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OVERSIGHT HEARING ON THE U.S. ARMY CORPS OF ENGINEERS' CIVIL WORKS PROGRAM

HEARING BEFORE THE COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS UNITED STATES SENATE ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

MAY 8, 2019

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ONE HUNDRED SIXTEENTH CONGRESS
FIRST SESSION

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OVERSIGHT HEARING ON THE U.S. ARMY CORPS OF ENGINEERS' CIVIL WORKS PRO- GRAM

WEDNESDAY, MAY 8, 2019

U.S. SENATE,
COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS,
Washington, DC.

The committee met, pursuant to notice, at 10:05 a.m. in room 406, Dirksen Senate Office Building, Hon. John Barrasso (chairman of the committee) presiding.

Present: Senators Barrasso, Carper, Inhofe, Cramer, Braun, Rounds, Sullivan, Boozman, Wicker, Ernst, Cardin, Whitehouse, Markey, Duckworth, and Van Hollen.

OPENING STATEMENT OF HON. JOHN BARRASSO, U.S. SENATOR FROM THE STATE OF WYOMING

Senator BARRASSO. Good morning. I call this hearing to order.

The Committee has an important responsibility to maintain oversight over the U.S. Army Corps of Engineers' Civil Works Program. Today's hearing is an opportunity to hear directly from the leaders of the Army Corps.

The Army Corp's water infrastructure projects support America's economy and help keep communities safe. These projects include maintaining navigable waterways, managing the risk from floods and coastal storms, and supporting aquatic ecosystems. They also provide power and water to communities around the Nation.

Over the last 2 months, extensive flooding has taken place in the Midwest due to melting snow and intense rain. This flooding has tragically resulted in loss of life, as well as billions of dollars in damages.

In April, this Committee held a field hearing in Iowa to examine the Army Corps' management of Midwest flooding. The goal was to get to the bottom of this disaster and move toward possible solutions. Given Wyoming's own experience with flooding in places like Greybull and Worland, my constituents and I can sympathize with those who have lost so much.

Today's hearing will provide the Committee another opportunity to hear from the leadership of the Army Corps of Engineers on the flood in the Midwest. It will also give Committee members an opportunity to hear testimony about the implementation of America's Water Infrastructure Act.

Since 2014, this Committee has worked in a bipartisan way to pass critical water resource development legislation every 2 years. These water infrastructure laws benefit every State.

Last October, Congress passed, and President Trump signed into law, America's Water Infrastructure Act. The legislation passed the Senate by a vote of 99 to 1. When fully implemented, the new law will have far-reaching impacts. These include creating jobs, growing the economy, protecting lives and property, cutting red tape, and promoting federalism.

The benefits of America's Water Infrastructure Act will be evident in the West as well as all across the Country. Nationally, the Act improves permitting reforms to allow for the development of more water storage projects and it increases local input in the prioritization process.

America's Water Infrastructure Act will reduce flood risk through the construction of levees and the improvement of dams. Key provisions will benefit farmers and ranchers. In my home State of Wyoming, we will restore water storage capacity at Federal reservoirs and expand the Fontenelle Reservoir in Southwestern Wyoming. It also creates a permanent program to help mitigate the threat of floods caused by ice jams.

The law requires the Army Corps to expedite snowpack monitoring activities in the Upper Missouri River Basin. This is to help predict and mitigate flood risks. This year's increased snowpack is a serious concern to many of my constituents, especially in northern Wyoming, including Teton County. The law does all this while actually reducing the deficit.

America's Water Infrastructure Act represented excellent progress. Now it needs to be implemented, so I look forward to hearing from today's witnesses on how the Army Corps of Engineers is managing its Civil Works Program. I want to thank you for coming before the Committee to testify, and we look forward to hearing from you.

As I get ready to turn to Ranking Member Carper, I will mention that we are in the middle of five roll call votes this morning, so members of the Committee may be leaving and coming back as we go to the floor, because each of the votes must be cast in person.

With that, Senator Carper.

**OPENING STATEMENT OF HON. THOMAS R. CARPER,
U.S. SENATOR FROM THE STATE OF DELAWARE**

Senator CARPER. Thanks, Mr. Chairman. Mr. Chairman, thanks for bringing us together.

I also want to apologize for the exercise we are about to go through. When John Barrasso and I are running the U.S. Senate, this will not happen during our hearings. On our regular order we will do a lot better.

Mr. Chairman, thanks for convening this morning's hearing to conduct oversight on the Civil Works Program run by the U.S. Army Corps of Engineers. We salute you all. Thank you all for your service. Delighted that those in the audience have joined us as well.

This hearing is a timely followup to the field hearing we recently held in Iowa to examine flood protection efforts along the Missouri

River and its tributaries. This subject is still particularly pertinent given that much of downtown Davenport remains submerged under flood waters this morning.

While I am optimistic that this hearing will provide us with some important insights, I do have some concerns that we only have the Army Corps of Engineers at the table today. During the drafting process for the last Water Resources Development Act, also known as WRDA, one of the issues that Chairman Barrasso and I and our staffs heard repeatedly raised was that the OMB micromanages the Corps of Engineers and that there is a troubling lack of transparency with respect to OMB's Corps budgeting process.

While OMB continues to underfund the Army Corps' infrastructure efforts in every budget, OMB also relies upon a prioritization method that fails to capture all of a project's benefits. This method is called the "Benefit to Cost" ratio. It racks and stacks projects based solely on national economic benefits. What that means, however, is that the needs of smaller communities, the needs of rural communities, of Tribes and, in many cases, the environment, our environment, lose.

At the same time, OMB can oftentimes be a "black box." The agency rarely, if ever, discloses how each individual project was evaluated, raising serious concerns about which projects will make it into the final Army Corps workplan each year. It may seem esoteric, but millions of Americans across our Country really do rely on Army Corps projects in order to safely navigate our waters, stay safe from flooding and storm damage, or reap the benefits of healthy aquatic ecosystems and marshlands.

At the hearing in Iowa, it was made clear that the Army Corps is not the only agency that should be at the table if we want to take a holistic view of civil works projects and programs. Numerous other Federal agencies, State agencies, local partners and communities all share a responsibility to be part of the solution.

In the coming months, our Committee needs to conduct additional oversight hearings on the implementation of the America's Water Infrastructure Act. It is incumbent upon us to hold agencies accountable to the reforms that our Committee and the Congress supported in an overwhelmingly bipartisan way.

These reforms, including Benefit to Cost ratio transparency reforms, flood mitigation studies, and local stakeholder participation in district budget planning processes, must be implemented to ensure we abate the damage of these floods and storms before they occur, rather than fix the unmitigated damage in their aftermath.

I want to thank our witnesses today. I am particularly excited to hear from Mr. Chip Kline. Chip off the old block. I said, Chip, who are you named after? He said, my dad; I'm a chip off the old block. Whether you are a chip or not, we are happy that you are here.

I think Mr. Kline is going to share some insights on Louisiana projects. We welcome that, especially after that State's experienced the devastation wrought by Hurricanes Katrina and Rita, and God knows how many more.

In my home State of Delaware, we have witnessed the destructive forces of climate change with hurricane max storms like Superstorm Sandy. Scientists tell us that climate change was con-

nected to the torrential rains and snowfall conditions that led to record-breaking flooding in the Midwest this spring, just a few weeks ago. Meanwhile, in Louisiana, climate change and sea level rise are eroding the coastline, forcing the State to take on massive reconstructive efforts that we will hear about later this morning. Climate change does impact red States and blue States alike, and we need to work together in a constructive bipartisan way to help address this issue.

From today's testimony I hope to learn more from the Army Corps as to how the Civil Works Program should be improved to better account for extreme weather events and sea level rise, which our Nation's leading scientists tell us will be the new norm, placing extreme burdens on the American people and our economy.

As the adage goes, an ounce of prevention really is worth a pound of cure. If we invest strategically in the maintenance of our flood control infrastructure before the storms hit, many problems could be prevented before they ever begin. In the case of the Army Corps, however, I fear that this Administration may be preventing the agency from preparing our Nation's levees, dams, and ports to meet a new climate reality.

Again, Mr. Chairman, thanks so much for pulling us all together. It is an important hearing. We look forward to learning from our witnesses and I thank them all for taking the time to share their experience and brilliance with each one of us. Thank you.

Senator BARRASSO. Thank you very much, Senator Carper.

