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MARK WALKER, CHAIRMAN



- 1. S. 3021 America's Water Infrastructure Act of 2018
- 2. H.R. 6227 National Quantum Initiative Act, as amended
- 3. <u>Concur in the Senate Amendment to H.R. 589 Department of Energy Research and Innovation Act</u>
- 4. <u>S. 97 Nuclear Energy Innovation Capabilities Act of 2017</u>

S. 3021 — America's Water Infrastructure Act of 2018 (Klobuchar, D-MN)

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FLOOR SCHEDULE:

Expected to be considered September 13, 2018, under suspension of the rules, which requires a 2/3 majority for passage.

TOPLINE SUMMARY:

<u>S. 3021</u> would authorize Army Corps of Engineers water projects as well as feasibility studies. The bill would deauthorize \$4 billion worth of previously authorized projects and make a number of other changes to Army Corps policies. The bill would also rescind the authorization for projects authorized by this bill after 10 years unless funds have been obligated.

The bill incorporates several energy bills that have previously passed the House. The bill would require the Secretary of Energy to draw down and sell 5 million barrels of crude oil from the Strategic Petroleum Reserve during fiscal year 2028.

The bill would also increase funding for drinking water infrastructure, make changes to stormwater and wastewater provisions, and reauthorize the Water Infrastructure Finance and Innovation Act (WIFIA).

COST:

The Congressional Budget Office <u>estimates</u> that implementing S. 3021 would reduce direct outlays by \$333 million, reduce revenues by \$103 million, and would reduce deficits by \$230 million over the FY 2018 – 2028 period. The outlay effects are mostly because the bill directs the Department of Energy to sell \$5 million oil barrels from the Strategic Petroleum Reserve in 2028, which would increase net offsetting receipts by \$340 million in that fiscal year. The reduction in revenues is due to an expected increase in issuance of tax-exempt bonds by state and local governments using the funds authorized to be appropriated for capitalization grants to State Revolving Funds.

CBO has *not* completed an estimate of the effect of S. 3021 on spending that would be subject to appropriation or an analysis of intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act.

The bill would deauthorize \$4 billion worth of previously authorized projects.

CONSERVATIVE VIEWPOINTS:

• Expand the Size and Scope of the Federal Government? The bill would increase authorizations for water resources projects and other programs, including, the Corps of Engineers Continuing Authorities Program, and several new and existing grants. The bill would also provide for the deauthorization of older projects that have not been funded.

Some conservatives may be concerned that the bill would renew a provision requiring American iron and steel to be used for all construction and repairs made to a public water system that uses funds from the state revolving loan funds program.

- **Encroach into State or Local Authority?** Some conservatives may believe that the types of projects authorized by the bill may be more appropriately funded by state and local governments or the private sector. The Committee on Transportation and Infrastructure has <u>made the case</u> for a federal role.
- Delegate Any Legislative Authority to the Executive Branch? No.
- Contain Earmarks/Limited Tax Benefits/Limited Tariff Benefits? No, the bill follows a process established by Congress to fund specific projects evaluated and reported by the Army Corps of Engineers.

DETAILED SUMMARY AND ANALYSIS:

Key:

Included in the House-passed legislation Some changes made to House-passed language New provisions

TITLE I - General Provisions

Sense of Congress: The bill would express the sense of Congress that a Water Resources Development Act (WRDA) bill should be considered during every Congress.

Study of the Future of the U.S. Army Corps of Engineers: The bill would require the secretary, with the National Academy of Sciences, to convene a committee of experts to carry out a study on the effects of moving the U.S. Army Corps of Engineers out of the Department of Defense. The study must consider national security effects, the ability of the Corps to assist operations of the U.S. Armed Services, and the emergency response obligations of the Corps. The results of the study must be submitted to Congress within two years. The secretary is prohibited from implementing the findings of the study unless expressly authorized by Congress

Study on Economic and Budgetary Analyses: The bill would require the secretary to enter into an agreement with the National Academy of Sciences to carry out a study on the principles and methodologies used by the Corps to formulate and budget for water resources development projects and to make recommendations to Congress on how to improve transparency, return on investment, and cost savings. The report on the study must be made available to the public and submitted to Congress.

Dissemination of Process Information: The bill would require the secretary to develop and implement education efforts to ensure non-federal interests and local elected officials are aware of the annual Report to Congress on Future Water Resources Development process.

Non-Federal Engagement and Review: The bill would require the secretary to issue guidance to implement each provision of this bill and issue a public notice prior to issuing implementation guidance for a covered water resources development law. The secretary would be required to take into account input and recommendations provided to the secretary prior to finalizing guidance, and submit this information to Congress.

Lake Okeechobee Regulation Schedule Review: The bill would require the Corps to expedite completion of the <u>Lake Okeechobee</u> regulation schedule to coincide with the completion of the <u>Hebert Hoover Dike</u> project. Furthermore, the Corps would be required to consider the <u>Comprehensive Everglades Restoration Plan</u>.

Access to Real Estate Data: The bill would require the secretary to make information related to all real property the Corps owns, operates, or manages, publically available.

Aquatic Invasive Species Research: The bill would require the secretary to research the management and eradication of aquatic invasive species, including Asian carp and zebra mussels, and submit a plan to address the impacts of aquatic invasive species to Congress.

Harmful Algal Bloom Technology Demonstration: The bill would require the secretary to implement a 5-year harmful algal bloom technology development demonstration under the <u>Aquatic Nuisance Research Program</u>.

Bubbly Creek, Chicago Ecosystem Restoration: The bill would require the secretary to enter into a memorandum of agreement with the EPA to facilitate ecosystem restoration at <u>Bubbly Creek</u>.

Dredge Pilot Program: The bill would authorize the secretary to carry out a pilot program to award 5-year contracts for the operation and maintenance of harbors and inland harbor if the secretary determines the contract provides costs savings compared to awarding contracts annually or on a project-by-project basis. This provision sunsets 10 years after enactment.

Hurricane and Storm Damage Protection Program: The bill would allow the authorize the secretary to carry out a pilot program to award contract to more than one authorized hurricane and storm drainage reduction project in a geographical region, if the contract provides cost savings compared to awarding contracts on a project-by-project basis. The bill authorizes \$75 million for this section and the authority for this provision expires 10 years after enactment

Operation and Maintenance of Existing Infrastructure: The bill would require the secretary to improve the reliability, operation, and maintenance of, existing Corps infrastructure, and improve cyber-threat resilience.

Assistance Relating to Water Supply: The bill would allow the secretary to provide assistance to municipalities adversely affected by Corps construction.

Property Acquisition: The bill would require the secretary to consider the minimum interest in real property that would be necessary to support the water resources development project prior to acquiring an interest in land or requiring a nonfederal interest to acquire an interest in land. The secretary is required to first consider a temporary easement to reduce the cost of the project and to minimize conflict with property owners.

Dredged Material Management Plans: The bill would require the secretary to expedite the dredged material management plan process.

Inclusion of a Project in Corps Workplan: The bill would require the secretary to include in the Corps workplan any authorized projects that the secretary has studied for disposition under an existing authority, and for which a final report has been completed.

Geomatic Data: The bill would require the secretary to develop guidance for the use of geomatic data obtained from a non-federal interest.

Local Government Reservoir Permit Review: The bill would require the secretary, for ten years after enactment, to expedite review of applications for certain permits, if the permit applicant is a local government that has jurisdiction over an area that is polluted by chemicals used at a former Department of Defense site that is undergoing environmental restoration. Permits must have been issued by the secretary to modify a reservoir owned or operated by the secretary, under which 80 percent of the water is used as drinking water for an area with a population under 80,000.

Transparency and Accountability in Cost Sharing: The bill would require each Corps district to maintain a balance sheet for all water resources development projects that require a nonfederal cost share, and provide to the nonfederal interest a copy of the balance sheet upon requires. The bill would require the secretary to transfer excess nonfederal funds to the nonfederal interest if the project is completed at less than the estimated cost.

Upper Missouri Mainstem Reservoir Water Withdrawal Intake Easement Review: The bill would require the secretary to expedite the review of applications for easements necessary to access federal land for the placement of water withdrawal intakes in the <u>Upper Missouri Mainstem Reservoirs</u>, that do not involve the modification of structures on federal land.

Certain Levee Improvements: The bill would authorize the secretary to provide technical assistance to a local government to assess the reasons a federal constructed levee that is owner or operated by the local government is not accredited by the Federal Emergency Management Agency.

Cost-Share Payment for Certain Projects: The bill would require the secretary to pay outstanding balances of the federal cost share to projects located in central New Mexico and carried out under section 593 of the <u>Water Resources Development Act of 1999</u>.

Locks on Allegheny River: The bill would allow the Corps to consider recreational boat traffic levels and related economic benefits when making funding determinations for the operating and maintenance of the <u>Allegheny River locks</u>.

Purpose and Need: The bill would require the district engineers to provide a purpose and need statement to the applicant of a water storage project that describes whether or not the district engineer agrees with the assessment of the purpose and need of the project.

Prior Project Authorization: The bill would require the secretary to ensure that projects that are budgeted under a different business line than was originally authorized, are carried out with requirements of the original budget line.

