the Government Accountability Office (GAO) to conduct a study on the implementation of this title on whether it effectively reduced wildfire risk and restored ecosystems on federal and non-federal land.

Sec. 40806. Establishment of fuel breaks in forests and other wildland vegetation.

Establishes a categorical exclusion under the National Environmental Policy Act (NEPA) for the establishment and maintenance of fuel breaks that are:

- Up to 1,000 feet in length or incorporate existing linear features, like roads, water infrastructure and pipelines; and
- Intended to reduce the risk of uncharacteristic wildfire on federal land or catastrophic wildfire for an adjacent at-risk community.

Activities that may be carried out under the categorical exclusion include:

- Mowing or masticating;
- Thinning by manual and mechanical cutting;
- Piling, yarding, and removal of slash or hazardous fuels;
- Selling of vegetation products, including timber, firewood, biomass, slash and fenceposts;
- Targeted grazing;

- Application of pesticide, biopesticide or herbicide;
- Seeding of native species;
- Controlled burns and broadcast burning; and
- Burning of piles, including jackpot piles.

The above activities may not be carried out under the categorical exclusion if the activity is conducted:

- In a component of the National Wilderness Preservation System;
- On federal land on which the removal of vegetation is prohibited or restricted by an act of Congress, presidential proclamation or regulation;
- In a wilderness study area; or
- In an area in which carrying out the activity would be inconsistent with the applicable land management plan or resource management plan.

Projects shall not include the establishment of permanent roads, though necessary maintenance and repairs may be made on existing permanent roads.

Sec. 40807. Emergency actions.

Authorizes the Secretary of Agriculture to take authorized emergency actions in response to emergency situations on National Forest System land in order to provide relief from hazards threatening human health and safety and mitigate threats to natural resources on National Forest System land or adjacent land. Authorized emergency actions include:

- The salvage of dead or dying trees;
- The harvest of trees damaged by wind or ice;
- The commercial and noncommercial sanitation harvest of trees to control insects or disease, including trees already infested with insects or disease;
- The reforestation or replanting of fire-impacted areas through planting, control of competing vegetation, or other activities that enhance natural regeneration and restore forest species;
- The removal of hazardous trees in close proximity to roads and trails;
- The removal of hazardous fuels;
- The restoration of water sources or infrastructure;
- The reconstruction of existing utility lines; and
- The replacement of underground cables.

Sec. 40808. Joint Chiefs Landscape Restoration Partnership program.

Establishes a program to improve the health and resilience of forest landscapes across National Forest System land and state, tribal and private land. Eligible activities include those that:

- Reduce the risk of wildfire;
- Protect water quality and supply; and
- Improve wildlife habitat for at-risk species.

In considering projects, the Forest Service and the Natural Resources Conservation Service shall consider whether the proposal:

- Reduces wildfire risk in a municipal watershed or the wildland-urban interface;
- Was developed through a collaborative process with participation from diverse stakeholders;
- Increases forest workforce capacity or forest business infrastructure and development;
- Leverages existing authorities and non-federal funding;
- Provides measurable outcomes; or
- Supports established state and regional priorities.

The program is authorized \$90 million in each of fiscal years 2022 and 2023.

TITLE IX - WESTERN WATER

Sec. 40901. Authorization of appropriations.

This section authorizes:

- \$1 billion for rural water projects that have been authorized by an act of Congress before July 1, 2021;
- \$3 billion for the Aging Infrastructure Account, of which
 - \$100 million shall be for Bureau of Reclamation reserved or transferred works that have suffered a critical failure under Sec. 40904; and
 - \$100 million shall be for the rehabilitation, reconstruction or replacement of dams constructed under the Carey Act of 1894, per Sec. 40904.
- \$1 billion for water recycling and reuse projects, of which:
 - \$550 million shall be for water recycling and reuse projects authorized by the Reclamation Wastewater and Groundwater Study and Facilities Act; and
 - \$450 million shall be for the large-scale water recycling project grant program in Sec. 40905;
- \$400 million for WaterSMART grants, with \$100 million reserved for projects that improve natural features or nature-based features;
- \$300 million for implementing the Colorado River Basin Drought Contingency Plan subject to the conditions in Sec. 40906;
- \$250 million for water desalination projects and studies authorized by the Water Desalination Act;
- \$100 million for the water storage grant program in Sec. 40902;
- \$100 million for the watershed health grant program in Sec. 40907; and
- \$50 million for endangered species recovery and conservation programs in the Colorado River Basin.

Sec. 40902. Water storage, groundwater storage, and conveyance projects.

Feasibility studies are only eligible for funding under this section if authorized by Congress before enactment of this act. Feasibility studies may also be carried out for the Verde Reservoirs Sediment Mitigation Project in Arizona and for the Tualatin River Basin Project in Oregon.

Funding for project construction is only available under this section if authorized by Congress before passage, or if Congress approves funding for a feasibility study and the Secretary of the Interior:

- Finds the project to be technically and financially feasible;
- Determines that sufficient non-federal funding is available for the non-federal cost share of the project; and
- Finds the project to be in the public interest and recommends the project for construction.

The federal cost share shall not exceed 50% for federally owned projects or 25% for non-federally owned projects, unless otherwise stated in an act of Congress. Before being funded, a project should be determined to have a proportionate share of benefits to be federal benefits. All relevant environmental laws including NEPA must be complied with to receive funding for a project under this section.

Sec. 40903. Small water storage and groundwater storage projects.

Creates a competitive grant program for small water storage and groundwater storage projects in Bureau of Reclamation states, Alaska or Hawaii. Eligible projects must have a storage capacity of between 2,000 acre-feet and 30,000 acre-feet of water. Grant funds would cover the federal share of planning, design and construction costs. Priority will be given to projects that will likely provide a more reliable water supply to states, tribes and local governments; increase water management flexibility and reduce impacts on environmental resources from projects operated by federal and state agencies; are regional in nature; have support from multiple stakeholders; and provide multiple benefits, including water supply reliability, ecosystem benefits, groundwater management and water quality improvements. The federal cost share for projects shall not exceed the lesser of 25% of project costs or \$30 million.