In just a few moments we will start hearing from our witnesses.

We have R.D. James here, who is the Assistant Secretary of the Army for Civil Works, the United States Department of the Army; Major General Scott Spellmon, who is the Deputy Commanding General for Civil and Emergency Operations from the U.S. Army Corps of Engineers; Lynn Budd, who is the Director of the Wyoming Office of Homeland Security; and Chip Kline, who is the Chairman of the Coastal Protection and Restoration Authority.

Before we get to the opening statements, I would like to personally welcome Director Lynn Budd, who has recently taken over as the Director of the Office of Homeland Security in Wyoming in January 2019. Director Budd has spent the last three decades as a resident of Cheyenne.

She began her career at the Wyoming Office of Homeland Security in 2011 as a Grants Specialist. From there she served in a variety of different capacities, including Senior Planner, Critical Infrastructure Protection and Resilience Program Manager, and Security Unit Chief.

Director Budd has also functioned as a Manager of the State Operations Center, coordinating State resources in support of local jurisdictions during times of emergency in Wyoming. Prior to joining the State Office of Homeland Security, she worked in the Wyoming Office of the Nature Conservancy. I have had the privilege of knowing Director Budd for over 20 years and I am very grateful that she is here with us today. Welcome.

I also want to remind all of the witnesses that your full written testimony will be made part of the official hearing today, so please try to keep your statements to 5 minutes so that we may have time for questions.

I look forward to hearing your testimony, beginning with Assistant Secretary James.

Secretary James, please proceed.

**STATEMENT OF HON. R.D. JAMES,
ASSISTANT SECRETARY OF THE ARMY CIVIL WORKS**

Mr. JAMES. Thank you, Chairman Barrasso, Ranking Member Carper, and distinguished members of the Committee. Thank you for the opportunity to be here today to discuss the oversight of the Army Corps of Engineers program.

This reminds me that Harry Truman once said that the buck stops here. Well, I propose that the buck starts here with this Committee. Your deliberations, your oversight, your commitment to the Civil Works Program of this Country has made it a better place, and I look forward to working with you to continue to try to do that and improve on what we have already got.

I was sworn in as Assistant Secretary of the Army 15 months ago, and my goals today are the same as they were when I started: focus on outcomes, not process, in order to get the results. Since last year, I have had the pleasure to meet with most of you one-on-one to discuss both your concerns and the overall direction of the U.S. Army Civil Works Program. The input that you provide is appreciated, and I remain committed to working with each of you.

The Fiscal Year 2020 budget provides over \$4.8 billion for the Civil Works Program, with a focus on investments that will yield high economic and environmental returns or address a significant risk to public safety. This budget relies on a foundation of strong relationships between the Corps and the local communities, which allow us to work together to help manage, develop, restore, and protect their water resources. The budget focuses on the highest performing work within the three main missions of the Corps: flood control and storm damage reduction, commercial navigation, and aquatic ecosystem restoration.

The Fiscal Year 2020 budget supports a Corps program that has a diverse set of tools and approaches to working with local communities, whether this means funding projects with our cost-sharing partners, providing planning assistance and technical expertise to help communities make better informed decisions, or participating in the national and international conversations on how to best address our water resource challenges. The budget helps us maintain and improve our efforts on resiliency and sustainability, one of the challenges associated with the way we have used our water resources.

The Fiscal Year 2020 budget includes approximately \$2.4 billion for the study, design, construction, operation, and maintenance of inland and coastal navigation projects. The Flood Risk Management program is funded at approximately \$1 billion in the budget and includes funding to provide technical and planning assistance to local communities to enable them to understand and better manage their flood risk. The budget provides \$187 million to restore several large ecosystems that have been the focus of interagency collaboration to support restoring aquatic habitat in ecosystems

where the aquatic ecosystem structure, function, and processes have degraded.

The President signed the America's Water Infrastructure Act of 2018 into law on 23d October 2018. Title I of the Act is known as the Water Resource Development Act of 2018 and included numerous provisions that apply directly to the three main Corps mission areas described above. In October 2018, we moved forward with implementation of the provisions in the law that pertain to the Army Civil Works mission. I have provided guidance, where needed, to ensure effective and efficient implementation of the law.

I would also like to touch on the widespread devastation and serious impacts that this spring's Missouri and Mississippi River flooding has created for many people throughout the Country. Major General Spellmon and I both visited the areas personally and have seen the impacts. This year's flood season has challenged many Federal and State agencies and local communities across the Nation.

The extent of the damage to levees in the region is catastrophic. Most levees extending from near Omaha, Nebraska to near Kansas City, Missouri overtopped during the flood, and most of them overtopped were blown out of position and were no longer acceptable as levees. I am committed to helping this region repair the damage to infrastructure as quickly as possible and will assure this Committee the Corps' No. 1 priority is life and public safety.

Since receiving my appointment to be the ASA, I have one mission: move dirt. The intention is to start, continue, and finish projects in a more timely and efficient way to ensure a better return on the taxpayers' investment and to better the lives of Americans. Under my oversight and the direction, and with the help of General Semonite and his team, the Corps of Engineers' Civil Works Program is taking bold actions to improve performance and engineer solutions for the Nation's toughest challenges.

I am committed to ensuring that the United States Army Corps of Engineers does what it does better than any other organization in the world: design and build infrastructure projects, projects that protect lives, improve commerce, and benefit all Americans.

Thank you for inviting me today. I look forward to your questions.

[The prepared statement of Mr. James follows:]

DEPARTMENT OF THE ARMY

**WRITTEN STATEMENT
OF**

**MR. R.D. JAMES
ASSISTANT SECRETARY OF THE ARMY
FOR CIVIL WORKS**

AND

**MAJOR GENERAL SCOTT SPELLMON, DEPUTY COMMANDING
GENERAL CIVIL AND EMERGENCY OPERATIONS**

BEFORE

**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS
UNITED STATES SENATE**

ON

**OVERSIGHT ON THE U.S. ARMY CORPS OF ENGINEERS CIVIL
WORKS PROGRAM**

MAY 8, 2019

Chairman Barrasso, Ranking Member Carper and distinguished members of the committee, thank you for the opportunity to be here today to discuss the oversight of the Army Corps of Engineers Civil Works program.

I have been in the Assistant Secretary of the Army position for 15 months and my goals today are the same as they were when I started, to focus on outcomes, over process, in order to make the best use of the available funds. Since last year I have had the pleasure to meet with most of you one on one to discuss your views on the U.S. Army Corps of Engineers Civil Works program. That input is appreciated and I remain committed to working with each of you.

The Fiscal Year (FY) 2020 Budget provides over \$4.8 billion for the Army Civil Works program, with a focus on investments that will yield high economic and environmental returns or address a significant risk to public safety. This Budget relies on a foundation of strong relationships between the Corps and local communities, which allow us to work together to help manage, develop, restore, and protect their water resources. The Budget focuses on the highest performing work within the three main mission areas of the Corps, which are:

- commercial navigation,
- flood and storm damage reduction, and
- aquatic ecosystem restoration.

The FY 2020 Budget supports a Corps program that has a diverse set of tools and approaches to working with local communities, whether this means funding projects with our cost-sharing partners, providing planning assistance and technical expertise to help communities make better informed decisions, or participating in the national and international conversations on how to best address future water resources challenges. The Budget helps us maintain and improve our efforts on resiliency and sustainability – one of the challenges associated with the ways that we have used our water and related land resources in the past.

The FY 2020 Budget includes approximately \$2.3 billion for the study, design, construction, and operation and maintenance of inland and coastal navigation projects. The Flood Risk Management program is funded at approximately \$1.0 billion in the Budget and includes funding to provide technical and planning assistance to local communities to enable them to understand and to better manage their flood risks. The Budget provides \$187 million to help restore several large ecosystems, which have been a focus of interagency collaboration, where the aquatic ecosystem structure, function, and processes have degraded.

Since the enactment of WRDA 2018, the Chief of Engineers has signed and transmitted 12 water resources project reports.