Mississippi River and Tributaries Project: The bill would require the secretary to expedite the reset and restoration of damaged levees after a flood event that requires the operation of floodway and backway features within the Mississippi River and Tributaries Project through natural overtopping or artificial crevassing of a federal levee in order to relieve pressure on other levees.

Beneficial Use of Dredged Materials: The bill would expand the pilot program currently codified under 33 U.S.C. 2326 note from 10 project to 20 projects.

Ice Jam Prevention and Mitigation: The bill would expand the pilot program currently codified under <u>33 U.S.C. 701s note</u> from 10 project to 20 projects and extend the authorization for the pilot program through 2022. The bill would require the secretary to select one project on an Indian reservation that serves more than one Indian tribe.

Rehabilitation of Corps Constructed Dams: The bill would increase the authorization for the rehabilitation of dams constructed by the Corps from \$10 million in each fiscal year through 2026, to \$40 million. The bill would also increase the amount that may be used for one project from \$10 million to \$40 million.

Columbia River: The bill would require the secretary to examine the extent to which Indian tribes were displaced as a result of the construction of the Bonneville Dam in Oregon. The examination may include an assessment related housing and related facilities. The secretary may use existing authorities to provide assistance to displaced Indians, if the secretary determines that assistance is required. The bill would require the secretary conduct a survey to determine the displacement of Indian tribes resulting from the construction of John Day Dam in Washington and Oregon, and, based on the study, the secretary may provide assistance to the tribes. The bill would also require the secretary complete a village development plan for any Indian village submerged as a result of the Dalles Dam in Washington and Oregon. The secretary is allowed to acquire land from willing landowners. The plan must include an estimated cost and schedule for the construction of a replacement village.

Missouri River Reservoir Sediment Management: The bill would require the secretary to prioritize sediment management plans that affect reservoirs that cross state lines in the <u>Upper Missouri River Basin Pilot Program</u>.

Lock Operations Pilot Program: The bill would reauthorize the lock operations pilot program authorized under 33 U.S.C. 2212 note, for an additional 5 years.

Credit or Reimbursement: The bill would allow the secretary to provide a credit to a nonfederal interest instead of a reimbursement for certain flood damage reduction projects, or coastal navigation projects, if requested by the nonfederal interest. The credit, or the reimbursement, may be applied to the share of the cost of the nonfederal interest in carrying out other flood damage reduction and coastal navigation projects or studies, at the nonfederal interest's request.

Non-federal Implementation Pilot Program: The bill would expand the pilot program codified under 33 U.S.C. 2201 note from 15 project to 20 projects and reauthorize the program through 2023.

Surplus Water Contracts and Water Storage Agreements: The bill would prohibit the secretary from assessing a water storage fee for any water storage in the Upper Missouri Mainstream Reservoirs.

Post-Disaster Watershed Assessments in U.S. Territories: The bill would require all post-disaster watershed assessment activities carried out in a territory to be conducted at full federal expense, unless the President determines the territory has the ability to pay for the cost share without the use of federal funds or loans.

Expedited Considerations: The bill would extend the expedited consideration of an interim authorization bill, as detailed under <u>128 Stat. 1374</u>, through December 31, 2024.

Project Studies Subject to Independent Review: The bill would extend the independent peer review provisions codified under <u>33 U.S.C. 2343</u> for an additional five years.

Chicago Sanitary and Ship Canal Dispersal Barriers Project: The bill would require the operation and maintenance of the Chicago Sanitary and Ship Canal Dispersal Barriers Project to be carried out at an 80 percent federal, 20 percent nonfederal, cost share.

Acknowledgement of Credit: The bill would allow the secretary to provide credit for work carried out between November 8, 2007, and the date of enactment by a non-federal interest for a project if the work is integral to the project and was carried out according to appropriate federal laws.

Levee Safety Initiative Reauthorization: The bill would reauthorize the <u>Levee Safety Initiative</u> through 2023.

Funding to Process Permits: The bill would remove the limitation of a provision under <u>33 U.S.C.</u> <u>2352</u>, which allows the secretary to accept and expend funds contributed by a non-federal public entity or a public-utility company, natural gas company, or railroad carrier to expedite permits related to a project for a public purpose under the Department of the Army's jurisdiction. The provision is currently set to expire in 2024. The GAO is required to complete a follow-up study related to the implementation of this provision by June 10, 2018. The bill would extend the completion timeline to December 31, 2022.

Reservoir Sediment: The bill would make permanent the pilot program established under 33 U.S.C. 2326c that requires the secretary to accept services provide by a nonfederal interest for the removal of sediment captured behind a federally operated dam. The bill would require a report be submitted to Congress within 3 years of enactment.

Beneficial Use of Sediment: The bill would allow the secretary to grant a temporary easement necessary to facilitate the placement of sediment, if the in the interest of the United State, in carrying out a project for the beneficial reuse of sediment to reduce storm damage to property under <u>33 U.S.C.</u> <u>2326</u>, that involves only a single application of sediment. The project is no longer eligible for future placement of sediment if the secretary grants a temporary easement.

Inclusion of Alternative Measures for Aquatic Ecosystem Restoration: The bill would require the secretary to consider and include a natural feature in carrying out projects to restore and protect and aquatic ecosystem or estuary.

Operation and Maintenance of Navigation and Hydroelectric Facilities: The bill would exclude navigation facilities that were under contract on or before the date of the enactment with a nonfederal interest to perform operations or maintenance under <u>33 U.S.C. 2321</u> from being considered inherently governmental functions, and not commercial activities. The secretary would be prohibited from contracting commercial facilities at a navigation facility after the date of enactment.

Water Resources Development Projects by Non-Federal Interests: The bill would amend the feasibility study of a proposed water resources development project authorized under 33 U.S.C. 2231. The bill would prohibit the secretary from delaying completion of the review of the feasibility study as a result of considering policy changes. The secretary would be allowed to expend funds to undertake reviews and activities that are the responsibility of the secretary in providing technical assistance. The secretary is requiring to ensure the use of funds accepted from non-federal interests do not affect impartial decision making.

The bill would not require certain projects constructed by non-federal interests to obtain federal permits that would not be required if the project was being carried out by the federal government, unless new information or circumstances that are relevant to environmental concerns have since the project recommendation.

Comprehensive Backlog Report: The bill would require the secretary to publish a list of major federal operation and maintenance needs of Army Corps of Engineers (Corps) projects and a list of studies that Congress has authorized but for which a report has not been issued. This list, along with a list of projects that have been authorized but not completed, must be submitted to Congress every two years.

The bill would require the President, with the Corps, to submit a budget to Congress that aligns the cost-benefit ratio with that used by the Corps and demonstrates the transparency used in selecting water resources development projects that are submitted as part of the budget request.

The bill would require the secretary to annually provide stakeholders information on the proposed budget, to hold multiple public meetings, and to provide nonfederal interests the opportunity to collaborate with district personnel.

Corps Continuing Authorities Program: The bill would increase the authorizations for: (1) the storm and hurricane restoration program from \$30 million to \$37.5 million; (2) the small river and harbor improvement program from \$50 million to \$62.5 million; (3) the shore damage prevention or mitigation program from \$10 million to \$12.5 million; (4) the regional sediment management program from \$50 million to \$62.5 million; (5) the small flood control projects program from \$55 million to \$68.75 million; (6) the aquatic ecosystem restoration program from \$50 million to \$62.5 million; (7) the project modifications for improvement of environment program from \$40 million to \$50 million; (8) the emergency streambank and shoreline protection program from \$20 million to \$25 million; and, (9) the tribal partnership program from \$10 million to \$12.5 million.

Hurricane and Storm Damage Reduction: Current law allows the secretary to conduct a study considering the feasibility of extending beach nourishment projects for an additional 15 years beyond the codified limit, which is 50 years after the construction begins. The bill would clarify that the additional 15 years begins on the date beach nourishment began.

Regional Coalitions and Higher Education: The bill would authorize the Corps to cooperate with a state, group of states, or regional coalition of government entities to prepare a comprehensive plan for the development, conservation, and utilization of water and related resources of drainage basins, watersheds, or ecosystems, and submit a report and recommendations to congress.

Emergency Response to Natural Disasters: Under current law, the Chief of Engineers may use the emergency fund to rebuild hurricane and storm damage risk reduction projects that have been damaged by natural disasters to the design level of protection. The bill would require these projects be built to either the pre-storm level, or design level, whichever provides the greater protection.

Cost and Benefit Feasibility Assessment: The bill would allow the Corps to carry out repair work related to natural disasters, under <u>33 U.S.C. 701n</u>, when the cost outweighs the benefits if the nonfederal sponsor agrees to pay a sufficient amount to make the remaining costs equal to the estimated value of benefits, and the secretary determines the repair could benefit another Corps project.

National Dam Safety Program: The bill would reauthorize the <u>National Dam Safety Program</u> through 2023.

Local Government Water Management Plans: The bill would allow the secretary to enter into a written agreement with a local government in the watershed that has adopted a local or regional water management plan, to allow the government to participate in the feasibility study to determine if there is an opportunity to include additional elements in the project.

Advanced Funds for Water Resources Development Studies and Projects: The bill would extend the provision outlined in <u>33 U.S.C. 701h-1</u> that allows the Corps to accept advanced funds from nonfederal interests. The provision is currently available to floor-control projects and the bill would extend this provision to all water resource development studied and projects.