Sec. 40904. Critical maintenance and repair.

This section authorizes \$100 million for critical maintenance and repair at Bureau of Reclamation reserved or transferred works for which construction began on or before Jan. 15, 1915, and which suffered a critical failure in the last two years. Funding may be used for the entire transferred or reserved work, regardless of whether the critical failure was limited to a single project of the overall work.

An additional \$100 million is provided for the rehabilitation, reconstruction or replacement of dams constructed under the Carey Act of 1894 for which:

- Construction began on or after Jan. 1, 1905;
- The governor of the state in which the dam is located has:
 - Determined the dam has reached its useful life;
 - Determined the dam poses significant health and safety concerns; and
 - Requested federal support; and
- The estimated rehabilitation, reconstruction, replacement, engineering and permitting costs would exceed \$50 million.

Sec. 40905. Competitive grant program for large-scale water recycling and reuse program.

Establishes a competitive grant program for large-scale water recycling and reuse projects in Bureau of Reclamation states. Eligible entities include states, tribes, municipalities, irrigation districts, water districts, wastewater districts or other organizations with water or power delivery authority. Projects funded through the program must have a total estimated cost of at least \$500 million, be technically and financially feasible and provide a federal benefit under the reclamation laws. Project sponsors must have sufficient non-federal funding to complete the project. Priority will be given to projects that provide multiple benefits, including water supply reliability, ecosystem benefits and water quality improvements; reduce impacts on environmental resources from projects operated by federal and state agencies; advance water management plans across a multistate area; are regional in nature; and have support from multiple stakeholders. The federal cost share shall not exceed 25% of project costs.

Sec. 40906. Drought contingency plan funding requirements.

Funds under this section to be used on projects that establish or conserve recurring Colorado River water that contributes to Lake Mead and other Colorado River water reservoirs or improve the long-term efficiency of operations in the Lower Colorado River. None of the funds may be used for the operation of the Yuma Desalting Plant.

Sec. 40907. Multi-benefit projects to improve watershed health.

Creates a competitive grant program for habitat restoration projects that improve watershed health in river basins adversely impacted by a Bureau of Reclamation water project. Eligible entities include states, tribes, local governments, organizations with power or water delivery authority, regional authorities or nonprofit conservation organizations. Eligible projects must provide at least one of the following: ecosystem benefits; restoration of native species; mitigation of climate change impacts for fish and wildlife habitats; protection against invasive species; enhancement of commercial, recreational, subsistence or tribal ceremonial fishing; or enhancement of river-based recreation. The federal cost share shall not exceed 50% of project costs, or 75% for projects in which the non-consumptive water conservation benefit or habitat restoration benefit accounts for at least 75% of costs.

Sec. 40909. Clarification of authority to use coronavirus fiscal recovery funds to meet a non-federal matching requirement for authorized Bureau of Reclamation water projects.

Provides that state and local fiscal recovery funds from the American Rescue Plan Act may be used to pay the non-federal cost share of authorized Bureau of Reclamation projects.

Sec. 40910. Federal assistance for groundwater recharge, aquifer storage, and water source substitution projects.

This section authorizes the Bureau of Reclamation to provide technical assistance to tribes, states or public agencies for groundwater recharge projects, aquifer storage and recovery projects, or water source substitution for aquifer protection projects. In order to receive funding, the Secretary of the Interior must find the project to be technically and financially feasible; determine that

sufficient non-federal funding is available for the project’s non-federal cost share; and find the project to be in the public interest and recommend the project for construction.

TITLE X – AUTHORIZATION OF APPROPRIATIONS FOR ENERGY ACT OF 2020

Sec. 41001. Energy storage demonstration projects.

Authorizes \$355 million for energy storage demonstration projects authorized by the Energy Act of 2020 for the period of fiscal years 2022 through 2025. An additional \$150 million is authorized for the Long-Duration Demonstration Initiative and Joint Program for the period of fiscal years 2022 through 2025.

Sec. 41002. Advanced reactor demonstration program.

Authorizes \$511 million for fiscal year 2022 for the advanced nuclear reactor demonstration program authorized by the Energy Act of 2020.

- Future funding includes:
 - \$506 million for fiscal year 2023;
 - \$636 million for fiscal year 2024;
 - \$824 million for fiscal year 2025;
 - \$453 million for fiscal year 2026; and
 - \$281 million for fiscal year 2027.

Sec. 41003. Mineral security projects.

Authorizes \$8.67 million for fiscal year 2022 and \$5 million for each of fiscal years 2023 through 2025 for the National Geological and Geophysical Data Preservation Program.

For rare earth mineral security activities authorized by the Energy Act of 2020, authorizes \$23 million for fiscal year 2022.

- Future funding includes:
 - \$24.2 million for fiscal year 2023;
 - \$25.4 million for fiscal year 2024;
 - \$26.6 million for fiscal year 2025; and
 - \$27.8 million for fiscal year 2026.

For critical material innovation, efficiency and alternatives activities authorized by the Energy Act of 2020, authorizes \$230 million for fiscal year 2022.

- Future funding includes:
 - \$100 million for fiscal year 2023; and
 - \$135 million for each of fiscal years 2024 and 2025.

For the critical material supply chain research facility authorized by the Energy Act of 2020, provides \$40 million for fiscal year 2022 and \$35 million for fiscal year 2023.

Sec. 41004. Carbon capture demonstration and pilot programs.

Provides \$387 million for large-scale carbon capture pilot projects for fiscal year 2022.

- Future funding includes:
 - \$200 million for fiscal year 2023;
 - \$200 million for fiscal year 2024; and
 - \$150 million for fiscal year 2025.

For carbon capture demonstration projects, provides \$937 million for fiscal year 2022.

- Future funding includes:
 - \$500 million for each of fiscal years 2023 and 2024; and
 - \$600 million for fiscal year 2025.

Sec. 41005. Direct air capture technologies prize competitions.

Authorizes \$115 million for the Direct Air Capture Technologies Prize Competition authorized by the Energy Act of 2020.