- Little Colorado River (Winslow), Arizona
- Three Rivers, Arkansas
- Sacramento-San Joaquin, Delta Islands and Levees, California
- San Joaquin River Basin, Lower San Joaquin, California
- Anacostia Watershed Restoration, Prince George's County, Maryland
- Espanola Valley, Rio Grande and Tributaries, New Mexico
- San Juan Harbor, Puerto Rico
- Pawcatuck River, Rhode Island
- Resacas at Brownsville, Texas
- City of Norfolk, Virginia
- Norfolk Harbor and Channels (55-foot deepening), Virginia
- Seattle Harbor, Washington

I would also like to touch on the widespread devastation and serious impacts this spring's Missouri River flooding has created for many people throughout the region. Major General Spellmon and I have both visited the area personally and saw the impacts. Most levees extending from near Omaha, Nebraska, to near Kansas City, Missouri, overtopped during the flood. We can assure this committee that the Corps' number one priority during this period was to help the affected communities reduce their flood risk, with emphasis on public safety. The extent of the damage to levees in this region, while large, remains unclear. As the flood levels recede, we will be able more accurately to estimate the extent of the damage to the Federal and non-Federal levees that participate in the Rehabilitation and Inspection Program of the Corps, under Public Law 84-99, as amended.

Since receiving my appointment to be ASA, I've focused on how the Corps executes its funds. This involves identifying the highest priority investments and ensuring that we finish that work in a more timely and efficient way. This approach will ensure a better return on taxpayer's investment and better the lives of Americans. Under my oversight and direction and with the help of General Semonite and his team, the Corps of Engineers Civil Works Program is committed to working on improving its performance. The Corps also is using its engineering expertise and its relationships with project sponsors to develop new approaches for some of the Nation's toughest water resources challenges.

I am committed to ensuring that the United States Army Corps of Engineers does what it does better than any other organization in the world – to identify the best ways to manage, develop, restore, and protect water resources. Our goal is to achieve a high economic, environmental, and safety return for the Nation, which will benefit all Americans.

Thank you for inviting me to be here today. I look forward to your questions.

Senate Committee on Environment and Public Works
Hearing entitled, “Oversight Hearing on the U.S. Army Corps of Engineers’ Civil Works
Program”
May 8, 2019
Questions for the Record for Assistant Secretary James

Chairman Barrasso:

1. Section 7001 of the Water Resources Reform and Development Act of 2014 requires the Corps to submit an annual report to Congress on potential water resources development projects and studies for authorization. Congress has not received the 2019 report. Many stakeholders are anxiously awaiting its public release.

- a. When can we expect the 2019 report to be submitted to this committee and released to the public?

Response: I plan on providing the 2019 report in June 2019.

- b. What will you do to ensure the 2020 report is completed and submitted on time for inclusion in the next water resources development bill?

Response: It is my intent to submit the Section 7001 report annually in February.

Ranking Member Carper:

2. Section 1149(c) of WRDA 2018 establishes important, new requirements for the Corps to consider the use of natural infrastructure solutions, if they are practicable. I am concerned that the Corps does not appear to recognize the significance of this new requirement since your recently released implementation guidance for this provision merely states that the Corps “is already implementing” this requirement.

The intent of the provision was for the Corps to show its work when it considers these options, because there is concern that this is not happening. How does the Corps intend to demonstrate to this Committee that the Corps is meaningfully considering natural infrastructure in every project where it makes sense?

Response: The Army issued implementation guidance for WRDA 2018, Section 1149 in April 2019 directing the Corps to consider natural infrastructure alternatives alone or in conjunction with traditional alternatives during feasibility planning for flood risk management or hurricane and storm damage risk reduction when practicable. This guidance builds on the Corps’ substantive history of using natural and nature based features, including beaches, dunes, wetlands, and restoration of the environment in its formulation, evaluation, and recommendations for new projects where those features, alone or in combination, are technically feasible, environmentally sound, and cost-effective. In addition, the Corps has actively championed further dissemination of these practices through informational sessions on the use of natural and nature based features,

with the intent of improving the capabilities of project delivery teams to consider these features.

3. I am very concerned that after the Corps prioritizes projects, the Office of Management and Budget (OMB) applies its own cost-benefit analysis that further restricts funding for these projects, virtually eliminating the Corps' ability to construct or move lifesaving initiatives especially in rural communities. Last Congress, the Senate and the House pushed for more transparency on the benefit-to-cost ratio used by the Corps and OMB to make federal investment decisions.

Congress is seeking information on the economic principles and analytical methodologies currently used by or applied to the Corps to formulate, evaluate, and budget for water resources development projects.

- a. How does the Corps evaluate and include benefits for National Defense, Regional Economic Development and/or Other Social Effects when justifying projects for federal investment?

Response: Regional Economic Development (RED) and Other Social Effects (OSE) are two of the four accounts that were established to facilitate evaluation and enumeration of effects of alternative plans. The remaining two accounts are National Economic Development and Environmental Quality. The RED account registers changes in the distribution of regional economic activity that result from each alternative plan. Evaluations of regional effects are to be carried out using nationally consistent projections of income, employment, output, and population. The OSE account registers plan effects from perspectives that are not reflected in the other accounts. Potential categories of effects in the OSE account can include the following: Urban and community impacts; life, health, and safety factors; displacement; long-term productivity; and energy requirements and energy conservation. National defense can be described in multiple accounts depending on the information available, but it is often qualitative. National Defense, RED, and OSE are used to describe the effects of alternatives on each of these categories which supports the decision on the recommended plan.

- b. Does the current formula/methodology for determining benefits to costs provide an unfair advantage to more urban areas of the country with higher property values compare to rural or agricultural communities?

Response: Benefit-cost analysis methods used by the Corps follow standard applied economic theory, and the methodology for application is the same regardless of where the analysis is applied and are not tied to any specific geographic place. The resulting economic metric that is used for budgetary decisions, the benefit-cost ratio (BCR), can result in a concentration of construction in specific geographic areas. Urban areas tend to have greater flood damages / benefits compared to similar projects in more rural areas.

4. What challenges does the Corps face in budgeting, planning, constructing, operating and maintaining projects for extreme weather events that may be exacerbated by climate

change? Are there new lessons that we have learned that need to be applied to future efforts?

Response: The primary challenge is describing climate preparedness and resilience measures in a comprehensive and quantitative manner and identifying the appropriate level of investment today in adaptation measures needed far into the future. Lessons learned from our adaptation pilot projects led to improved methods and approaches, and also identified knowledge, policy, and technical guidance gaps.

5. Under President Trump's first actions in 2017, the President cut funding for the "Response to Climate Change at Corps Projects." The program developed and implemented practical and cost-effective approaches and policies to reduce vulnerabilities already being experienced at our Nation's water infrastructure. What was the rationale for cutting funding to this program since it was mitigating impacts already occurring at projects as a result from climate change and variability?

Response: Mitigation of impacts at projects as a result of climate change and variability is considered for funding during budget development for each individual project in lieu of being funded from the Response to Climate Change at Corps Projects remaining item. Providing funding to specific projects allows greater transparency and tracking of funding.

6. Assistant Secretary James, last year, a regionally significant project called the Great Lakes Coastal Resilience Study was put forth as the priority by all Districts in a Division, the Division itself, HQUSACE and your office of the ASA (CW), yet OMB did not select it for a new start. Please explain why this study was not made a priority.

Response: The FY '20 budget focuses on applying available resources to continue and complete existing studies and projects rather than starting new work that would compete for those resources.

7. It is concerning the Administration continues to ignore language regarding budget structure changes. In particular, the shifting of various studies and projects between accounts such as moving Dam Safety Modification Studies and Dredged Material Management Plans into the Investigations account instead of funding them under the Construction and O&M accounts, respectively. Another example of this is the consistent proposal to move the construction of Poplar Island from the aquatic ecosystem restoration business line to the navigation business line. Please explain why the Administration continues to propose such changes despite Congress' clear intent for the projects to be structured as they were authorized?

Response: For work that is moved into Investigations, the reclassification aids in transparency and tracking of the work and increases the visibility of work that could result in future funding decisions for the Construction account. For Poplar Island, the primary benefit of the project is correctly attributed to the Navigation program as the

dredged material disposal site for the Baltimore Harbor and Channels (50 Foot), MD project.

8. Expanding the use of beneficial dredged material is really important to protect communities from extreme weather while creating important habitat for nesting birds and other wildlife. What benefits are being observed from the beneficial use of dredged material pilot program so far? What is the current thinking about moving the pilot phase into a more permanent program?

Response: There is not sufficient information available to make a determination with regard to making the pilot phase a permanent program.