Costs in Excess of Federal Participation Limit: Current law authorizes the Secretary of the Army to spend up to \$20 million for the construction, repair, restoration, and modification of emergency streambank and shoreline protection works to prevent damage to highways, bridge approaches, and public works, churches, hospitals, schools, and other nonprofit public services. No more than \$5 million may be used for any single locality in a fiscal year. The bill would clarify that the non-federal interest is responsible for costs above \$5 million.

Disposition Studies: The bill would require the secretary, in conducting dispositions studies under <u>33 U.S.C. 549a</u>, to consider modifications that would improve the quality of the environment, including the removal of part or all of a project. The study is authorized to pursue removal of a project or part of a project with federal and nonfederal entities, if there is no longer a federal interest.

Watercraft Inspection Stations: The bill would increase the authorization for the <u>program</u> to provide for watercraft inspection stations to assist with the prevention and eradication of noxious aquatic plant growths and aquatic invasive species from \$40 million to \$110 million, with \$30 million going to the Columbia River basin, \$30 million going to the Upper Missouri River Basin, and \$30 million going to the Upper Colorado and the South Platte and Arizona River Basins.

Coastal Erosion: The bill would require the secretary to complete operation and maintenance renourishment to mitigate coastal erosion from federal project structures in the upper northeast. The secretary would be required to identify no more than five projects in Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island and New York.

Prohibition of Surplus Water Fees, Lake Cumberland Watershed, Kentucky and Tennessee: The bill would prohibit the secretary from charging a fee for surplus water under contracts for surplus water stored in the Lake Cumberland Watershed, Kentucky and Tennessee, under 33 U.S.C. 708. This provision would expire two years after enactment.

Middle Rio Grande Peak Flow Restoration: The bill would require the secretary to restart the temporary deviation in the operation of Cochiti Lake and Jemez Canyon Dam to continue to evaluate its effects. This authority would expire five years after enactment.

Prohibition of Administrative fees in Implementing Rough River Lake Flowage Easement Encroachment Resolution Plan: The bill would prohibit the Secretary from imposing administrative fees on eligible property owners.

Preconstruction Engineering Design Demonstration Program: The bill would require the secretary to establish a demonstration program to allow an authorized project to begin preconstruction engineering and design if the secretary has determined the project is technically feasible, economically justified and environmentally acceptable.

TITLE II - Studies

Proposed Feasibility Studies: The bill would allow the Corps to conduct a feasibility study for each of the ten projects listed below, as <u>submitted</u> in the 2017 Report to Congress on Future Water Resources Development and the 2018 Report to Congress on Future Water Resources Development:

- 1. <u>Cave Buttes Dam in Phoenix, Arizona</u>: flood risk management
- 2. <u>San Diego River in San Diego, California</u>: flood risk management, navigation, and ecosystem restoration
- 3. <u>J. Bennett Johnston Waterway in Louisiana</u>: navigation
- 4. Northshore in St. Tammany Parish, Louisiana: flood risk management
- 5. <u>Ouachita-Black Rivers in Little River, Louisiana</u>: navigation
- 6. <u>Chautauqua Lake in Chautauqua, New York</u>: ecosystem restoration and flood risk management
- 7. <u>Trinity River and Tributaries in Liberty, Texas</u>: navigation
- 8. West Cell Levee in Irving, Texas: flood risk management
- 9. <u>Coastal Virginia in Coastal, Virginia</u>: flood risk management, ecosystem restoration, and navigation
- 10. Tangier Island in Tangier Island, Virginia: flood risk management and ecosystem restoration

Additional Studies:

Lower Mississippi River in Missouri, Kentucky, Tennessee, Arkansas, Mississippi, and Louisiana, (ecosystem restoration): The bill would authorize the Corps to carry out studies to determine the feasibility of habitat restoration for the eight reaches that have been identified as priorities in Lower Mississippi River Resource Assessment; Final Assessment in Response to Section 402 of WRDA 2002.

St. Louis Riverfront and Meramec River Basin in Missouri and Illinois (ecosystem restoration and flood risk management: The bill would also authorize the Corps to carry out studies to determine the feasibility of a project for ecosystem restoration and flood risk management in: (1) Madison, St. Clair, and Monroe Counties in Illinois; and, (2) St Louis, Jefferson, Franklin, Gasconade, Maries, Phelps, Crawford, Dent, Washington, Iron, St. Francois, St. Genevieve, Osage, Reynolds, and Texas Counties in Missouri.

Expedited Completion of Reports for Certain Projects: The bill would require the Corps to expedite the completion of the following feasibility studies, and may proceed to preconstruction planning, engineering and design of the project if the project is deemed justified:

- 1. <u>Selma, Alabama:</u> riverbank stabilization
- 2. Three Mile Creek, Alabama: ecosystem restoration
- 3. Nome, Alaska: navigation
- 4. <u>Seward, Alaska:</u> flood diversion
- 5. <u>Covote Valley Dam, California:</u> flood control and water conservation
- 6. Lower Cache Creek, California: flood risk management

- For this project, the bill would require the Corps to review and give priority to plans and designs requested by non-federal interests and incorporate them into the federal study, if they are consistent with federal standards.
- 7. Lower San Joaquin River, California: flood risk management
- 8. South San Francisco, California: flood risk management
- 9. <u>Tijuana River, California:</u> flood risk management and ecosystem restoration
- 10. Westminster-East Farden Drove, California: flood damage reduction
- 11. East Hartford, Connecticut: flood risk management
- 12. Hartford, Connecticut: risk management
- 13. <u>Delaware River Basin:</u> comprehensive flood mitigation study
- 14. Lake Apopka, Florida: ecosystem restoration
- 15. Kansas River Weir, Kansas: ecosystem restoration
- 16. Baptiste Collette Bayou, Louisiana: navigation and channel deepening
- 17. Houma Navigation Canal, Louisiana: navigation and channel deepening
- 18. Bayou Lafourche, Louisiana: navigation and channel deepening
- 19. St Tammany Parish, Louisiana: floor damage reduction and ecosystem restoration
- 20. Warren Glen Dam Removal, Musconetcong River, New Jersey: ecosystem restoration
- 21. Rahway River Basin, New Jersey: floor risk management
- 22. The Hudson-Raritan Estuary Comprehensive Restoration Project, New Jersey and New York
 - For this project, the secretary may recommend the secretary accept and expend National Park Service funds.
- 23. Abiquiu Dam, New Mexico: flood control and water supply
- 24. East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, Queens, New York: reformulation
- 25. New York-New Jersey Harbor and Tributaries Focus Area: navigation
- 26. Willamette River Basin, Oregon: water resource improvements
- 27. Pawcatuck River, Rhode Island: coastal storm risk management
- 28. Rhode Island historical structure flood hazard vulnerability assessment
- 29. Norfolk, Virginia: coastal storm risk management
- 30. Tacoma Harbor, Washington: navigation

The bill would require the secretary to expedite completion of a post-authorization change report for the San Luis Rev River Flood Control Protection Project, California.

The bill would require the secretary to expedite the updating of the master plan for the Juniata River and tributaries project, Pennsylvania.

Expedited Completion of Certain Projects: The bill would require the Corps to expedite the completion of the following projects:

- 1. West Haven, Connecticut
- 2. Providence River, Rhode Island
- 3. Morganza to the Gulf, Louisiana
- 4. Louisiana Coastal Area-Barataria Basin Barrier, Louisiana
- 5. West Shore Lake Pontchartrain, Louisiana
- 6. Southwest Coastal Louisiana, Louisiana

GAO Study on Benefit-Cost Analysis Reforms: The bill would require the GAO to conduct a study on the benefit-cost procedure of the secretary and the director of the Office of Management and Budget.

Harbor Maintenance Trust Fund Report: The bill would require the secretary to submit the harbor maintenance trust fund report required under <u>33 U.S.C. 2238</u> within 180 days.

Nonpowered Dams for Hydropower Development: The bill would require the secretary, within 18 months of enactment, to develop a list of Corps-operated dams that have the greatest potential for hydropower development. The list must be submitted to Congress, and made available to the public.

Study on Innovative Ports for Offshore Wind Development: The bill would require the secretary to carry out a study on all federally authorized ports and harbors to identify three ports and harbors suited to become innovative ports for offshore wind development.

Report on Innovative Materials: The bill would require the secretary to submit to Congress a report that describes the activities conducted by the Corps in relation to the use of innovative materials in water resources development projects.

Study and Report on Expediting Certain Waiver Processes: The bill would require the secretary to complete a report to Congress based on the best options available to implement the waiver process for the non-federal cost share codified under <u>Public Law 111-85</u>.

Corps Flood Policy within Urban Areas: The bill would require the secretary to submit a report to congress on flooding within urban areas and federal policy constraints on the secretary's ability to address urban flooding.

Feasibility Studies for Mitigation of Damage: The bill would require the secretary to submit a report to congress identifying the incomplete feasibility studies for certain projects for mitigation of damage to an area affected by weather.

Community Engagement: The bill would require the secretary to submit to congress a report on potential disproportionate and adverse health or environmental effects of programs, policies, and activities of the Corps related to water resources development projects on minority, low-income, rural and Indian communities.