Sec. 41006. Water power projects.

For hydropower research, development and demonstration programs authorized by the Energy Act of 2020, authorizes \$36 million for the period of fiscal years 2022 through 2025.

For National Marine Energy Centers authorized by the Energy Act of 2020, authorizes \$40 million for the period of fiscal years 2022 through 2025.

Sec. 41007. Renewable energy projects.

Provides \$84 million for enhanced geothermal systems demonstration projects; \$100 million for wind energy demonstration projects; and \$80 million for solar energy demonstration projects authorized by the Energy Act of 2020 for the period of fiscal years 2022 through 2025.

Sec. 41008. Industrial emissions demonstration projects.

For industrial emissions reduction demonstration projects authorized by the Energy Independence and Security Act of 2007, this section authorizes:

- \$100 million for each of fiscal years 2022 and 2023; and
- \$150 million for each of fiscal years 2024 and 2025.

TITLE XI – WAGE RATE REQUIREMENTS

Sec. 41101. Wage rate requirements.

Requires the wages for projects funded under this act to comply with David-Bacon prevailing wage requirements.

TITLE XII – MISCELLANEOUS

Sec. 41201. Office of Clean Energy Demonstrations.

Establishes an Office of Clean Energy Demonstrations within the Department of Energy to provide project management and oversight of clean energy demonstration projects authorized by this division or the Energy Act of 2020.

Sec. 41202. Extension of Secure Rural Schools and Community Self-Determination Act of 2000.

Extends the Secure Rural Schools program, which provides funding for schools, roads and other municipal services in rural counties with national forest land, through 2023 at fiscal year 2017 funding levels.

DIVISION E – DRINKING WATER AND WASTEWATER INFRASTRUCTURE

TITLE I – DRINKING WATER

Sec. 50101. Technical assistance and grants for emergencies affecting public water systems.

Directs the administrator of the Environmental Protection Agency (EPA) to evaluate the compliance of community water systems and wastewater systems with environmental, health and safety requirements, including water quality sampling, testing and reporting requirements. Requires the administrator to submit a report to Congress with the findings of this evaluation and to determine whether, in aggregate, community water systems and wastewater systems maintain asset management plans. Authorizes the EPA to provide technical assistance and grants to states and publicly owned water systems to assist in responding to emergency situations resulting from cybersecurity events and from contaminants in drinking water such as lead. Appropriates \$35 million for each of fiscal years 2022 through 2026 for technical assistance and grants for emergencies affecting public water systems. Authorizes \$15 million for technical assistance for small public water systems for each of fiscal years 2022 through 2026, and allows the EPA to provide this technical assistance to state-based nonprofits governed by community water systems.

Sec. 50102. Drinking water state revolving loan funds.

Authorizes \$2.4 billion for the Drinking Water State Revolving Loan Fund program in fiscal year 2022.

- Future funding includes:
 - \$2.75 billion for fiscal year 2023;
 - \$3 billion for fiscal year 2024; and
 - \$3.25 billion for each of fiscal years 2025 and 2026.

Allows states to provide grants, negative interest loans, other loan forgiveness or restructuring or refinancing of debt for disadvantaged communities using program funds. The minimum percentage of additional subsidy that must go to disadvantaged communities is increased from 6% to 12%.The American Iron and Steel requirement for the Drinking Water State Revolving Fund is made permanent.

This section also reauthorizes a provision in the Safe Drinking Water Act that allows for up to 2% of the Drinking Water State Revolving Fund to be used by a nonprofit organization to provide technical assistance for small public water systems in order to achieve compliance.

Sec. 50103. Source water petition program.

This section reauthorizes the Source Water Petition Program through 2026 at the current funding level of \$5 million annually. Counties designated by a state to act on behalf of an unincorporated area to submit source water quality protection petitions are authorized to request that a state assist with the development of a local partnership to reduce drinking water contaminants and protect the source water of community water systems.

Sec. 50104. Assistance for small and disadvantaged communities.

The Assistance for Small and Disadvantaged Communities Program is reauthorized through 2026. Expands the lists of eligible projects and activities that may receive funds under the Safe Drinking Water Act for assistance for small and disadvantaged communities to include:

- The purchase of independently certified point-of-entry or point-of-use filters for the removal of contaminants;
- Investments needed to provide accurate information on (i) the need for filtration and filter safety and (ii) options for replacing lead service lines; and
- Contracts with nonprofit organizations with water system expertise to assist underserved communities.

The non-federal cost share for eligible entities receiving assistance under this program is reduced from 45% to 10%, though the EPA administrator may waive the cost share requirement if an entity is unable to pay or would experience significant hardship if required to pay. To carry out this program, the bill authorizes \$70 million for fiscal year 2022. Future funding includes:

- \$80 million for fiscal year 2023;
- \$100 million for fiscal year 2024;
- \$120 million for fiscal year 2025; and
- \$140 million for fiscal year 2026.

For the Drinking Water System Infrastructure Resilience and Sustainability grant program established by the Safe Drinking Water Act, this section authorizes \$25 million annually between fiscal years 2022 and 2026. This program provides grants to small and disadvantaged communities to increase the resilience of drinking water infrastructure to natural hazards. The federal cost share for projects funded through this program shall be 90%, though the cost share may be increased to 100% if an entity is unable to pay or would experience significant hardship if required to pay.

Establishes a competitive grant program for public water systems and nonprofit entities to connect households with a combined income of 50% or less of the median nonmetropolitan household income in the state to public water systems. Authorizes \$20 million for this program for each of fiscal years 2022 through 2026.

A pilot competitive grant program is established for states to provide funding to underserved communities for drinking water infrastructure. The EPA administrator is directed to give priority to states with a high proportion of communities that lack household drinking water or wastewater services or are served by a public water system that violates federal drinking water standards. Provides \$50 million for this program for each of fiscal years 2022 through 2026.

Sec. 50105. Reducing lead in drinking water.