9. Funding for the Corps' Regulatory program has remained flat for many years. In fact, when considering inflation, the program receives a decline in funding on an annual basis. This is concerning given the need for the Corps to expeditiously, but thoroughly, do its regulatory obligations. Is an annual appropriation of \$200 million enough to maintain the integrity of the Corps' regulation of the Clean Water Act when the number and complexity of permits continue to increase?

Response: The funding provided in the President's Budget is sufficient to efficiently and effectively manage the Regulatory Program.

10. Would you please provide an update on the number of Chief's Reports or other major decision documents expected to be completed this fiscal year? What is the status of the 2019 Report to Congress on Future Water Resources Development? Could you also please provide an update on the timeline for the next round of the Sec. 7001 process?

Response: The table below summarizes the completed and anticipated Chief's Reports for FY2019.

Project Name	Project Purpose	Date
CHIEF'S REPORTS		
Little Colorado River at Winslow, Navajo County, Arizona	Flood and Storm Damage Reduction	14-Dec-2018 (actual)
Delta Islands and Levees, California	Ecosystem Restoration	18-Dec-2018 (actual)
Pawcatuck River Coastal Storm Risk Management, Rhode island	Flood and Storm Damage Reduction	19-Dec-2018 (actual)
Anacostia Watershed Restoration, Prince George's County, Maryland	Aquatic Ecosystem Restoration	19-Dec-2018 (actual)
City of Norfolk, Virginia	Flood and Storm Damage Reduction	05-Feb-2019 (actual)
Souris River Basin Flood Risk Management, Bottineau, McHenry,	Flood and Storm Damage Reduction	16-Apr-2019 (actual)

Renville, and Ward Counties, North Dakota		
The Great Lakes and Mississippi River Interbasin Study - Brandon Road, Will County, Illinois	Aquatic Ecosystem Restoration	May-2019
Yuba River Ecosystem Restoration, California	Aquatic Ecosystem Restoration	July-2019
South Platte River and Tributaries, Adams and Denver Counties, Colorado	Aquatic Ecosystem Restoration	July-2019
Delaware River Dredged Material Utilization, Delaware	Flood and Storm Damage Reduction	May-2019
Rio Grande, Environmental Management Program, CO, NM, TX, Sandia Pueblo to Isleta Pueblo, New Mexico Ecosystem Restoration	Aquatic Ecosystem Restoration	July-2019
Whittier Breakwater, Alaska	Navigation	July-2019
Lowell Creek Tunnel Flood Diversion, Alaska	Flood and Storm Damage Reduction	August-2019
Matagorda Ship Channel (Widening and Deepening), Texas	Navigation	August-2019
Fire Island to Montauk Point, New York	Flood and Storm Damage Reduction	August-2019
Unalaska (Dutch) Harbor, Alaska	Navigation	August-2019
East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, Atlantic Coast of New York	Flood and Storm Damage Reduction	August-2019
Sacramento River Bank Protection Project, California	Flood and Storm Damage Reduction	August-2019
Jefferson County Ecosystem Restoration, Jefferson County, Texas	Ecosystem Restoration	August-2019
Ecorse Creek, Michigan	Flood and Storm Damage Reduction	September-2019
Northwest El Paso, Texas	Flood and Storm Damage Reduction	September-2019
Inner Harbor Navigation Canal Lock, Louisiana	Navigation	September-2019
Delaware River Dredge Material Utilization, NJ	Navigation	September-2019

GIWW Brazos River Flood Gates & Colorado River Locks, Texas	Navigation	September-2019
Savan Gut Phase II, St. Thomas, US Virgin Islands	Flood and Storm Damage Reduction	September-2019
DIRECTOR'S REPORTS		
Dry Creek, Sonoma County, California	Aquatic Ecosystem Restoration	29-Mar-2019 (actual)
Kenai River Bluff Erosion, Alaska	Flood and Storm Damage Reduction	10-Apr-2019 (actual)
Passaic River Tidal Protection Area (P.L. 113-2)	Flood and Storm Damage Reduction	June-2019
DISPOSITION STUDIES		
Willamette Falls Locks, Willamette River, Oregon	Navigation	July-2019
WATERSHED STUDIES		
Minnesota River Watershed Study, MN & SD (Minnesota River Authority)		August-2019
West Maui Watershed, Maui, Hawaii		August-2019
Merrimack River Watershed Study, New Hampshire & Maine		July-2019
Red River of the North Basin, ND, MN, SD & Manitoba, Canada		November-2018

The 2019 Report to Congress on Future Water Resources Development is being finalized and is scheduled to be transmitted to Congress in June 2019. A Federal Register Notice requesting proposals from non-Federal interests for the 2020 Report to Congress on Future Water Resources Development was posted in April 2019. Proposals will be collected through an online server for 120 days, closing in August 2019. The proposals will then be evaluated based on the criteria provided in the Water Resources Reform Development Act of 2014, Section 7001, as amended. The analysis of each proposal will be provided to the ASA(CW) for consideration and final determination. The anticipated date to provide the 2020 report to Congress is February 1, 2020.

11. The FY20 Budget request included a large set-aside amount of \$150 million for projects to be implemented under Section 1043 of WRRDA 2014.

a. Would you please provide the status of implementing this section?

Response: One project has been implemented under the Section 1043(b) authority, McCook Reservoir Flood Control Project Chicago, Illinois and a second project is being considered for implementation, Clear Creek Flood Control Project, Harris County, Texas. The authority to commence a project under Section 1043(b) projects expires on 10 June 2019 and the FY 2020 Budget proposes to extend this authority.

- b. Would you please provide examples of the type of projects that could be constructed under this authority?

Response: Section 1043 pilot projects can be carried out for authorized flood risk management, hurricane and storm damage risk reduction, coastal harbor and channel inland navigation, and aquatic ecosystem restoration projects

- c. What is the likelihood this large amount of funding will be carried over instead of being used to buy down projects currently in the backlog?

Response: If appropriated, the Army would work with eligible non-Federal sponsors to determine the best use of the funding provided. It is unlikely that the funding would be carried over.

12. Last month, the GAO issued a 122-page report highlighting the need for federal agencies to take additional actions to conduct meaningful consultation. The Corps was one of the 21 federal agencies featured in the report.

The report noted that the Corps' Civil Works program adhered to regulations promulgated consistent with Section 106 of the National Historic Preservation Act (NHPA). The Corps' Regulatory Program, which relies on different regulations dating back to 1990, did not. Furthermore, the Fall 2018 Unified Agenda of Federal Regulatory and Deregulatory Actions noted that the Corps seeks to revise its regulations to conform to NHPA requirements.

Would you update the Committee on the status of the Corps' general efforts to improve tribal consultation, and more specifically, the Corps' efforts to update its Regulatory Program regulations to ensure NHPA compliance?

Response: The Army intends to fully comply with the GAO recommendation to update its tribal consultation policy to ensure that tribal input during coordination is documented and tribes are informed on how their input was used in the agency decision-making process.

The GAO report also highlighted some ongoing points of disagreement between the Corps and the ACHP, e.g. the definition of "undertaking" which the Corps interprets as the federal action but the ACHP interprets as the "overall project regardless of level federal involvement".

The Army maintains that the Corps Regulatory Program continues to fully comply with the NHPA. The Corps compliance occurs by utilizing not only its regulations at 33 CFR 325 Appendix C but also 2005 interim guidance which relies, in part on ACHP's regulations at 36 CFR 800, and 2007 interim guidance. These guidance documents were developed to ensure full compliance after the NHPA was amended and 36 CFR 800 was modified.

The Corps understands that reliance on multiple regulations, policies, and guidance documents to comply with Section 106 and consultations with Tribes can create uncertainty

for tribes, the regulated public, stakeholders, and Corps staff. To improve clarity and predictability, the Corps is working with the ASA(CW) to update the Regulatory Program's regulations by codifying these guidance documents and policies and address the wide range of tribal consultation requirements.

13. The WINN Act of 2016 amended Section 203 of WRDA 2000 to expand the Tribal Partnership Program to allow the construction of water resource development projects on Indian lands. Drought continues to plague much of the West and climate change has altered precipitation patterns, increasing flooding and decreasing available water supplies.

Has the Corps used this construction authority to build any new projects for Indian tribes, and has the Corps funded any studies or projects that deal with water supply assessments or planning activities under Section 203? If not, what is preventing the Corps from doing so?