Maintenance of High Risk Flood Control Projects: The bill would require the secretary to assess the anticipated effects of the secretary continuing to be responsible for the maintenance of the projects classified as class III under the Dam Safety Action Classification, for the which the secretary has assumed responsibility for maintenance as of enactment.

North Atlantic Division Report on Hurricane Barriers and Harbors of Refuge: The bill would require the secretary to submit a report to congress on the durability and resiliency of existing hurricane barriers and harbors of refuge in the North Atlantic Division.

Great Lakes Coastal Resiliency Study: The bill would require the secretary complete an assessment of the water resources needs of the Great Lakes System.

McMicken Dam, Arizona, and Muddy River, Massachusetts: The bill would require the secretary to submit a report to congress on the status of the McMicken Dam project and the Muddy River project.

Forecast-Informed Reservoir Operations: The bill would require the secretary to issue a report to congress on the results of the forecast-informed reservoir operation research study pilot program at

Coyote Valley Dam, Russian River basin, California, within one year of completion of the pilot program.

Cedar River, Iowa: The bill would require the secretary submit a report to congress with a summary of the path forward and timeline to implement the Cedar River, Iowa project for flood risk management.

Old River Control Structure, Louisiana: The bill would require the secretary submit a report to congress on the structure and operations plan for the old river control structure.

Upper Missouri River Protection: The bill would require the Corps to expedite the completion of a report for the <u>Upper St. Anthony Falls Lock and Dam</u> project that includes plans for modifying the Upper St. Anthony Falls Lock and Dam to preserve recreational opportunities and the ecosystem's health, to maintain the benefits to the natural ecosystem and human environment, and the preservation of any portion of the lock and dam to maintain flood control.

Missouri River: The bill would require the secretary to submit to Congress a report on the impacts of interception-rearing complex construction on navigation and flood control, as set forth in the <u>Missouri River Master Manual</u> and on the pallid sturgeon population recovery. The bill would prevent addition interception –rearing complex construction until the report is completed.

Lower Missouri River Bank Stabilization: The bill would require the secretary to submit a report to congress on the function and reliability of the Lower Missouri River bank stabilization and navigation project.

Coastal Texas Study: The bill would require the secretary to expedite the completion of studies for flood damage reduction, hurricane and storm damage reduction, and ecosystem restoration in the coastal areas of Texas.

Report on Water Supply Contract, Wright Patman Lake, Texas: The bill would require the secretary submit to congress a report on the implementation of the water supply contract at Wright Patman Lake.

Deauthorizations: The bill would require the secretary to develop an interim deauthorization list that identifies: (1) each water resources development project that was authorized before November 8, 2007, that has not begun construction, or no federal or non-federal funds have been obligated in the last six fiscal years; (2) each project identified and included on a list to Congress for reauthorization, as required under 33 U.S.C. 579a(b)(2); and, (3) any project for which the non-federal sponsor submits a request for inclusion. After a public comment period, the secretary is required to submit a revised list to the appropriate Congressional committees, and develop a final deauthorization list. The final list must have an estimated federal cost of completion of at least \$4 billion.

Backlog Prevention: The bill would rescind the authorization for the projects authorized by this bill after ten years unless funds have been obligated for construction or a post-authorization study, or the authorization has been modified by a subsequent Act of Congress. The bill requires the Corps to submit a report to Congress in 12 years that includes: (1) a list of water resources development projects for which construction has not been completed; (2) reasons why the projects were not completed; (3) a schedule for completion based on expected appropriation levels; and, (4) a five and ten-year projection on construction backlog and mitigation recommendations.

Project Modifications: The bill makes the following modifications, which are consistent with the Reports to Congress on Future Water Resources Development:

- 1. Harbor and South Bay, California: increased funding from \$35 million to \$70 million
- 2. <u>Lakes Marion and Moultrie, South Carolina</u>: increased funding from \$60 million to \$89.55 million

Lytle and Cajorn Creeks, California: The bill would deauthorize a portion of the Lytle and Cajon Creeks channel improvement project.

Yuba River Basin, California: The bill would modify the Yuba River Basin project for flood damage to allow a non-federal interest to construct a new levee to connect the existing levee with high ground. The non-federal cost of constructing the levee shall be 100 percent.

Bridgeport Harbor, Connecticut: The bill would deauthorize a portion of the Bridgeport Harbor project for navigation.

Comprehensive Everglades Restoration Plan, Central and Southern Florida, Everglades Agricultural Area, Florida: the bill would authorize the secretary to carry out the project for ecosystem restoration in central and southern Florida.

Kissimmee River Restoration: The bill would allow the Corps to credit certain work toward the non-federal share of the Kissimmee River <u>project</u>. According to the CBO report, the Corps has previously determined that certain in-kind contributions were ineligible as qualifying credit towards the local cost share. The credit for these contributions would total \$6 million, according to the CBO <u>report</u>.

Levee L-212, Four River Basin, Ocklawaha River, Florida: The bill would deauthorize the Four River Basins, Florida, project for flood control.

Additional Modifications and Deauthorizations: the bill would expedite, modify, deauthorize, or make other changes to projects in Penobscot River, Boston Harbor, Plymouth Harbor, Portsmouth Harbor and Piscataqua River, Missouri river and Tributaries, Hampton Harbor, Passaic River Federal Navigation Channel, Passaic Ricer Federal Navigation Channel, Faigo-Moorhead Metropolitan Area, Clatsop County, Svensen Island, West Tennessee Tributaries, Puget Sound, Milwaukee Harbor, Red River Basin and projects for flood risk management and storm damage risk reduction in southern states along the coast.

Conveyances: The bill would allow the secretary to convey 9.19 acres of real property to Cheatham County, Tennessee. The land is part of the Cheatham lock and Dam <u>project</u> The bill retains the U.S.'s right to inundate the land with water. Cheatham County is required to pay the fair market value for the land and the conveyance is subject to existing easements, rights-of-way and leases.

The bill would also allow the secretary to convey five acres of real property to the City of Nashville, Tennessee. The land is part of the <u>Riverfront Park Recreational Development</u>. Should the city cease to maintain improvements for recreation included in the conveyance or use the property for purposes other than recreation and flood risk management, the city is required to repay the federal cost share of construction recreation improvements. The city is required to pay all reasonable and necessary costs of conveyance.

Additional conveyances would be made in Kentucky River, Bainbridge, Georgia, Port of Whitman Country, Fort Dupont and Tuscaloosa.

Project Authorizations: The bill would authorize appropriations for 15 specific projects.

TITLE II - Drinking Water Improvement

Indian Reservation Drinking Water Program: The bill would require the Environmental Protection Agency to carry out an Indian reservation drinking water program to implement 10 projects in each the Upper Missouri River Basin and the Upper Rio Grande River Basin. The bill authorizes \$20 million for each of fiscal years 2019-2022.

Study on Intractable Water Systems: The bill would require the Secretary of Agriculture and the Secretary of Health and Human Services complete a study identifying intractable water systems and barriers to delivery of portable water to those served by an intractable water system.

Drinking Water Infrastructure Resilience and Sustainability: The bill would allow the EPA administrator to issue a grant to a state so the state may assist in activities related to a contaminant that is likely to enter a public water system, and could potentially endanger public health.

The EPA is authorized to establish and carry out a grant program for eligible entities to increase resilience to natural hazards. The bill authorizes \$4 million for fiscal year 2019 and 2020.

Voluntary School and Child Care Program Lead Testing Grant Program Enhancement: The bill would require the EPA to give priority to state and local agencies that will assist in voluntary testing for lead contamination in drinking water in schools. The bill would increase the authorization for fiscal year 2020 and 2021 to \$25 million from \$20 million.

Drinking Water Fountain Replacement for Schools: The bill would require the EPA to establish a grant program to provide assistance to local education agencies for the replacement of water fountains manufactured prior to 1988. The bill would authorize \$5 million for fiscal years 2019 through 2021.

Innovative Water Technology Grant Program: The bill would require the EPA to make grants to eligible entities to develop and deploy innovative water technologies, or provide technical assistance to deploy demonstrated innovative water technologies. The bill would authorize \$10 million for fiscal years 2019 and 2020.

Additional Considerations for Compliance: The bill would allow a state with primary enforcement responsibility to require the owner or operator of a public water system to assess options for consolidation or transfer of ownership of the system if the public water system has repeatedly violated national primary drinking water regulations and is unwilling or unable to take actions that will result in compliance with national primary drinking water regulations.

Improved Accuracy and Availability of Compliance Monitoring Data: The bill would require the EPA to provide to congress a strategic plan for improving the accuracy and availability of monitoring data collected to demonstrate compliance with national primary drinking water regulations.

Community Water System Risk and Resilience: The bill would require each community water system serving a population over 3,300 persons to conduct an assessment of the risks to, and the

resilience of, it system. Community water systems are also required to prepare an emergency response plan. The bill allows the EPA to use up to \$5 million from available funds to provide technical assistance to community water systems. The bill would allow the EPA to use up to \$10 million to provide grants for small systems. The bill authorized \$25 million in fiscal year 2020 and 2021.

Grants for Public Water Systems Supervision Programs: The bill would reauthorize and increase the authorization for grants that may be provided to states to carry our public water systems programs from \$100 million to \$125 million. The program previously expired in 2003.