Modifies eligibility for the Safe Drinking Water Act lead reduction grant program to limit the eligibility of nonprofit organizations to those with experience in lead reduction. Expands project eligibility for grant funds to non-publicly owned lead service lines. Prioritizes lead service line replacement projects that serve disadvantaged communities and low-income homeowners and renters. Grant recipients shall offer to replace the privately owned portion of the lead service line for low-income homeowners at no cost to the homeowner, and may offer to do the same for other homeowners. Entities receiving grant funds must demonstrate that they have considered feasible alternatives for reducing the concentration of lead in drinking water, such as corrosion control, and notify the state of any planned replacement of lead service lines. Authorizes \$100 million for this program in each of fiscal years 2022 through 2026.

Establishes a lead inventorying utilization grant pilot program for lead reduction projects in municipalities in which at least 30% of service lines are known or suspected to contain lead. Provides \$10 million for the program.

Sec. 50106. Operational sustainability of small public water systems.

Creates a grant program to improve the operational sustainability of small public water systems that serve fewer than 10,000 people. Eligible entities include states, local governments, public corporations established by a unit of local government to provide water service; nonprofit corporations, public trusts, or cooperative associations that own or operate public water systems; tribes that own or operate public water systems; nonprofit organizations that provide technical assistance to public water systems; or tribal consortia. Grant funds may be used for projects that improve the operational sustainability of small systems through:

- Development of a detailed asset inventory, which can include drinking water sources, wells, storage, valves, treatment systems, distribution lines, hydrants, pumps, controls and other essential infrastructure;
- Development of an infrastructure asset map;
- Deployment of leak detection technology;
- Deployment of metering technology;
- Training in asset management strategies, techniques and technologies for staff;
- Deployment of strategies, techniques and technologies to enhance the operational sustainability and effective use of water resources through water reuse; and
- Development or deployment of other strategies, techniques or technologies that the EPA administrator determines to be appropriate.

The federal cost share of projects carried out using grant funds is 90%, though the EPA administrator has the discretion to increase the federal cost share of a project to 100%. Authorizes \$50 million for the program for each of fiscal years 2022 through 2026.

Sec. 50107. Midsize and large drinking water system infrastructure resilience and sustainability program.

Establishes a grant program for public water systems serving communities with a population of 10,000 or more for the purposes of (i) increasing resilience to natural hazards and extreme weather events; and (ii) reducing cybersecurity vulnerabilities. Funds may be used for:

- Conservation of water or the enhancement of water-use efficiency;
- Modification or relocation of existing drinking water infrastructure made, or that is at risk of being, significantly impaired by natural hazards or extreme weather events, including risks to drinking water from flooding;
- Design or construction of new or modified desalination facilities to serve existing communities;
- Enhancement of water supply through the use of watershed management and source water protection;
- Enhancement of energy efficiency or the use and generation of renewable energy in the conveyance or treatment of drinking water;
- Development and implementation of measures to (A) increase the resilience of the entity to natural hazards and extreme weather events; or (B) to reduce cybersecurity vulnerabilities;
- Conservation of water or the enhancement of a water supply through the implementation of water reuse measures; or
- Formation of regional water partnerships to collaboratively address documented water shortages.

Authorizes \$50 million for each of fiscal years 2022 through 2026. Sets aside 50% of funds for entities serving communities of between 10,000 and 100,000 people.

Sec. 50108. Needs assessment for nationwide rural and urban low-income community water assistance.

Directs the EPA administrator to conduct a nationwide assessment of municipalities, public entities and tribal governments serviced by water service providers that serve a disproportionate percentage of households in need or have taken on unsustainable debt due to customer nonpayment for services.

Sec. 50109. Rural and low-income water assistance pilot program.

Establishes a pilot program to award grants to entities to assist households with needs in maintaining access to drinking water and wastewater treatment. Eligible recipients include municipalities, tribal governments or other entities that (A) own or operate community water systems, treatment works or municipal separate storm sewer systems; or (B) have taken on an unsustainable level of debt due to customer nonpayment for services. Requires the EPA administrator to utilize data from the needs assessment in Section 50108 to inform the program. Assistance provided through the program may include direct financial assistance; a lifeline rate; bill discounting; special hardship provisions; a percentage-of-income payment plan; or debt relief for the eligible entity or water system owned by the entity. Forty grants shall be awarded through the program with not more than eight awarded for rural water service providers; eight for large water

service providers serving less than or equal to 500,000 people; eight for large water service providers serving greater than 500,000 people; and eight for community water systems, treatment works or municipal separate storm sewer systems that serve disadvantaged communities.

Sec. 50110. Lead contamination in school drinking water.

Changes the Voluntary School and Child Care Program Lead Testing Grant Program to the Voluntary School and Child Care Program Lead Testing and Reduction Grant Program. Expands eligibility for the program to include tribal consortia, public water systems and qualified nonprofits that will assist tribal education agencies in voluntary lead testing and remediation at schools and child care programs under their jurisdiction; and public water systems located in a state that does not participate in the voluntary grant program that also assists schools or child care programs with lead testing and remediation. The program is provided \$30 million for fiscal year 2022.

- Future funding includes:
 - \$35 million for fiscal year 2023;
 - \$40 million for fiscal year 2024;
 - \$45 million for fiscal year 2025; and
 - \$50 million for fiscal year 2026.

Sec. 50112. Advanced Drinking Water Technologies.

Directs the EPA administrator to carry out a study to examine the state of existing and potential future technology, including technology that: addresses cybersecurity vulnerabilities; enhances treatment monitoring; or enhances the treatment, monitoring, affordability, efficiency and safety of drinking water provided by a public water system.

Establishes a competitive grant program to identify and deploy advanced drinking water technologies that address cybersecurity threats or enhances the treatment, monitoring, affordability, efficiency and safety of drinking water provided by public water systems. Eligible entities include public water systems that serve populations of less than or equal to 100,000 people or communities with inadequate drinking water systems. The federal cost share for projects funded by the program is 90%, though the EPA administrator may waive the non-federal cost share if an entity is unable to pay or would experience significant hardship if required to pay. Provides \$10 million for the program for each of fiscal years 2022 through 2026.

Sec. 50113. Cybersecurity support for public water systems.