Response: The FY 2020 Budget includes \$500,000 in the Investigations account under the Tribal Partnership Program. There are currently nine on-going feasibility studies, seven on-going watershed assessments, and two technical assistance activities with cost-sharing agreements signed between the Department of the Army and the non-Federal sponsor. The Corps has not yet completed a feasibility study under the Tribal Partnership Program that might recommend construction under this authority.

14. Regarding the Harbor Maintenance Trust Fund (HMTF), Section 2102 of WRRDA 14 provided definitions and a formula for equitable allocation of funds among different types of ports. Would you please explain why this provision has never been implemented?

Response: The Corps has consistently met the targets for emerging harbors and Great Lakes harbors. Expanded uses is traditionally a non-federal responsibility.

15. I am concerned about the cost to the nation of repairing repeated levee failures. Under the PL 84-99 program, the Army Corps repairs damaged levees often at up to 100 percent federal taxpayer expense. Section 3029 of WRRDA 2014 required the Corps to submit a report on expenditures on flood control structure repairs under the P.L. 84-99 program for the previous five years and to submit successive reports every two years. With this data, Congress and the public can work with the Corps on solutions that prioritize flood control structures for repair or replacement, so we are not rebuilding the same structure in the same place time and again just to see it damaged again in the future.

- a. Please provide a copy of these reports as required by WRRDA 2014.

Response: This report is under development.

- b. Does the Corps track data related to repetitively damaged flood control infrastructure including historic expenses and cumulative costs of repairing flood damage? Is that data publicly available via the National Levee Database?

Response: The Corps is working to collect and organize certain data (primarily failure modes) from the available historic records of our district offices. However, the scope of this ongoing effort does not include tracking the data or an evaluation of historic expenses or cumulative costs.

The data is not available through the National Levee Database.

- c. Would you provide Congress and the public with data on flood control structures suffering repetitive losses?

Response: I am committed to ensuring that we are transparent and will ensure that the data collected is available publically. As appropriate some of the information we are collect may be made available through the National Levee Database.

16. I understand that you sent a memo titled, "Regulatory Policy Directives Memorandum" ("Directive"), on December 13, 2018 to the Chief of Engineers. In that memo, you stated that Corps regulations give a state "sixty (60) days to act on a request for a Section 401 water quality certification upon receipt of such request" unless unspecified "special circumstances" warrant more time.

I understand that you have received negative feedback from the states who argue, among other things, that this requirement is: 1) inconsistent with the express language of Clean Water Act section 401; 2) unworkable with respect to the time required by states to solicit, review and comment on public feedback on such applications; and 3) is profoundly inconsistent with the Corps' own regulations that state: "[i]n determining whether or not a waiver period has commenced or waiver has occurred, the district engineer will verify that the certifying agency has received a valid request for certification." The Corps explained when it promulgated this regulation that "valid requests for certification must be made in accordance with State laws [.]".

- a. Given the feedback you have received, do you intend to revoke or significantly revise this memo in order to adhere to the law Congress laid out in section 401 of the Clean Water Act?

Response: No revision is anticipated. The memorandum is consistent with the law and merely contains guidance that is intended to refresh and reinforce existing, validly promulgated Corps regulations. It does not alter or amend any preexisting law or regulation.

- b. If so, please provide the substance of that proposed action and the timeline for such retraction or modification.

Response: N/A

17. If you intend to enforce the memo as it stands, please provide your justification for such decision. Also please provide your strategy for dealing with the likely increase in 401 certification denials that such implementation would likely provoke.

Response: The purpose of the guidance is to clarify timeframes and improve efficiency for receiving Section 401 Water Quality Certification (401 WQC) decisions from the certifying agency pursuant to 33 U.S.C. § 1341. The memorandum is not intended to modify the WQC processes of the states. I understand the authority granted to states by the CWA with respect to 401 WQCs and in no way seek to infringe on states' rights. I support and appreciate the Administration's federalism initiatives to find an appropriate balance of power between the federal and state governments. My directive to the Corps seeks to implement uniform application of existing Corps regulations found at 33 CFR 325.2. Such uniform application of the Corps' regulations ensures national consistency throughout the Corps Districts, which, in turn, results in increased certainty and predictability for the regulated public. Although there is a default timeframe of 60 days under existing Corps regulations, I intend to preserve the District Commander's discretion to account for circumstances in which a longer timeframe may be warranted. I will work to ensure the Corps understands under which types of circumstances it may be appropriate to extend beyond the 60 days and ensure that Districts continue to engage with the states when determining an appropriate timeframe.

Senator Capito:

18. Summersville Lake is a U.S. Army Corps of Engineers ("the Corps") project in West Virginia. The dam was constructed in the 1960s primarily for flood control. While hydropower is not a congressionally authorized purpose of the project, the City of Summersville ("the City") owns and operates a non-federal hydropower facility through a FERC run of river license. The facility has a capacity of 80-megawatts (MW), with generated power sold by the City to a utility provider. In recent years, the City has sought a study on the part of the Corps to examine the prospects of increasing power generation at the facility by raising the winter pool level at the lake and limiting releases from the impoundment, consistent with primary purposes of the project like flood control. This would benefit Summersville residents through additional revenue for the City and generate an estimated 45 gigawatt-hours (GWh) of electricity, enough power to supply 4,500 homes and that promises to bring down costs for consumers. A Section 216 initial appraisal from March 2017 determined that these changes could not be made due to hydropower not being an authorized purpose of the project, and because a detailed study of the risks had not been undertaken.
- a. Do you believe the Section 7001 process, whereby a non-federal interest can propose modifications to Corps projects for congressional authorization, would be applicable here? More specifically, could the City request a feasibility study that looks into whether or not hydropower can be added as an authorized purpose?

Response: Yes.

- b. Aside from the criteria laid out in Section 7001 of WRRDA 2014, are there any additional criteria the Corps uses to determine whether or not a proposed feasibility study is included in the report to Congress?

Response: No.

- c. Is a study proposed through Section 7001 similar in scope to any other feasibility study conducted by the Corps?

Response: Yes.

- d. If the city were to include its preferred operational changes – raising the winter pool level and limiting outflow while not conflicting with flood control purposes – as part of a successful Section 7001 proposal, would the Corps take that information into account as part of any future study on authorizing hydropower at the project?

Response: The Corps would consider all reasonable alternatives that achieve study objectives, including alternatives suggested/recommended by the non-Federal sponsor.

- e. If hydropower were to be added as an authorized purpose of the Summersville project, would the City then be able to request modifications to the water control manual and operating memorandum of agreement to facilitate non-federal hydropower generation?

Response: Yes. However, any project changes would need to be supported by a water reallocation study.

- f. The Corps has a long history of operating hydroelectric power plants in the United States. If hydropower were to be added as an authorized purpose of the Summersville project, would generation from the City's facility be subject to federal ownership in any way?

Response: No.

- g. There are approximately 90 non-federal hydropower facilities on Corps projects. Do you know of any instances where the Corps has modified operations in order to facilitate non-federal hydropower generation?

Response: No.

- h. If there have been instances where the Corps has modified operations – whether through changes to a memorandum of agreement or water control manual – in order to facilitate non-federal hydropower generation, what criteria and processes has the Corps used to consider and implement these modifications?

Response: N/A

- i. Do individual Corps districts have wide latitude to consider operational changes consistent with project purposes? More specifically, does hydropower need to be an authorized purpose for a project in order for the individual district to consider operational changes that don't conflict with project purposes?

Response: Changes to a project's water control manual to accommodate a change in project purposes must be preceded by a water reallocation study that will confirm that the proposed course of action will not adversely impact other project purposes. Individual Corps Districts do not have the authority to make those changes absent that study.

- j. According to the Albuquerque District's own website, in 2010 the Corps amended their memorandum of agreement with Los Alamos County, New Mexico to generate more power at a non-federal hydroelectric facility located on the Abiquiu Dam. The website states, in part, that "the District will proactively manage water releases from the dam to maximize energy production, while respecting flood control and water right obligations." What process did the County and District go through to amend the agreement, and is it applicable in this situation?

Response: The amended memorandum of agreement was the result of the installation of a new hydroelectric turbine at the Abiquiu Dam. The installation of the turbine allowed Los Alamos County to generate more power on an annual basis. The amended agreement did not modify the Water Control Plan or water release decisions at Abiquiu Dam. Amending the memorandum of agreement would not be applicable to this situation.