State Revolving Loan Funds: Current law caps capitalization grants under <u>42 U.S.C. 300j-12</u> at 30 percent of the total amount of loan subsidies made by a state. The bill would increase this cap to 35 percent and require grants to be at least six percent of the total amount of loan subsidies made by a state. Loans would be fully amortized within 30 years of the project's completion, except in the case of a disadvantaged community, which may be extended up to 40 years, but not beyond the design life of the project.

Source Water Petition Programs: The bill would renew the authorization for source water petition programs, from fiscal year 2020 to 2021. The authorization was allowed to expire in 2003.

Review of Technologies: The bill would require the administrator to review existing and potential methods that ensure the physical integrity of community water systems, prevent contaminants in community water systems, allow for alternative drinking water supplies from nontraditional sources, and facilitate source water assessment and protection.

Report on Federal Cross-Cutting Requirements: The bill would require the GAO to submit a report to congress to identify demonstrations of compliance with at state or local environmental law that may be substantially equivalent to any demonstration required by the EPA for compliance with a federal cross-cutting requirement.

The bill would authorize \$100 million to the EPA to provide additional capitalization grants to eligible states under 42 U.S.C. 300j-12.

Monitoring for Unregulated Contaminants: The bill would require public water systems that serve between 3,000 and 10,000 persons to monitor for unregulated contaminants under 42 U.S.C. 300j-4. The bill would authorize \$15 million in fiscal years 2019 through 2021 to pay for testing and lab analysis. This authorization was previously allowed to expire in 2003.

American Iron and Steel: The bill would renew a provision requiring American iron and steel to be used for all construction and repairs made to a public water system that uses funds from the state revolving loan funds <u>program</u>.

Some conservatives may be concerned that this is a protectionist policy for iron and steel producers.

Capitalization Grants to States for State Drinking Water Treatment Revolving Loan Funds: The bill would renew the authorization to provide capitalization grants to states for state drinking water treatment revolving loan funds. The bill would authorize: (1) in fiscal year 2019, \$1.174 billion; (2) in fiscal year 2020, \$1.3 billion; (3) in fiscal year 2021, \$1.95 billion. This authorization was previously allowed to expire in 2003.

TITLE III - Energy

Title III incorporates several House-passed energy related bills.

Section 3001 would amend section 5 of the Federal Power Act (16 U.S.C. 798) by lengthening the duration of each preliminary permit to construct and operate a nonfederal hydropower project issued by FERC to four years instead of three, as in the discretion of the Commission may be necessary for making examinations and surveys, for preparing maps, plans, specifications, and estimates, and for making financial arrangements. The bill would also authorize FERC to extend the period of a preliminary permit once for not more than four additional years beyond the four years, if FERC finds that the permittee has carried out activities under such permit in good faith and with reasonable diligence; and if the FERC determines that there are extraordinary circumstances that warrant an additional extension. The bill would further amend section 13 of the Federal Power Act (16 U.S.C. 806) to extend periods for the commencement of construction once but not longer than eight additional years, instead of two years. Any obligation of a licensee or exemptee for the payment of annual charges for a project that has not commenced construction as of the bill's enactment would commence not earlier than the latest of the date by which the licensee or exemptee is required to commence construction; or the date of any extension of the deadline.

The section is similar to a provision in the <u>House-passed H.R. 3043</u>, the Hydropower Policy Modernization Act. The RSC's legislative bulletin for H.R. 3043 can be found <u>here</u>.

Section 3002 would reduce the regulatory review period for conduit hydropower facility projects that would like to qualify under 12 U.S.C. 823a, which exempts certain projects from needing a license. The bill would also allow for larger conduit project to be eligible for the exemption. Under 12 U.S.C. 823a, certain conduit hydropower facilities that are used predominantly for the distribution of water and not the generation of electricity are not required to be licensed by the Federal Energy Regulatory Commission (FERC). Projects that would like to qualify under this section must file with the FERC. If the FERC makes an initial determination that the facility does qualify and within 45 days and entity contests the determination, the FERC must issue a written determination of the facility's qualification. If no entity contests within 45 days, the facility is deemed to meet the criteria. The section would shorten the 45-day timeline in both instances to 30 days. In addition, the bill would allow facilities with installed capacities over 5 megawatts to qualify.

The section is similar to the House-passed <u>H.R. 2786</u>. The RSC's legislative bulletin for H.R. 2786 can be found <u>here</u>.

Section 3003 would amend part I of the Federal Power Act (16 U.S.C. 792 et seq.) by authorizing FERC to issue and amend licenses and preliminary permits, as appropriate, for any facility the Commission determines is a qualifying facility. FERC would be authorized to issue a rule establishing an expedited process for issuing and amending licenses and preliminary permits for qualifying facilities within 180 days. FERC would be required to convene an interagency task force, with appropriate Federal and State agencies and Indian tribes represented, to coordinate the regulatory processes associated with the authorizations required to construct and operate a qualifying facility. FERC would ensure that the expedited process will result in a final decision on an application for a license by not later than 2 years after receipt of a completed application for the license.

Before issuing any license for a qualifying facility, FERC would be required to assess the safety of existing non-Federal dams and other non-Federal structures related to the qualifying facility (including possible consequences associated with failure of such structures). In issuing any license

for a qualifying facility, FERC would ensure that the Commission's dam safety requirements apply to such qualifying facility, and the associated qualifying non-powered dam, over the term of such license.

FERC, with the Secretary of the Army, the Secretary of the Interior, and the Secretary of Agriculture, would be directed to jointly develop a list of existing non-powered Federal dams that the Commission and the Secretaries agree have the greatest potential for non-Federal hydropower development.

In developing the list, FERC and the Secretaries may consider: the compatibility of hydropower generation with existing purposes of the dam; the proximity of the dam to existing transmission resources; the existence of studies to characterize environmental, cultural, and historic resources relating to the dam; and the effects of hydropower development on release or flow operations of the dam.

The section is similar to the House-passed <u>H.R. 2872</u>, the Promoting Hydropower Development at Existing Nonpowered Dams Act. The RSC's legislative bulletin for H.R. 2872 can be found <u>here</u>.

Section 3004 would amend part I of the Federal Power Act (16 U.S.C. 792 et seq.) by authorizing FERC to issue and amend licenses and preliminary permits for closed-loop pumped storage projects. The bill would direct FERC to issue a rule establishing an expedited process for issuing and amending licenses and preliminary permits for closed-loop pumped storage projects. FERC would additionally be required to convene an interagency task force, with appropriate Federal and State agencies and Indian tribes represented, to coordinate the regulatory processes associated with the authorizations required to construct and operate closed-loop pumped storage projects.

FERC would be required to ensure that the expedited process will result in final decision on an application for a license by not later than two years after receipt of a completed application for such license. Before issuing any license for a closed-loop pumped storage project, FERC would be directed to assess the safety of existing dams and other structures related to the project (including possible consequences associated with failure of such structures). FERC would be authorized to grant an exemption from any other requirement of this part with respect to any part of the closed-loop pumped storage project (not including any dam or other impoundment), and would be required to consult with the United States Fish and Wildlife Service and the State agency exercising administration over the fish and wildlife resources of the State in which the closed-loop pumped storage project is or will be located.

FERC would be directed to establish fees which would be paid by an applicant for a license for a closed-loop pumped storage project that is required to meet terms and conditions set by fish and wildlife agencies. The fees would be adequate to reimburse the fish and wildlife agencies for any reasonable costs incurred in connection with any studies or other reviews carried out by agencies. The fees would be transferred to such agencies by the FERC, subject to annual appropriations acts, for use solely for purposes of carrying out such studies and shall remain available until expended.

FERC may add entities as joint permittees following the issuance of a preliminary permit; and transfer a license in part to one or more nonmunicipal entities as co-licensees with a municipality, if the municipality retains majority ownership of the project for which the license was issued in order to facilitate development of a closed-loop pumped storage project.

FERC would additionally be required to hold a workshop to explore potential opportunities for development of closed-loop pumped storage projects at abandoned mine sites, and issue guidance to

assist applicants for licenses or preliminary permits for closed-loop pumped storage projects at abandoned mine sites. FERC would be mandated to establish criteria that a pumped storage project shall meet in order to qualify as a closed-loop pumped storage project eligible for the expedited process.

The section is similar to the House-passed <u>H.R. 2880</u>, the Promoting Closed-Loop Pumped Storage Hydropower Act. The RSC's legislative bulletin for H.R. 2880 can be found <u>here</u>.

Section 3005 would require FERC to take into consideration in determining the term of a new license issued when an existing license under this part expires: project-related investments by the licensee under the new license; and project-related investments by the licensee over the term of the existing license. The FERC determination would give equal weight investments by the licensee to implement the new license under this part, including investments relating to redevelopment, new construction, new capacity, efficiency, modernization, rehabilitation or replacement of major equipment, safety improvements, or environmental, recreation, or other protection, mitigation, or enhancement measures required or authorized by the new license; and investments by the licensee over the term of the existing license (including any terms under annual licenses) that resulted in redevelopment, new construction, new capacity, efficiency, modernization, rehabilitation or replacement of major equipment, safety improvements, or environmental, recreation, or other protection, mitigation, or enhancement measures conducted over the term of the existing license. At the request of the licensee, FERC would make a determination as to whether any planned, ongoing, or completed investment meets specified criteria. Any determination would be issued within 60 days following receipt of the licensee's request.