Directs the EPA administrator to develop a prioritization framework to identify public water systems that, if degraded or rendered inoperable, result in significant health and safety impacts. Requires the creation of a Technical Cybersecurity Support Plan for public water systems to identify which water systems should be prioritized and establish timelines for voluntary technical support.

Sec. 50114. State response to contaminants.

Amends the State Response to Contaminants program established by the Safe Drinking Water Act to expand the provision just covering underserved communities to include small or disadvantaged communities.

Sec. 50115. Annual study on boil water advisories.

Directs the EPA administrator to submit an annual report on the prevalence of boil water advisories issued in the United States.

TITLE II – CLEAN WATER

Sec. 50201. Research, investigations, training and information.

Authorizes \$75 million for each of fiscal years 2022 through 2026 for: (i) providing grants to state water pollution control agencies to conduct and promote the coordination and acceleration of, research, investigations, experiments, training, demonstrations, surveys and studies relating to the causes, effects, extent, prevention, reduction and elimination of pollution; (ii) providing grants to nonprofits to provide technical assistance for rural, small and tribal municipalities and treatment works; and (iii) treatment works pilot training programs, employment needs forecasting training projects and grants, research fellowships; and technical training. Of this amount, \$50 million per fiscal year is set aside for item (ii).

Sec. 50202. Wastewater efficiency grant pilot program.

Establishes a wastewater efficiency grant pilot program for publicly owned treatment works for projects that create or improve waste-to-energy systems. Funds may be used for:

- Sludge collection;
- Installation of anaerobic digesters;
- Methane capture;
- Facility upgrades and retrofits necessary to create or improve waste-to-energy systems; and
- Other new and emerging, but proven, technologies that transform waste to energy.

Grant amounts shall be no more than \$4 million per recipient. Provides \$20 million for each of fiscal years 2022 through 2026 for the program.

Sec. 50203. Pilot program for alternative water source projects.

Expands the definition of “alternative water source projects” to include projects that treat stormwater and that treat wastewater or stormwater for groundwater recharge, potable reuse or other purposes. The alternative water source projects pilot program is amended to clarify that projects that have received construction funds under the reclamation and reuse program conducted under the Reclamation Projects Authorization and Adjustment Act of 1992 are not eligible for assistance through this program. Provides \$25 million for each of fiscal years 2022 through 2026 for the program.

Sec. 50204. Sewer overflow and stormwater reuse municipal grants.

Expands the types of projects eligible for sewer overflow and stormwater reuse municipal grants to include notification systems to inform the public of combined sewer or sanitary overflows that result in sewage being released into rivers and other waters. Directs the EPA administrator to work with states to ensure the nonfederal share requirements are not passed on to rural and financially distressed communities, and requires that 25% of grant funds be used for projects in these communities. Authorizes \$280 million for the program for each of fiscal years 2022 through 2026.

Sec. 50205. Clean water infrastructure resiliency and sustainability program.

Establishes a grant program for municipalities and intermunicipal, interstate and state agencies for the purposes of increasing the resiliency of publicly owned treatment works to natural hazards or cybersecurity vulnerabilities. Funds may be used for projects that increase resilience through:

- Water conservation;
- Enhancement of water use efficiency;
- Enhancement of wastewater or stormwater management by increasing watershed preservation and protection;
- Modification or relocation of existing publicly owned treatment works, conveyance or discharge system components at risk of being significantly impaired or damaged by a natural hazard;
- Development and implementation of projects to increase the resilience of publicly owned treatment works to natural hazards or cybersecurity vulnerabilities; and
- Enhancement of energy efficiency or the use and generation of recovered or renewable energy in the management, treatment or conveyance of wastewater or stormwater.

The federal cost share for projects shall not exceed 75%, though the cost share may be increased to 90% for projects that serve communities of fewer than 10,000 people or meet state affordability criteria under the Federal Water Pollution Control Act. The EPA has the discretion to cover 100% of costs for these projects. Authorizes \$25 million for each of fiscal years 2022 through 2026 for the program.

Sec. 50206. Small and medium publicly owned treatment works circuit rider program.

Establishes a circuit rider grant program for qualified nonprofits to provide assistance to small and medium publicly owned treatment works. Priority is given to recipients that would serve a community that has a history of unresolved wastewater or stormwater issues, is financially distressed, faces stormwater and wastewater overflow issues, or has previously failed to access federal technical assistance due to cost-sharing requirements. Authorizes \$10 million for each of fiscal years 2022 through 2026 for the program.

Sec. 50207. Small publicly owned treatment works efficiency grant program.

Creates a grant program to improve energy or water efficiency of small publicly owned treatment works. Grants may be awarded to (i) an owner or operator of a small publicly owned treatment works that serves a population of not more than 10,000 people or a disadvantaged community or (ii) a nonprofit organization that seeks to assist a small publicly owned treatment works. Sets aside 15% of program funds for treatment works that serve fewer than 3,300 people.

Sec. 50209. Connection to publicly owned treatment works.

Establishes a grant program to assist low-income households to connect to publicly owned treatment works. The EPA is authorized to provide grants to publicly owned treatment works or nonprofit organizations to cover the costs of connecting a household to a municipal or private wastewater system. Provides \$40 million for each of fiscal years 2022 through 2026 for the

program. Sets aside 15% of program funds for treatment works that serve fewer than 3,300 people.

Sec. 50210. Clean water state revolving funds.

Authorizes states to provide grants and other loan forgiveness or debt restructuring to municipalities or intermunicipal, interstate or state agencies using water pollution control revolving loan funds. Additional subsidization provided by states may not exceed 30% of the revolving loan capitalization grant and may not be less than 10% of the total received, to the extent there are sufficient applications for assistance. States may use an additional 2% of funds annually allotted to provide technical assistance to rural, small and tribal publicly owned treatment works. To carry out this section, \$2.4 billion would be provided for fiscal year 2022.

- Future funding includes:
 - \$2.75 billion for fiscal year 2023;
 - \$3 billion for fiscal year 2024; and
 - \$3.25 billion for each of fiscal years 2025 and 2026.