Senator Markey:

- 19. The Corps of Engineers owns and maintains the Cape Cod Canal bridges, which provide vital access and evacuation routes for the residents of Cape Cod. The Corps is currently conducting a study of the two 80-year-old bridges, which is expected to conclude that the bridges must be replaced in the next 5-10 years, at a cost of \$800 million - \$1 billion. Meanwhile, the Corps is considering a \$150 million major rehabilitation of the Sagamore Bridge, which may still need replacement within ten years.

- a. Would you support swiftly replacing these bridges to avoid spending \$150 million in stopgap repairs?

Response: Absent completion of the on-going feasibility study, I cannot speculate on the results or presume a path forward.

- b. Are you confident that the Corps has sufficient funding to replace these bridges in a timely manner? If not, what additional funding would be necessary, and from what sources?

Response: Absent completion of the on-going feasibility study, I cannot speculate on the results or presumed path forward.

20. The Massachusetts Department of Transportation is willing to assume ownership of the bridges should they be replaced, thus relieving the Corps of Engineers of their responsibility to operate and maintain these assets in perpetuity.

a. Would the Corps support divesting of these bridges, once replaced?

Response: The Corps has supported divesting other bridges, once replaced, but absent completion of the on-going feasibility study, I cannot speculate on the results or presumed path forward.

b. What directives and authorities would the Corps require from Congress to facilitate divestment of Corps-owned bridges to willing state and nonfederal sponsors?

Response: The on-going feasibility study will identify whether or not additional authority is needed to divest the Corps-owned bridges to willing state and non-Federal sponsors.

21. The Corps of Engineers' mission includes strengthening our Nation's security and reducing risks from disasters, and its vision is engineering solutions for our Nation's toughest challenges. One of the toughest challenges facing our Nation is climate change, which is already fueling the record-breaking floods and extreme weather events wreaking havoc on our infrastructure and communities. Although it is the stated policy of the Corps of Engineers to integrate climate change adaptation planning and actions into the agency's missions, operations, programs, and projects, it is clear that more could be done in Corps project design, prioritization, and funding to ensure climate resilience. I am particularly disturbed by reports of President Trump's Office of Management and Budget (OMB) excising proposed Army Corps projects that mention climate change.

a. What climate models or data do the Corps currently use to inform adaptation planning? Please provide specifics, including dating of information or maps that are used.

Response: The Corps uses models and data from a variety of sources to inform adaptation planning, including: Sea Level Curve Calculator, Sea Level Tracker, Nonstationarity Detection Tool, and Climate Hydrology Assessment Tool.

This data was developed by a consortium including Bureau of Reclamation, National Oceanic and Atmospheric Administration, National Center for Atmospheric Research, and several universities and non-governmental organizations, and is available to the public on a website hosted by Lawrence Livermore National Laboratory.

Future updates will include additional indicators, through Water Year 2019, from data sources including the U.S. Forest Service, the U.S. Geological Service, the National Integrated Drought Information Service, and the U.S. Department of Agriculture.

b. How are climate considerations currently prioritized among other considerations (e.g. budget, timelines, and stakeholder engagement)?

Response: Climate considerations are part of the planning process, which includes identification of the problem, constraints and opportunities.

- c. Are climate metrics included alongside or do they overlap with other metrics used by the Corps (e.g. rainfall, sea level, etc.)?

Response: Climate metrics are used to describe the physical environment, both observed, current, and reasonably foreseeable future conditions, just as other physical data are used.

- d. How has Congressional appropriation of construction funding impacted the Corps' ability to conduct preventive work that promotes climate resilience?

Response: The Corps' ability to conduct preventive work that promotes climate resilience is subject to the same construction funding impacts due to Congressional appropriation of construction funding as any other project.

- e. What needs to be done to facilitate funding of resilient projects?

Response: All new Civil Works construction projects are formulated to be resilient.

- f. What are the specific projects that have been blocked by the OMB for including climate change or climate metrics, and what are the potential impacts and costs of not conducting those projects?

Response: To my knowledge, no specific Corps projects have been blocked by the OMB for including climate change or climate metrics.

- g. How have executive orders regarding federal agencies' climate priorities (EO 13834 replacing EO 13693) affected the Corps of Engineers policies?

Response: No effects from EO 13834 have been noted.

Senator Sullivan:

- 22. Lowell Creek Tunnel has been identified as the number one High Hazard Flood Risk in the State of Alaska. A flood control alternatives study is being conducted by the Corps and was slated for completion in 2019. Will the flood control alternatives study on Lowell Creek Tunnel be completed this year so a permanent solution can be found to the flooding that almost annually threatens the community?

Response: No. The study will not be completed this fiscal year and may require up to 22 additional months.

Senator Whitehouse:

- 23. I submitted a comment letter in February as part of the Corps' request for feedback as it began developing implementation guidance and improvements for provisions in the past

three WRDA bills. I asked for guidance to be developed for Sections 1208 (innovative materials and advanced technologies report), 1210 (report on debris removal), and 1218 (North Atlantic Division report on hurricane barriers and harbors of refuge). Does the Corps plan to develop implementation guidance on these reports?

Response: The Corps has reviewed Sections 1208, 1210, and 1218 and determined that there is no need for written guidance at this time. Should an issue develop in the future related to these reports, the Corps will assess the need for written guidance.

a. When does the Corps plan to begin work on these reports?

Response: The Section 1208 and 1210 reports are currently under development.

b. I have received word from Corps staff that these reports would constitute “new study starts” and require the same treatment as studies that lead to construction of new projects. I would argue that these are intended to be reports to Congress reflecting an analysis of internal Corps processes and assets. Can you please explain the distinction?

Response: The completion of the reports listed above will not require new study starts.

24. I have repeatedly asked for an explanation or briefing on the Corps’ Flood and Coastal Storm Damage Reduction business line in its annual budget requests. As you know, this budget line, which includes investigations, construction, and operations & maintenance work, separates its funding into “inland” and “coastal.” Over the past ten years, the Corps has spent between 19 (FY 2011) and 120 (FY2017) times more on inland versus coastal funding. In the Corps’ FY20 budget request, the ratio is better at 13:1 for inland versus coastal dollars. The FY19 Energy and Water funding bill included a requirement for the Corps to submit a report to Congress within 180 days outlining every project and the level of funding for inland and coastal projects under the Flood and Coastal Storm Damage Reduction Business Line. That timeline expired on March 19. When can I expect this report?

Response: The report is under development.

25. Has the Corps utilized its enhanced debris removal authority from WRDA 2016, allowing it to remove debris adjacent to navigation channels and for the purpose of recreation in addition to navigation in any location?

Response: No, the Corps doesn't utilize this authority for the purpose of recreation.

26. Is the Corps taking any proactive reviews, studies, or prioritization of projects or existing assets to understand the risks that climate change poses to them, especially along the coasts where sea level rise, storm surge, and other coastal flooding risks?

Response: The Corps incorporates observed and expected changing climate conditions into planning, design, construction, operations, and maintenance for all new projects in accordance with current policy and technical guidance.

27. Could I have your commitment to work with East Providence on finding a reasonable solution to the South Quay/G&W permitting issue? Though originally permitted as an industrial port, the area remains vacant and largely undeveloped. The city is hoping to convert the property into a space that supports economic growth and community development in the area. I hope we can come to an agreement among the city, property owner, Army Corps, and local stakeholder groups on a path forward that both protects the environment and supports East Providence's economy.

Response: Yes

Senator Wicker:

28. Did the U.S. Army Corps of Engineers consider 33 CFR 325.6(d) when making the decision to let the Regional General Permit for the Aviation Technology Park near the Trent Lott Airport in Jackson County, Mississippi, expire? If not, can you explain why that provision was deemed not to apply to this situation, and why the U.S. Army Corps of Engineers let the permit expire, given that it was previously extended in 2009 and 2014?

Response: Yes 33 CFR 325.6(d) was considered. The Clean Water Act authorizes the Army to issue general permits for a period of not more than five years. (33 USC 1344(e)(2)). U. S. Army Corps of Engineers (Corps) regulations further provide that no regional permits shall be issued for a period of more than five years. (33 CFR 325.2(e)(2)). District Commanders are only permitted to grant extensions under 33 CFR 325.6 for individual permits and not regional general permits. The regulations do not provide a mechanism to extend regional general permits beyond five years. Previous extensions were made in error and should not have been granted. Expiration of the regional general permit does not preclude potential applicants from developing the Aviation Technology Park. The Corps will make every effort to review any application that is submitted related to the Aviation Technology Park in an expeditious manner.