Section 3006 would amend section 205 of the Federal Power Act (16 U.S.C. 824d) by mandating that if FERC permits the established 60-day period for a rate change to expire without issuing an order accepting or denying the change because FERC Commissioners are divided two against two as to the lawfulness of the change, as a result of vacancy, incapacity, or recusal on FERC, or if FERC lacks a quorum the failure to issue an order accepting or denying the change by FERC, the change shall be considered to be an order issued by FERC; and each Commissioner would add to the FERC record a written statement explaining the views of the Commissioner with respect to the change.

Section 3007 would authorize FERC to extend the time period at the request of the licensee for the project, and after reasonable notice, for up to three consecutive two-year periods during which the licensee is required to commence construction of a hydroelectric project at the J. Bennett Johnston Waterway in Louisiana. Under current law, a license is automatically revoked if the licensee does not begin construction within two years of issuance, or within a maximum of four years if FERC uses its authority to extend the deadline. The permit for the three hydroelectric projects that are part of the J. Bennett Johnston Waterway expired earlier in 2017.

The section is similar to the <u>House-passed H.R. 2457</u>, J. Bennett Johnston Waterway Hydropower Extension Act of 2017. The RSC's legislative bulletin for H.R. 2457 can be found <u>here</u>.

Section 3008 would require FERC to issue an order continuing the stay of the license of the statutory deadline by which construction must commence on the Mahoney Lake Hydroelectric Project located in Ketchikan Gateway Borough, Alaska (FERC project numbered 11393). FERC would be required to reinstate the construction license and make the effective date of the license the date on which the stay is lifted. FERC would be authorized to reinstate the construction license if it is expired. If FERC reinstates the license, the first extension shall take effect on the date of that expiration.

The section is similar to H.R.4317, Mahoney Lake Hydroelectric Project Licensing Act.

Section 3009 would require the Secretary of Energy to draw down and sell 5,000,000 barrels of crude oil from the Strategic Petroleum Reserve during fiscal year 2028. Amounts received from a sale would be deposited in the general fund of the Treasury during the fiscal year in which the sale occurs. The Secretary of Energy may not draw down and sell crude oil in quantities that would limit the authority to sell petroleum products. This policy is used as an offset for spending in the bill. The required sale is in addition to a mandated sale of 100 million barrels over the FY 2022 – 2027 period required by the Bipartisan Budget Act of 2018.

TITLE IV

Stormwater Infrastructure Funding Taskforce: The bill would require the EPA to establish a stormwater infrastructure taskforce to develop recommendations to approve the availability of funding for the construction and operation of stormwater infrastructure.

Wasterwater Technology Clearinghouse: The bill would require the EPA to update the information on the following programs to include information on cost-effective and alternative wastewater recycling and treatment technologies: programs for nonpoint source management and the permit program for the disposal of sewer sludge.

Technical Assistance for Treatment Works: The bill would authorize the secretary to make grants to nonprofit organizations to provide technical assistance to rural and tribal municipalities to assist with treatment works under 33 U.S.C. 1254. The bill would authorize the program at \$25 million for fiscal years 2019 through 2023.

Long Island Sound Programs: Under current law, <u>grants</u> can only make up to 50 percent of the research to help implement the Long Island Sound Comprehensive Conservation and Management Plan. The bill would increase this to 60 percent. The bill would also require a report on the program to be submitted to congress.

Columbia River Basin Restoration: The bill would authorize \$30 million for the Columbia River Basin restoration <u>program</u>.

Sewer Overflow Control Grants: The bill would authorize \$225 million for the sewer overflow control grant program.

Assistance for Individual Household Decentralized Wastewater Systems of Individuals with Low or Moderate Income: The bill would allow funds from the state water pollution control revolving fund to provide financial assistance for the repair or replacement of existing individual household decentralize wastewater treatment systems or the connection of certain households to publically owned treatment works.

WIFIA Reauthorization and Innovative Financing for State Loan Funds: The bill would reauthorize WIFIA at \$50 million for fiscal years 2020 and 2021 and increase the amount that can be used for administrative costs from \$2.2 million to \$5 million.

The bill would add an exception to the secured loans <u>program</u> that would allow a state infrastructure financing authority to finance 100 percent of a project if the state infrastructure financing authority assumes full responsibility in the event of a default.

The bill would prohibit a state infrastructure financing authority from assessing pass through fees.

The bill would authorize state infrastructure financial authorities programs at \$5 million in fiscal year 2020 and 2021, if at least \$50 million is appropriated to WIFIA.

Snake River Basin Flood Prevention Action Plan: The bill would require the Commissioner of Reclamation to develop a flood prevention action plan for each state within the Snake River Basin.

GAO Audit of Contracts and Tainter Gate Repairs of Harlan County Dam: The bill would require the GAO to audit certain contracts for repairs to the Tainter gates at Harlan County Damn.

Water Infrastructure and Workforce Investment: The bill would require the EPA to establish a competitive grant program to assist the development of activities relating to workforce development in the water utility sector. The bill authorizes \$1 million for this program in fiscal year 2019 and fiscal year 2020.

Regional Liaisons for Minority, Tribal and Low-Income Communities: The bill would require the EPA to assign one employee in each regional office to liaise with minority, tribal and low income communities.

WaterSense: The bill would establish a voluntary program, WaterSense, within the EPA to promote water-efficient products through voluntary labeling.

Predatory and Other Wild Animals: The bill would require the U.S. Fish and Wildlife Service to process permits for the taking of certain depredating eagles and migratory birds.

Klamath Project Water and Power: The bill would allow the secretary to administer programs to align water supplies and demand for irrigation water users associated with the Klamath Project. Expenditures may not exceed \$10 million on an average annual basis.

Certain Bureau of Reclamation Dikes: The bill would allow the federal share of the operations and maintenance costs of certain BOR dikes to be 100 percent.

Indian Rights Irrigation Fund Reauthorization: The bill would reauthorize the <u>Indian Irrigation</u> <u>Fund</u> through fiscal year 2028.

Indian Dam Safety Reauthorization: The bill would reauthorize the Indian dam safety <u>program</u> through fiscal year 2030, and the section's flood plain management program through fiscal year 2026.

Diana E. Murphey United States Courthouse: The bill would designate the U.S. courthouse located at 300 South Fourth Street in Minneapolis, Minnesota as the "Diana E. Murphey United States Court House".

COMMITTEE ACTION:

S. 3021 was introduced on June 7, 2018. Originally, the bill only included the redesignation of the 300 South Fourth Street in Minneapolis, Minnesota as the "Diana E. Murphey United States Court House". The bill passed the Senate by unanimous consent on September 4, 2018. The bill was received in the

House and referred to the House Committee on Transportation and Infrastructure. There has been no further action on the bill.

On June 6, 2018, the House passed its Water Resources Development Act bill, H.R. 8, by a vote of <u>408-2</u>. The RSC's legislative bulletin for H.R. 8 can be found <u>here</u>.

ADMINISTRATION POSITION:

A Statement of Administration Policy (SAP) is not available for this version of the bill. A SAP for the House-passed legislation can be found here.

CONSTITUTIONAL AUTHORITY:

A constitutional authority statement is not required for bills that originate in the Senate.

H.R. 6227 – National Quantum Initiative Act (Rep. Smith, R-TX)

CONTACT: Jennifer Weinhart, 202-226-0706

FLOOR SCHEDULE:

Scheduled for consideration on September 13, 2018, under a suspension of the rules which requires a 2/3 majority for final passage.

TOPLINE SUMMARY:

H.R. 6227 would create a National Quantum Coordinating Office at the White House Office of Science and Technology Policy (OSTP), in order to advance quantum research and development.

COST:

The Congressional Budget Office (CBO) <u>estimates</u> that "implementing H.R. 6227 would cost \$1.1 billion over the 2019-2023 period, assuming appropriation of the authorized and necessary amounts."

CONSERVATIVE CONCERNS:

Some conservatives may be concerned the bill would require a 10-year National Quantum Initiative Program. The bill would establish new offices, programs and councils would sunset on the date that is 11 years after enactment. The president would be permitted continue these activities, however, if he determines they are necessary for national security or economic interests. These provisions are in violation of the Majority Leader's Sunset Requirement Floor Protocol.

- **Expand the Size and Scope of the Federal Government?** Yes. This legislation would create a National Quantum Coordinating Office at the White House Office of Science and Technology Policy (OSTP), in addition programs through the NSF, NIST, and the Department of Energy. Some members may feel that this type of research and development is better addressed in private industry.
- Encroach into State or Local Authority? No.
- Delegate Any Legislative Authority to the Executive Branch? No.
- Contain Earmarks/Limited Tax Benefits/Limited Tariff Benefits? No.

DETAILED SUMMARY AND ANALYSIS:

The growing field of Quantum Information Science is believed to be important for global competitiveness in science and tech policy, with ramifications across a number of fields. According to the <u>committee</u>, other nations including China, are actively investing billions of dollars into the field, with a goal of "surpassing the U.S. in quantum computing during the next decade."