Sec. 50211. Water infrastructure and workforce investment.

Expands the scope of the Innovative Water Infrastructure Workforce Development Program to include:

- Expanding the use and availability of activities and resources that relate to the recruitment, including through the promotion of diversity within that recruitment, of individuals to careers in the water and wastewater utility sector;
- Expanding the availability of training opportunities for individuals entering into and seeking career advancement within the water and wastewater utility sector; and
- Expanding the use and availability of activities and strategies, including the development of innovative activities and strategies that relate to the maintenance and retention of a sustainable workforce.

Eligibility for these grants is also expanded to include public works departments and agencies. The EPA administrator is directed to establish a federal interagency work group to address recruitment, training and retention challenges in the water and wastewater utility workforce, which shall submit a report to Congress outlining potential solutions within one year. Provides \$5 million annually between fiscal years 2022 and 2026 to carry out this section.

Sec. 50213. Water data-sharing pilot program.

Creates a pilot grant program for the establishment of information-sharing systems for water quality, water infrastructure needs and water technology (including cybersecurity technology) between states and local governments. Eligible entities include states, counties, other units of local government or regional consortia with coastal watersheds or water systems with significant pollution levels or significant individual water infrastructure deficits. Provides \$15 million annually between fiscal years 2022 and 2026 to carry out this section.

Sec. 50214. Final rating opinion letters.

Amends the Water Infrastructure Financing and Innovation Act (WIFIA) of 2014 to require project applicants to provide a final rating opinion letter from only one rating agency instead of from two rating agencies.

Sec. 50215. Water infrastructure financing reauthorization.

Reauthorizes the WIFIA program through fiscal year 2026 at \$50 million per year. Requires the EPA administrator to develop and implement an outreach plan to promote financial assistance under the program to small and rural communities.

Sec. 50216. Small and disadvantaged community analysis.

Directs the EPA administrator to submit a report to Congress that analyzes the State Water Pollution Control Revolving Fund and the Drinking Water State Revolving Fund programs to identify historical distributions of funds to small and disadvantaged communities and new opportunities to improve distribution to low-income, rural and minority and Indigenous communities.

Sec. 50217. Stormwater infrastructure technology.

Establishes a grant program for the creation of between three and five stormwater control infrastructure technologies centers of excellence. These centers will conduct research on new and emerging technologies relevant to the geographical location in which the center is located and provide technical assistance to federal, state and tribal governments for projects utilizing these technologies. One of these centers will be designated as a national clearinghouse that maintains a public database of information on these technologies. Provides \$5 million for this program in each of fiscal years 2022 through 2026.

Creates a competitive grant program for eligible entities to carry out stormwater control infrastructure projects that utilize new and emerging, but proven, stormwater control technologies. There are two kinds of grants established by the program: planning and development grants and implementation grants. Priority is given to applications submitted on behalf of communities with combined storm and sanitary sewers in their collection systems; small, rural or disadvantaged communities; or eligible entities that will use at least 15% of grant funds to provide service to a small, rural or disadvantaged community. The maximum amount of a single grant is \$200,000 for planning and development grants and \$2 million for implementation grants. The federal cost share for each project shall not exceed 80% of the total cost, though this may be waived for entities that demonstrate financial need. Authorizes \$10 million annually for the grant program between fiscal years 2022 and 2026.

Sec. 50218. Water reuse interagency working group.

Establishes an interagency working group to advance water reuse, with the EPA administrator serving as chair. The group must submit a report to Congress on its activities at least once every two years. The working group will be terminated six years after enactment unless the EPA provides an extension.

Sec. 50219. Advanced clean water technologies study.

Directs the EPA administrator to conduct a study on the state of existing and potential future clean water technologies. The results of this study must be submitted to the Senate Environment and Public Works Committee and the House Energy and Commerce Committee.

Sec. 50220. Clean watershed needs survey.

Requires the EPA to conduct an assessment of capital improvement needs for projects eligible for state water pollution control revolving funds assistance within two years of enactment and once every four years thereafter. Provides \$5 million for this assessment.

Sec. 50221. Water resources research act amendments.

Modifies the Water Resources Research Act grant program to require one nonfederal dollar for every one federal dollar awarded, instead of two non-federal dollars for every federal dollar awarded. Requires the Department of the Interior to submit a report to Congress annually regarding compliance with this provision. Directs the department to evaluate grant recipients once every five years to determine the effectiveness of the institute’s research and whether further support should be provided. Reauthorizes the program through fiscal year 2025 and reduces the annual appropriation for research focused on interstate water problems to \$3 million per year.

Sec. 50222. Enhanced aquifer use and recharge.

Establishes an enhanced aquifer use and recharge research grant program. Authorizes 50% of program funds to be used to provide one grant to a state, local or tribal government to carry out activities supporting this research, and the remaining program funds shall be provided to one research center. Authorizes \$5 million annually for the grant program between fiscal years 2022 and 2026.

DIVISION F - BROADBAND

TITLE II – TRIBAL CONNECTIVITY TECHNICAL AMENDMENTS

Sec. 60201. Tribal connectivity technical amendments.

Allows Tribal Broadband Connectivity Program grants to be used for remote learning, telework or telehealth resources beyond the COVID-19 pandemic. Extends the deadline for committing grant funds from 180 days to 18 months and the deadline to spend these funds from one year to four years after receiving the funds.

TITLE III – DIGITAL EQUITY ACT OF 2021

Sec. 60304. State digital equity program.

Sets aside 5% of the amounts provided for the newly created State Digital Equity Capacity Grant Program for grants or cooperative agreements for tribes. The aim of the program is to achieve digital equity (including the availability and affordability of broadband and digital literacy), support digital inclusion activities, and build capacity for efforts relating to the adoption of broadband. Provides \$240 million for fiscal year 2022 and \$300 million is provided for each of fiscal years 2023 through 2026.