29. How many extension requests has the U.S. Army Corps of Engineers received to extend Regional General Permits throughout the U.S. since 2014, and how many of those have been denied? Please provide a list of the permits that qualify.

Response: Any request extending the life of an RGP beyond five years would have been inappropriate.

30. What is the U.S. Army Corps of Engineers doing to help the permittee for the Aviation Technology Park near the Trent Lott Airport in Jackson County, Mississippi, regain authorization for the project?

Response: The Corps plans to meet with the Jackson County Economic Development Foundation and Jackson County Airport Authority on May 17th and discuss the best path forward.

31. How will the U.S. Army Corps of Engineers move the projects authorized by Section 1157 of P.L. 114-322 forward to completion?

Response: Eligible projects will be considered for future funding along with other programs, projects, and activities across the Nation competing for the available Federal resources.

Senator BARRASSO. Thank you very much, Assistant Secretary James.

Now, General Spellmon.

**STATEMENT OF MAJOR GENERAL SCOTT SPELLMON, DEPUTY
COMMANDING GENERAL, CIVIL AND EMERGENCY OPER-
ATIONS, U.S. ARMY CORPS OF ENGINEERS, CIVIL WORKS**

General SPELLMON. Sir, good morning, Mr. Chairman and Members of the Committee. Thank you for the opportunity to speak with you today about America's Water Infrastructure Act of 2018, Corps execution of the Civil Works Program, and our ongoing flood fights across the Nation.

Again, my name is Major General Scott Spellmon. I am the Corps' Deputy Commanding General for Civil Works and Emergency Operations.

To begin, the Corps would also like to acknowledge the widespread devastation and serious impacts this spring's flooding is creating for many people across the Country. The Assistant Secretary and I have witnessed many of these impacts firsthand during our visits to the field. Throughout, Corps personnel have been working tirelessly to help mitigate the effects of these events by providing assistance to States and local communities, and we will continue to do so for the foreseeable future.

Like Secretary James stated, this year's flood season is challenging many Federal and State agencies, as well as local communities. At our highest point, there were over 400 river gages indicating flood stage across the Country and over 183 reported ice jams on our Nation's rivers. In the Ohio River Valley, this past fall and winter were the wettest on record in the past 124 years, and we have seen record reservoir levels in our Cumberland River projects.

Our Mississippi Valley Division has been flood fighting on the Lower Mississippi River for the past 200 days, and that will continue for at least the next several weeks. Just this week, flood stages on the Upper Mississippi River reached record levels, impacting communities in Illinois, Iowa, and Missouri.

In North Dakota, the Red River of the North presented several challenges north of Fargo, with Corps reservoirs again reaching full capacity. In Colorado, we are seeing near record amounts of mountain snowpack, as well as in California, where snowpack exceeds 160 percent of average in portions of the Sierra Nevada Mountains.

Additionally, significant weather systems have been coming onshore along the West Coast, causing major flooding along the Russian River, north of San Francisco, as well as in the Willamette and Rogue River basins in Oregon. In many of these watersheds, Corps dams and reservoirs have prevented significant flooding downstream of those projects, averting millions of dollars in property damage, as well as saving countless lives.

On the Missouri River, the flood event that began on March 13th was a combination of rainfall, warmer temperatures, and rapid snow melt, all on top of saturated and frozen soil. This condition covered a large area, including central and western Nebraska, southeastern South Dakota, western Iowa, and portions of northern Missouri and Kansas. The ensuing runoff drained into uncontrolled

tributaries that were already subject to ice jam conditions. This combination of events led to record discharges on a number of rivers where we reached major flood stage in less than 24 to 48 hours.

Today I want to assure the Committee that the Corps' No. 1 priority in all of its operations remains life and public safety as we work to address the many flooding challenges across the Country.

We also want to thank this Committee and the Congress for the authorities and flexibilities it has provided the Corps to address these and many other challenges. These tools, accompanied with record levels of appropriation for the Civil Works Program, is making a positive difference.

You may have heard our Chief of Engineers speak to ongoing efforts to revolutionize the way we do business as an enterprise. The authorities provided by this Committee continue to enable this initiative. We are working to modernize the traditional delivery of the Civil Works Program by utilizing innovative tools to accelerate project delivery, explore alternative financing approaches, and streamlining internal processes to improve permitting and regulatory reform.

We recently completed an internal survey of our 43 districts to garner their initial feedback on project delivery given the support provided by the Administration, Congress, and our own internal initiatives. The early results of this survey are impressive. Sixteen districts reported a combined 200 months of scheduled savings across numerous projects. That is 17 years of time shaved off of project schedules. They also reported millions of dollars in cost savings attributed to innovation, risk-informed decisionmaking, among many other initiatives.

In the regulatory program we continue to streamline our permit processes. Where modifications to existing Corps structures are concerned, we have reduced pending Section 408 permission requests as much as 50 percent.

I look forward to highlighting these improvements to our project delivery during our session today and I would welcome any comments or questions that you may have. Thank you.

Senate Committee on Environment and Public Works
Hearing entitled, “Oversight Hearing on the U.S. Army Corps of Engineers’ Civil Works Program”
May 8, 2019
Questions for the Record for General Spellmon

Chairman Barrasso:

1. The American Society of Civil Engineers indicates levees across the country protect an estimated \$1.3 trillion dollars in property. It gave the nation’s levees a “D” grade in its 2017 infrastructure report card. The extensive flood damage this spring in the Midwest resulting from multiple levee breaches illustrates the importance of having safe and structurally sound levees. This committee authorized a national levee safety program as part of the Water Resources Reform and Development Act of 2014 and extended that authorization until 2023 in America’s Water Infrastructure Act of 2018 (AWIA). What has the Corps done to implement this program for both federal and non-federal levees?

Response: The FY 2020 Budget includes \$53.7 million for programmatic levee safety activities by the Corps. The Corps would use some of this funding to continue its inventory and review of levees for the National Levee Database, including risk screenings of levee systems. With this funding, the Corps also would develop and update its levee safety policies and risk assessment methodology, develop its technical competencies, work with other Federal agencies on a common set of guidelines for the safety of their levees, and generally to coordinate with FEMA and other stakeholders. In addition, the Corps would provide technical assistance and other information to communities and states that will enable them to better understand and manage the flood risks – to people, the economy, and the environment – associated with their levee systems.

Since 2014, the Corps has been developing some of the technical and communications building blocks necessary for an effective National Levee Safety Program. The Corps and the Federal Emergency Management Agency (FEMA) also are working together to better align their respective levee-related agency programs to improve the sharing of condition and risk information and to improve communication of risk to communities in which both agencies conduct activities.

2. Section 1131 of AWIA made the ice jams prevention and mitigation pilot program from the Water Infrastructure Improvements for the Nation Act permanent and increased the number of eligible projects. As you know, ice jams, which result from the breakup of ice in rivers during spring melting, can cause significant damage to communities in my state in towns like Worland and Greybull. Can you update us on the progress the Corps is making in implementing this program?

Response: While the Corps has not used the Section 1131 authority, the Corps has used the Section 205, Continuing Authorities Program authority to execute two projects demonstrating ice jam technologies.

3. Section 1203 of AWIA directs the Corps to expedite flood and drought monitoring activities in the Upper Missouri River Basin, including additional stream gages, which were originally authorized in 2014. This is critical to the safety of communities in Upper Missouri River Basin. What actions does the Corps plan to take in fiscal years 2019 and 2020 to carry out this monitoring?

Response: The FY 2020 Budget includes \$3 million for new and replacement stream gaging equipment on the Missouri, Mississippi, and Ohio River systems. FY 2019 funds includes an update to the 2013 recommendation to include current soil moisture and soil moisture instrumentation costs; site locations; a data management process; affected stakeholders; and end products in the monitoring process.

4. Water supply and storage is crucial for farmers and ranchers in the West. Without it, those working the land find it almost impossible to sustain their livelihoods. This committee has heard testimony regarding the importance of removing chronic sediment buildup behind dams and in reservoirs in order to increase storage capacity. Congress responded by enacting section 1134 of AWIA. It prioritizes the development and implementation of sediment management plans for reservoirs within the Missouri River Basin, in partnership with the Secretary of Interior. What steps is the Corps taking to implement this section to ensure adequate capacity for water supply is retained?

Response: Outside of local interest at Gavins Point Dam along the Missouri River to discuss the potential for a sediment removal project, the Corps has not received any formal requests for implementation of sediment management plans on the Missouri River.