H.R. 6227 would create a National Quantum Coordinating Office at the White House Office of Science and Technology Policy (OSTP), in order to advance quantum research and development. This legislation aims to expand and support research, development, demonstration and application of quantum information science by creating a broader workforce with expertise in the issue, expand

knowledge gaps, and develop related facilities. It also seeks to encourage interagency coordination, and collaboration among government, private, and educational sources.

H.R. 6227 would require the president to implement a 10-year National Quantum Initiative Program, which would provide for interagency coordination, partnerships with industry and academia, and would leverage current federal investments. It would require the president to establish a National Quantum Coordination Office to perform a variety of duties, including overseeing the program and conducting public outreach. It would also require the president to establish within the National Science and Technology Council, a subcommittee on Quantum Information Science to coordinate research and education activities, set goals and priorities, assess federal infrastructure needs, and to evaluate areas for international cooperation. The subcommittee would be required to develop a strategic plan within one year following enactment and further develop five-year strategic plans. The subcommittee would be required to submit reports to Congress on the plans.

H.R. 6227 would require the president to establish a National Quantum Initiative Advisory Committee to independently assess: trends in the field; progress in the program; the activities and priorities of the program; the management of the program; a need for revisions to the program; areas of possible international cooperation; and whether national security, economic, and other concerns are addressed. The advisory committee would be required to report to the president every two years and submit reports to Congress.

These newly created offices, programs and councils would sunset on the date that is 11 years after enactment. The president would be permitted continue these activities, however, if he determines they are necessary for national security or economic interests.

As part of the program created by this legislation, the director of the National Institute of Standards and Technology would be required to: continue to support quantum information science and technology research and development; use existing programs to train scientists in the field; create or expands collaborations with public or private sector entities; have the authority to enter into and undertake contracts.

Within one year following enactment the NIST director would be required to gather a workshop of stakeholders to discuss the needs necessary to support the quantum information science and technology industry in the United States. The director would be required to submit a report to congress on the findings of the workshop.

The Secretary of Commerce would be required to allocate \$400 million to carry out the NIST activities included in the legislation, which would include \$80 million for fiscal years 2019-2023, subject to appropriations from amounts make available to the National Institute of Standards and Technology. This section would require the use of funds otherwise appropriated after the enactment date.

This legislation would also require the director of the National Science foundation to create a research and education program on quantum information science and engineering. The director of the NSF, in consultation with other relevant federal agencies, would be required to award grants to nonprofits or higher education institutes to create up to five Multidisciplinary Centers for Quantum Research. The activities of selected institutions would be authorized to carry out activities for five years. The director of the NSF would be required to devote \$250 million to carrying out these activities, including \$50 million for fiscal years 2019-2023, subject to the availability of appropriations. This section would require the use of funds otherwise appropriated after the enactment date.

The Director of the NSF would be permitted to create a graduate student traineeship program for those who pursue masters or doctoral degrees in quantum information science.

Finally, the Secretary of Energy would be required to carry out a basic research program on quantum information science and ensure that the Office of Science undertakes a program to create and operate up to five National Quantum Information Science Research Centers, selected through a competitive process, awarded for five-year periods.

The Secretary of Energy would be required to provide \$625 million for this section, including \$125 million for fiscal years 2019-2023, subject to the availability of appropriations. This section would require the use of funds otherwise appropriated after the enactment date.

No additional funds would be authorized to be appropriated to carry out this legislation.

A one-pager can be found <u>here</u>.

COMMITTEE ACTION:

H.R. 6227 was introduced on June 26, 2018, and was referred to the House Committee on Science, Space, and Technology and was ordered reported, amended, by voice vote on June 27, 2018.

ADMINISTRATION POSITION:

A Statement of Administration Policy is not available.

CONSTITUTIONAL AUTHORITY:

"Congress has the power to enact this legislation pursuant to the following: Article I, Section 8, Clause 18: The Congress shall have Power . . . To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof."

Concur in the Senate Amendment to H.R. 589 - Department of Energy Research and Innovation Act (Rep. Smith, R-TX)

CONTACT: Jennifer Weinhart, 202-226-0706

FLOOR SCHEDULE:

Scheduled for consideration on September 13, 2018, under a suspension of the rules which requires a 2/3 majority for final passage.

TOPLINE SUMMARY:

The Senate Amendment to H.R. 589 would strike Title IV from the House-passed H.R. 589, the Department of Energy Research and Innovation Act. In the House-passed bill, title IV would have revised the purposes of the civilian nuclear energy research, development, demonstration, and commercial application programs of the U.S. Department of Energy.

<u>H.R. 589</u> would provide policy direction for Department of Energy (DOE) research programs concerning basic science, nuclear energy, and research coordination.

Title I would include text similar to the <u>Department of Energy Lab Modernization and Technology Transfer Act</u> (H.R. 1158 in the 114th Congress). It would improve technology transfer to the private sector, and would address the <u>Agreements for Commercialization Technology</u> pilot program.

Title II would address the Department of Energy's research coordination efforts, and would include text similar to the energy titles of the House-passed <u>America COMPETES</u> reauthorization (passed as H.R. 1806 in the 114th Congress).

Title III would address the Department of Energy Office of Science Policy, and would include text similar to four previously passed House bills including the <u>Solar Fuels Innovation Act</u> (H.R. 5638 in the 114th Congress), which would authorize a Solar Fuels Basic Research Initiative. It would also include text similar to the <u>Electricity Storage Innovation Act</u> (H.R. 5640 in the 114th Congress), to provide for the establishment at the DOE of an electricity storage basic research initiative.

It would also include text similar to the <u>American Super Computing Leadership</u> Act (H.R. 874 in the 114th Congress), to promote the development of software and hardware for high-end computing systems.

Title III would further include text similar to the previously passed <u>Low Dose Radiation Research Act</u> (H.R. 35 in the 114th Congress), which would require the Director of the Department of Energy's Office of Science to carry out a research program on low-dose radiation to enhance the scientific understanding of and reduce uncertainties associated with the effects of exposure to low-dose radiation in order to inform improved risk-management methods.

COST:

A Congressional Budget Office (CBO) estimate is not available.

Rule 28(a)(1) of the Rules of the Republican Conference prohibit measures from being scheduled for consideration under suspension of the rules without an accompanying cost estimate. Rule 28(b) provides that the cost estimate requirement may be waived by a majority of the Elected Leadership.

According to information provided courtesy of the Majority Leader's office when H.R. 589 was originally considered, CBO preliminarily estimates that the bill would not affect direct spending or revenues.

CONSERVATIVE CONCERNS:

Some conservatives may be concerned that several pieces of this legislation authorize a number of new research initiatives within existing programs at the Department of Energy. While the legislation does not include any authorizations for appropriations, it's reforms are only effective to the extent that the programs continue to receive funding despite being unauthorized, a practice in violation of clause 2(a)(1) or rule XXI of the Rules of the House and that many conservatives have long opposed.

Some conservatives may believe that the underlying research initiatives addressed by the bill are not within the appropriate scope of the federal government, and would be better left to the private sector. Many conservative Members have supported appropriation amendments to eliminate some or all of the funding for applied research programs, which can be found in the bill. However, some conservatives will support the bills shifting of the focus of DOE programs more towards basic research and away from predominately commercialization activities. Further, according to Science, Space and Technology Committee Chairman Smith: "While the Department of Energy Research and Innovation Act would provide basic research-focused direction, good government guidance, and disciplined policy limitations on existing, ongoing DOE programs, nothing in the legislation prevents or precludes the future reduction or termination of any DOE program as no funding is authorized by the legislation."

- **Expand the Size and Scope of the Federal Government?** The bill would authorize several new research initiatives and awards within existing programs of the Department of Energy.
- Encroach into State or Local Authority? No.
- Delegate Any Legislative Authority to the Executive Branch? No.
- Contain Earmarks/Limited Tax Benefits/Limited Tariff Benefits? No.

DETAILED SUMMARY AND ANALYSIS:

Title I

Title I would permit the directors of the National Laboratories to use authorized funds to support technology transfer at the DOE to carry out early stage technology demonstration activities, to encourage private sector interest, and highlight commercial applications of research.

Title I includes a sense of Congress that clean energy innovation would be beneficial to U.S. energy security and environmental goals. It would also address the restoration of the Laboratory Directed Research and Development Program, ensuring that operating contractors do not allocate general and administrative costs to laboratory directed research and development. It would require the

Secretary of the Energy to establish a public database with a listing of unclassified research and development contracts, grants, agreements, task orders, or other transactions.

Title I would require the secretary to submit a report to Congress on any recommended policy changes, and any legislative changes to section 1001 of the Energy Policy Act of 2005 (42 U.S.C. 16391), to improve technology transfer to the private sector.

Title I would direct the secretary to carry out the <u>Agreements for Commercialization Technology</u> pilot program as previously announced on December 8, 2011. Eligible contractors for the relevant National Laboratories would be given increased authority to negotiate contract terms, and would give directors of National Laboratories the ability to enter into agreements with non-federal entities. Directors would be required to submit summaries, cost estimates, and documentation to the secretary. Directors must verify that activities carried out are not in competition with the private sector, and do not represent conflicts of interest. The title would also require the submission of a report to Congress.

Finally, Title I address the Short-Term Cost-Share Pilot Program, and would exempt institutes of higher education and other non-profit institutions from the requirement that at least 20 percent of research and development costs be provided by a non-federal source. It would require the DOE to submit reports to Congress on cost-sharing waivers.