60305. Digital equity capacity grant program.

Sets aside 5% of the amount provided for the newly created Digital Equity Competitive Grant Program for grants or cooperative agreements for tribes. The aim of the program is to support digital inclusion activities, facilitate access to and adoption of broadband, provide training programs that cover computer skills or other workforce development programs, and construct or expand public access computing centers. Provides \$250 million for the first five fiscal years of the program, and provides such sums as may be necessary for each year thereafter.

DIVISION G – OTHER AUTHORIZATIONS

TITLE I – INDIAN WATER RIGHTS SETTLEMENT COMPLETION FUND

Sec. 70101. Indian Water Rights Settlement Completion Fund.

Appropriates \$2.5 billion for the Indian Water Rights Settlement Completion Fund.

TITLE II – WILDFIRE MITIGATION

Sec. 70203. Establishment of commission.

Directs the secretaries of the Interior, Agriculture and Homeland Security to establish a commission to study and make recommendations to improve federal policies on the prevention, mitigation, suppression and management of wildland fires and the rehabilitation of land devastated by wildland fires.

Sec. 70204. Duties of commission.

Requires the commission established in the previous section to issue a report providing recommendations to prevent, mitigate, suppress and manage wildland fires, including detailed short- and long-term policy recommendations and recommendations for federal legislation.

Directs the commission to submit a report to Congress outlining a strategy to meet aerial firefighting equipment needs through 2030 in the most cost-effective manner.

Two-thirds of the commission must approve of any recommendations contained in each report.

Sec. 70205. Powers of commission.

Authorizes the commission to hold hearings; secure information directly from federal agencies that is needed to carry out this title; utilize the Postal Service in the same manner as other agencies; and accept, use and dispose of gifts or donations of services or property as the commission considers necessary to carry out this title.

Sec. 70206. Commission personnel matters.

Commission members shall serve without compensation, though members shall be allowed travel expenses. The chair of the commission may appoint and terminate an executive director and other personnel as may be necessary to enable the commission to carry out its duties, though an executive director shall be subject to confirmation by the commission.

Sec. 70207. Termination of commission.

The commission shall terminate 180 days after the submission of the reports required under section 70204.

TITLE III – REFORESTATION

Sec. 70302. Reforestation following wildfires and other unplanned events.

Removes the \$30 million funding cap on the Reforestation Trust Fund. Directs all wood product tariffs to refill the Restoration Trust Fund. Directs the Forest Service to develop a 10-year plan and cost estimate to address the backlog of replanting needs on national forest land by 2031.

Sec. 70303. Report.

Requires the Secretary of Agriculture to annually submit a report to Congress that includes:

- An evaluation of the degree to which the secretary has achieved compliance with this title, including the number of acres covered by reforestation projects that follow unplanned events;
- The total number of acres of land reforested under each authority of the secretary under which reforestation projects have been carried out;
- The number of acres of National Forest System land affected by, and the substance of reforestation needs on that land resulting from, unplanned events; and
- The number of acres in need of reforestation under the Forest and Rangeland Renewable Resources Planning Act.

TITLE IV - RECYCLING PRACTICES

Sec. 70401. Best practices for battery recycling and labeling guidelines.

Directs the EPA Administrator to develop best practices for the collection of batteries to be recycled that may be implemented by state, tribal, and local governments. Authorizes \$10 million for fiscal year 2022, to remain available until Sept. 20, 2026.

Establishes a program within EPA to promote battery recycling through the development of voluntary labeling guidelines for batteries and other forms of communication materials for battery producers and consumers about the reuse and recycling of critical materials from batteries. Authorizes \$15 million for fiscal year 2022, to remain available until Sept. 20, 2026.

70402. Consumer recycling education and outreach grant program; federal procurement.

Establishes a grant program within the EPA for improving the effectiveness of residential and community recycling programs through public education and outreach. Eligible recipients include state, local and tribal governments; nonprofit organizations; and public-private partnerships. As part of the program, the EPA is required to develop a model toolkit for outreach and education for use by grant recipients. Requires the revision of federal procurement policies related to products made with post-consumer recycled material once every five years. Authorizes \$75 million through fiscal year 2026 for the program.

TITLE VIII – FEDERAL PERMITTING IMPROVEMENT

Sec. 70801. Federal permitting improvement.

Amends the Federal Permitting Improvement Steering Council of the Fixing America’s Surface Transportation (FAST) Act performance schedules to have the most efficient possible processes, including alignment of federal reviews of projects, reduction of permitting and project delivery time and consideration of the best practices for public participation. Makes the permitting reforms established by the FAST Act permanent and extends them to projects sponsored by Indian tribes or located on tribal land. Sets a goal of permitting covered projects within two years. Amends the permitting process improvement section of the FAST Act by adding a confidentiality clause relative to Native American natural, cultural and historical resources. Amends the coordination of required reviews section of the FAST Act by requiring a single joint interagency impact statement for a project where an environmental impact statement is required. Amends the reports section of the FAST Act to include an executive director annual report, opportunity to include comments, quarterly agency performance report and an agency best practices report. Funding for governance, oversight and processing of environmental reviews and the permits section of the FAST Act is amended by adding opportunity for issuing regulations to establish a fee structure for sponsors of covered projects to reimburse the United States for costs incurred while conducting environmental reviews and authorizations for these projects. Allows funds to be transferred between federal agencies to facilitate timely environmental reviews and authorizations.

DIVISION H – REVENUE PROVISIONS

TITLE II – CHEMICAL SUPERFUND

Sec. 80201. Extension and modification of certain Superfund excise taxes.

Reinstates certain Superfund fees on chemicals with modifications beginning July 1, 2022, which will expire Dec. 31, 2031. Adjusts the determination of taxable substances from a baseline level of 50% to 20%. Increases the rate on taxable substances to 10% in cases where the importer does not furnish information to the Treasury secretary. Requires the secretary to publish a list of taxable substances by Jan. 1, 2022.

TITLE IV – BOND PROVISIONS

Sec. 80402. Carbon dioxide capture facilities.

Expands eligibility for private activity bond financing to include eligible components of industrial carbon dioxide facilities and direct air capture facilities. Eligible components include any equipment installed in an industrial carbon dioxide facility that is (i) used for the purpose of capture, treatment and purification, compression, transportation or on-site storage of carbon dioxide produced by the facility; or (ii) integral or functionally related and subordinate to a process that converts a solid or liquid product from coal, petroleum residue, biomass or other materials into a synthesis gas primarily of carbon dioxide and hydrogen for direct use or subsequent chemical or physical conversion. For industrial carbon dioxide facilities with a capture and storage percentage of less than 65%, the percentage of the cost of eligible components installed that may be financed with tax-exempt bonds may not be greater than the designed capture and storage percentage.

TITLE XI – CLEAN SCHOOL BUSES AND FERRIES

Sec. 71101. Clean school bus program.

Establishes a clean school bus grant program within the EPA to replace existing buses with clean and zero-emissions school buses. Eligible recipients include state and local governments, tribes, contractors and nonprofit school transportation associations. The program n is provided \$1 billion each year between fiscal years 2022 and 2026. Fifty percent of program funds are reserved for zero-emissions buses, and the remaining 50% is reserved for alternative fuel school buses and zero-emissions school buses. The EPA is authorized to provide funds to cover up to 100% of the costs for school bus replacement.

Sec. 71102. Electric or low-emitting ferry pilot program.

Directs the Secretary of Transportation to create a pilot grant program for the purchase of electric or low-emitting ferries. The term “low-emitting ferry” includes those powered by methanol, natural gas, liquefied petroleum gas, hydrogen, coal-derived liquid fuels and biofuels. Requires that at least one grant be awarded to the state with the largest Marine Highway System and a bi-ferry service with an aging fleet. Fifty million dollars is provided for each of fiscal years 2022 through 2026.

Sec. 71103. Ferry service for rural communities.

Creates a Basic Essential Ferry Service program within the Department of Transportation to provide ferry service to rural areas. Eligible places must serve at least two rural areas and have had scheduled ferry services from 2015 through 2020. Two hundred million dollars is provided per year for fiscal years 2022 through 2026.

Sec. 71104. Expanding the funding authority for renovating, constructing, and expanding certain facilities.

Expands the funding authority for renovating, constructing and expanding Urban Indian health facilities under the Indian Health Care Improvement Act by striking the word “minor” before “renovations” and by striking the requirement that the renovations must be used to meet or maintain the Joint Commission for Accreditation of Health Care Organizations standards.

DIVISION I – OTHER MATTERS

Sec. 90002. Strategic Petroleum Reserve Drawdown and Sale.

Authorizes the Secretary of Energy to sell 87.6 million barrels of crude oil from the Strategic Petroleum Reserve during the period of fiscal years 2028 through 2031.

DIVISION J - APPROPRIATIONS

TITLE II – COMMERCE, JUSTICE, SCIENCE, AND RELATED AGENCIES

National Telecommunications and Information Administration

Provides \$2 billion for the Tribal Broadband Connectivity Fund.

National Oceanic and Atmospheric Administration

Appropriates \$60 million for tribes from the amount appropriated to NOAA for restoring fish passage and providing technical assistance under the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act.

TITLE III – ENERGY AND WATER DEVELOPMENT AND RELATED AGENCIES

Power Marketing Administrations

Authorizes \$500 million for the Western Area Power Administration for the purchase of power and transmission services.

TITLE VI – DEPARTMENT OF THE INTERIOR, ENVIRONMENT, AND RELATED AGENCIES

Bureau of Indian Affairs

Appropriates \$216 million to the BIA for tribal climate resilience, adaptation and community relocation. Of this amount, \$130 million is reserved for community relocation and \$86 million is reserved for tribal climate resilience and adaptation projects.

Appropriates \$250 million to the BIA for the construction, repair, improvement and maintenance of irrigation and power systems, dam safety, water sanitation and other facilities. Of this amount, \$50 million shall be for addressing irrigation and power systems and \$200 million shall be for dam safety water sanitation and other facilities.

Departmentwide Programs (Interior)

Appropriates \$2 million for implementation of the Tribal Forestry Protection Act for each of fiscal years 2022 through 2026.

Environmental Protection Agency

Provides \$55.43 billion for State and Tribal Assistance Grants, including:

- \$11.71 billion for capitalization grants for the Clean Water State Revolving Funds, with 49% of funds made available for each state going toward assistance agreements to eligible recipients with 100% forgiveness of principal or grants;
- \$11.71 billion for capitalization grants for the Drinking Water State Revolving Funds, with 49% of funds made available for each state going toward assistance agreements to eligible recipients with 100% forgiveness of principal or grants;
- \$15 billion for capitalization grants for the Drinking Water State Revolving Funds for lead service line replacement projects and associated activities, with 49% of funds made available for each state going toward assistance agreements to eligible recipients with 100% forgiveness of principal or grants;
- \$1 billion for grants under the Clean Water State Revolving Funds for addressing emerging contaminants;
- \$4 billion for capitalization grants for the Drinking Water State Revolving Funds for addressing emerging contaminants in drinking water, with a focus on perfluoroalkyl and polyfluoroalkyl substances (PFAS);

- \$5 billion for grants to address emerging contaminants under the Safe Drinking Water Act;
- \$1.5 billion for brownfields activities;
- \$100 million for pollution prevention grants under the Pollution Prevention Act; and
- \$275 million shall be for a grant program authorized by the Save Our Seas 2.0 Act to support local post-consumer materials management, including municipal recycling.

Department of Health and Human Services

Indian Health Service

Appropriates \$3.5 billion to the Indian Health Service for sanitation facilities. Up to \$2.2 billion shall be for projects that exceed the economical unit cost.

Department of Transportation

Pipeline and Hazardous Materials Safety Administration

Provides \$1 billion for grants for the modernization of natural gas distribution pipelines, with \$200 million available for each of fiscal years 2022 through 2026. Grants shall be provided to municipalities or community-owned utilities (not including for-profit entities) to repair, rehabilitate or replace their natural gas distribution pipeline systems, or to acquire equipment that would reduce incidents and fatalities and avoid economic losses, with no more than 12.5% of program funds going to a single entity.

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