The RSC legislative bulletin on similar provisions contained in H.R. 1158 in the 114th Congress can be found <u>here</u>.

Title II

Title II would protect certain types of information collected by the Advanced Research Projects Agency – Energy (ARPA-E) program. It would further require the Department of Energy to identify opportunities for collaborative research and development and any commercial application of science and technologies. It would require the DOE to try to leverage existing programs and to coordinate and consolidate activities when possible to promote collaboration. It would require the DOE to prioritize activities that use domestic resources and to develop a framework for setting long term strategic goals. DOE would be required to develop a strategic research portfolio analysis and coordination plan, so that the DOE periodically reviews the science and technology activities of the department, looking at national needs.

Title II would also authorize Energy Innovation Hubs, to enhance the economic, environmental and energy security through the United States. These awards would be given to those that establish and operate Hubs, to support and conduct collaborative research and development. Awards would be given for not more than five years, subject to the availability of appropriations.

Title II would require the Secretary of Energy to submit a report to Congress for FY 2018, on a strategy for facilities and infrastructure supported by the Office of Science, the Office of Energy Efficiency and Renewable Energy, the Office of Fossil Energy, or the Office of Nuclear Energy, Science and Technology Programs at all National Laboratories and single-purpose research facilities.

The RSC legislative bulletin on similar provisions contained in H.R. 1806 in the 114th Congress can be found here.

Title III

Title III would address the Department of Energy Office of Science Policy. It would largely include similar text to four previously passed House bills.

It would require the Director of the Office of Science Policy to provide competitive awards to multiinstitutional collaborations to conduct energy research to accelerate scientific breakthroughs. Institutions would be permitted to collaborate on awards granted. Energy Frontier Research Centers already supported may continue to receive support for four years following the date of the center's establishment. This title would permit the director to carry out a program for developing, constructing, operating and maintaining national energy sciences user facilities to improve American competiveness.

Title III would require the secretary to carry out the Solar Fuels Research Initiative to expand knowledge of photochemistry, electrochemistry, biochemistry, and materials science relevant to solar fuels systems. It would require the secretary to organize activities unto multidisciplinary teams, using expertise from National Laboratories, universities, and the private sector. It would require the Secretary of Energy to use the expertise provided by the Office of Science and Office of Energy Efficiency and Renewable Energy in order to carry out early research and development activities. It would also require the secretary to carry out programs to support research relevant to artificial photosynthetic systems and the need to replicate natural photosynthetic processes artificially.

Title III would further require the secretary to carry out the Electricity Storage Basic Research Initiative to support research and advanced scientific knowledge pertaining to experimental electricity storage systems. It would require the secretary to organize activities unto multidisciplinary teams, using expertise from National Laboratories, universities, and the private sector. It would require the secretary to leverage the expertise provided by the Office of Science and Office of Energy Efficiency and Renewable Energy in order to carry out early research and development activities. It would require the Secretary to carry out programs to support the study of multivalent ion materials in electric energy storage systems, electrochemistry modeling and simulation, and mesoscale electrochemistry.

Title III would additionally require the Department of Energy to develop at least two National Laboratory-industry-university partnerships to conduct integrated research for exascale computers. The term "exascale" is defined as a computing system performance at or near 10 to the 18th power floating point operations per second. It would require the secretary to conduct mission-related codesign activities in developing the exascale computing systems, and to develop necessary advancements in hardware and software technology, and provide competitive access for researchers to the exascale computing systems. This title would require several reports to Congress, including on integration of applications, funding, and on a review of the project.

Title III would ensure international collaboration at the most advanced accelerator facilities, including the Large Hadron Collider, ensuring that U.S. researchers have access. It would also require the DOE to carry out research activities on rare decay processes and the neutrino, and on dark energy and dark matter, in a collaborative process. It would require the Director of the Office of Science to carry out research and development activities in systems biology, in increase the understanding of complex biological systems. It would prevent the director from approving new climate-science related initiatives, unless they are well coordinated, with relevant work carried out by other federal agencies.

Title III would require the director to carry out a research program on low-dose radiation. It would also require the director, in coordination with the Assistant Secretary for Nuclear Energy, to carry out a research program studying materials that can endure the neutron, plasma, and heat fluxes expected in a fusion power system, and the need for one or more facilities to examine and test fusion and next generation fission materials. It would require the director to support research and development activities to optimize the tokamak approach to fusion and for inertial fusion for energy applications. It would require the director to support research activities at institutes of higher education, national labs, or at private facilities for a portfolio of alternative and enabling fusion energy concepts. It would further require the Office of Science to coordinate with ARPA-E.

Title III would permit the director to carry out a program for the production of isotopes, ensuring any production activities do not compete with private industry, unless it is critically in the nation's interest. It would also require the director to carry out a program to improve the safety, efficiency, and readiness of infrastructure at laboratories of the Office of Science.

The RSC legislative bulletin on similar provisions contained in H.R. 5638, H.R. 5640, and H.R. 35 in the 114th Congress can be found <u>here</u>, <u>here</u>, and <u>here</u>.

The past legislative bulletin for H.R. 589 can be found <u>here</u>.

COMMITTEE ACTION:

H.R. 589 was introduced on January 20, 2015, and was referred to the House Committee on Science, Space, and Technology. It passed under suspension by voice vote on January 24, 2017.

The Senate passed the bill, amended, by voice vote on July 23, 2018.

ADMINISTRATION POSITION:

A Statement of Administration Policy is not available.

CONSTITUTIONAL AUTHORITY:

Congress has the power to enact this legislation pursuant to the following:

Congress has the power to enact this legislation pursuant to the following: Article I, Section 8, Clause 18. No specific enumerating clause granting authority to implement research activities was included.

S. 97 – Nuclear Energy Innovation Capabilities Act of 2017 (Sen. Crapo, R-ID)

CONTACT: Jennifer Weinhart, 202-226-0706

FLOOR SCHEDULE:

Scheduled for consideration on September 13, 2018, under a suspension of the rules which requires a 2/3 majority for final passage.

TOPLINE SUMMARY:

<u>S. 97</u> would amend the Energy Policy Act of 2005, revising the Department of Energy's objectives as they pertain to nuclear energy research, development, demonstration and commercial use.

COST:

The Congressional Budget Office (CBO) <u>estimates</u> that "implementing the bill would cost \$340 million over the 2018-2022 period, assuming appropriation of the necessary amounts."

CONSERVATIVE CONCERNS:

- **Expand the Size and Scope of the Federal Government?** Yes. This legislation would authorize several new programs.
- Encroach into State or Local Authority? No.
- Delegate Any Legislative Authority to the Executive Branch? No.
- Contain Earmarks/Limited Tax Benefits/Limited Tariff Benefits? No.

DETAILED SUMMARY AND ANALYSIS:

<u>S. 97</u> would amend the Energy Policy Act of 2005, revising the Department of Energy's objectives as they pertain to nuclear energy research, development, demonstration and commercial use.

This legislation would provide for the mission objectives regarding nuclear policy for the Department of Energy, including the provision of research infrastructure and enabling partnerships between national laboratories and the private sector for certain purposes.

S. 97 would repeal the 2010 Nuclear Power Program and makes it clear that the Office of Nuclear Energy, Science, and Technology is no longer the designated entity for programs on advanced fuel recycling technology and cost-effective technologies regarding nuclear facility safety, as the office was replaced by the Office of Nuclear Energy, the Office of Science, and the Office of Technology Transitions.

It would require the DOE to determine the mission need for a versatile reactor-based fast neutron source that would act as a national user facility by December 31, 2017. After determining mission need, the DOE would be required to submit a plan to Congress for its establishment, with construction completed by December 31, 2025. Any delay in the project would be required to be explained in the DOE's annual budget request.

This legislation would require the DOE to undertake a program for the development of new reactor technologies using high-performance computation modeling and simulation techniques, coordinating with relevant agencies with the objectives of leveraging experience in the private sector, national laboratories, and education field. The Secretary would be required to consider support for other research activities that would allow for the maximum use of the research facilities.

This legislation would authorize a program to enable the testing and demonstration of reactor concepts that would be proposed and funded, at least in part by the private sector. The Secretary would be permitted to enter into a memorandum of understanding with the Nuclear Regulatory Commission chairman to share technical expertise and knowledge and would further require the commission and DOE to enter into two further memoranda of understanding.

Within one year following enactment, the secretary would be required to submit two alternative 10-year budget plans to Congress for civilian nuclear energy research and development. DOE would also be required to submit a report to Congress on engineering designs for innovative fusion energy systems.

DOE would be required to establish an Advanced Nuclear Energy Cost-Share Grant Program to make cost-share grants to applicants to fund a portion the commission fees for pre-application and application review activities.

COMMITTEE ACTION:

S. 97 was introduced on January 11, 2017, and passed the senate with amendments by voice vote on March 7, 2018.

ADMINISTRATION POSITION:

A Statement of Administration Policy is not available.

CONSTITUTIONAL AUTHORITY:

Constitutional authority statements are not required for Senate legislation.

NOTE: RSC Legislative Bulletins are for informational purposes only and should not be taken as statements of support or opposition from the Republican Study Committee.