Ranking Member Carper:

5. Section 1149(c) of WRDA 2018 establishes important, new requirements for the Corps to consider the use of natural infrastructure solutions, if they are practicable. I am concerned that the Corps does not appear to recognize the significance of this new requirement since your recently released implementation guidance for this provision merely states that the Corps “is already implementing” this requirement.

The intent of the provision was for the Corps to show its work when it considers these options, because there is concern that this is not happening. How does the Corps intend to demonstrate to this Committee that the Corps is meaningfully considering natural infrastructure in every project where it makes sense?

Response: The Army issued implementation guidance for WRDA 2018, Section 1149 in April 2019 directing the Corps to consider natural infrastructure alternatives alone or in conjunction with traditional alternatives during feasibility planning for flood risk management or hurricane and storm damage risk reduction when practicable. This guidance builds on the Corps’ substantive history of using natural and nature based features, including beaches, dunes, wetlands, and restoration of the environment in its

formulation, evaluation, and recommendations for new projects where those features, alone or in combination, are technically feasible, environmentally sound, and cost-effective. In addition, the Corps has actively championed further dissemination of these practices through informational sessions on the use of natural and nature based features, with the intent of improving the capabilities of project delivery teams to consider these features.

6. I am very concerned that after the Corps prioritizes projects, the Office of Management and Budget (OMB) applies its own cost-benefit analysis that further restricts funding for these projects, virtually eliminating the Corps' ability to construct or move lifesaving initiatives especially in rural communities. Last Congress, the Senate and the House pushed for more transparency on the benefit-to-cost ratio used by the Corps and OMB to make federal investment decisions.

Congress is seeking information on the economic principles and analytical methodologies currently used by or applied to the Corps to formulate, evaluate, and budget for water resources development projects.

- a. How does the Corps evaluate and include benefits for National Defense, Regional Economic Development and/or Other Social Effects when justifying projects for federal investment?

Response: Regional Economic Development (RED) and Other Social Effects (OSE) are two of the four accounts that were established to facilitate evaluation and enumeration of effects of alternative plans. The remaining two accounts are National Economic Development and Environmental Quality. The RED account registers changes in the distribution of regional economic activity that result from each alternative plan. Evaluations of regional effects are to be carried out using nationally consistent projections of income, employment, output, and population. The OSE account registers plan effects from perspectives that are not reflected in the other accounts. Potential categories of effects in the OSE account can include the following: Urban and community impacts; life, health, and safety factors; displacement; long-term productivity; and energy requirements and energy conservation. National defense can be described in multiple accounts depending on the information available, but it is often qualitative. National Defense, RED, and OSE are used to describe the effects of alternatives on each of these categories which supports the decision on the recommended plan.

- b. Does the current formula/methodology for determining benefits to costs provide an unfair advantage to more urban areas of the country with higher property values compare to rural or agricultural communities?

Response: Benefit-cost analysis methods used by the Corps follow standard applied economic theory, and the methodology for application is the same regardless of where the analysis is applied and are not tied to any specific geographic place. The resulting economic metric that is used for budgetary decisions, the benefit-cost ratio (BCR), can

result in a concentration of construction in specific geographic areas. Urban areas tend to have greater flood damages / benefits compared to similar projects in more rural areas.

7. What challenges does the Corps face in budgeting, planning, constructing, operating and maintaining projects for extreme weather events that may be exacerbated by climate change? Are there new lessons that we have learned that need to be applied to future efforts?

Response: The primary challenge is describing climate preparedness and resilience measures in a comprehensive and quantitative manner and identifying the appropriate level of investment today in adaptation measures needed far into the future. Lessons learned from our adaptation pilot projects led to improved methods and approaches, and also identified knowledge, policy, and technical guidance gaps.

8. Under President Trump's first actions in 2017, the President cut funding for the "Response to Climate Change at Corps Projects." The program developed and implemented practical and cost-effective approaches and policies to reduce vulnerabilities already being experienced at our Nation's water infrastructure. What was the rationale for cutting funding to this program since it was mitigating impacts already occurring at projects as a result from climate change and variability?

Response: Mitigation of impacts at projects as a result of climate change and variability is considered for funding during budget development for each individual project in lieu of being funded from the Response to Climate Change at Corps Projects remaining item. Providing funding to specific projects allows greater transparency and tracking of funding.

9. On February 9, 2018, Congress passed the Supplemental Appropriations for Disaster Relief Requirements Act, 2018 providing over \$17 billion to the Corps.

- a. How much of the \$17 billion remains unobligated now that 15 months have passed after the bill was enacted?

Response: As of March 30, 2019, \$16.8 billion remains unobligated.

- b. Why do such large unobligated balances remaining?

Response: The majority of the projects that are being funded through the Supplemental Appropriations for Disaster Relief Requirements Act of 2018 are in the Preconstruction Engineering and Design phase. The Army anticipates the obligation rates for the construction account to substantially increase in the near future with scheduled construction contract award-activities (40 scheduled in FY 2019 and 87 in FY 2020).

- c. What are the main issues with obligating funds in construction or making emergency repairs on projects?

Response: Completion of Preconstruction Engineering and Design, acquisition of required real estate, and utility relocations are the primary tasks being completed for the approved construction and emergency repair projects.

- d. After the Corps made its initial recommendations, how long did it take for the Administration, to determine what projects would receive funding under the supplemental appropriations? Please address for both short term repairs and long term construction.

Response: The initial list of short-term repair projects was published April 30, 2018 and identified 31 projects that would use \$360 million of the \$608 million provided in the O&M account to address short-term repairs. A second list was published May 21, 2018 that identified how \$424 million of the \$810 million in the FCCE account would be used to address short-term repairs at 48 projects. The complete plan to use the balance of the funding was published on July 5, 2018. The biggest challenge the Corps faced in determining how to use these funds, especially for short-term repairs, was gathering the appropriate level of information from the field on the damages incurred and developing defensible estimates of the needed repairs. As a result, there have been a number of changes to the published list.

- e. What can Congress do to expedite the obligation of these funds?

Response: The Corps is working as efficiently and effectively as possible to obligate all funds.

10. Funding for the Corps' Regulatory program has remained flat for many years. In fact, when considering inflation, the program receives a decline in funding on an annual basis. This is concerning given the need for the Corps to expeditiously, but thoroughly, do its regulatory obligations. Is an annual appropriation of \$200 million enough to maintain the integrity of the Corps' regulation of the Clean Water Act when the number and complexity of permits continue to increase?

Response: The funding provided in the President's Budget is sufficient to efficiently and effectively manage the Regulatory Program.

11. Would you please provide an update on the number of Chief's Reports or other major decision documents expected to be completed this fiscal year? What is the status of the 2019 Report to Congress on Future Water Resources Development? Could you also please provide an update on the timeline for the next round of the Sec. 7001 process?

Response: The table below summarizes the completed and anticipated Chief's Reports for FY2019.

Project Name	Project Purpose	Date
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CHIEF'S REPORTS		
Little Colorado River at Winslow, Navajo County, Arizona	Flood and Storm Damage Reduction	14-Dec-2018 (actual)
Delta Islands and Levees, California	Ecosystem Restoration	18-Dec-2018 (actual)
Pawcatuck River Coastal Storm Risk Management, Rhode island	Flood and Storm Damage Reduction	19-Dec-2018 (actual)
Anacostia Watershed Restoration, Prince George's County, Maryland	Aquatic Ecosystem Restoration	19-Dec-2018 (actual)
City of Norfolk, Virginia	Flood and Storm Damage Reduction	05-Feb-2019 (actual)
Souris River Basin Flood Risk Management, Bottineau, McHenry, Renville, and Ward Counties, North Dakota	Flood and Storm Damage Reduction	16-Apr-2019 (actual)
The Great Lakes and Mississippi River Interbasin Study - Brandon Road, Will County, Illinois	Aquatic Ecosystem Restoration	May-2019
Yuba River Ecosystem Restoration, California	Aquatic Ecosystem Restoration	July-2019
South Platte River and Tributaries, Adams and Denver Counties, Colorado	Aquatic Ecosystem Restoration	July-2019
Delaware River Dredged Material Utilization, Delaware	Flood and Storm Damage Reduction	May-2019
Rio Grande, Environmental Management Program, CO, NM, TX, Sandia Pueblo to Isleta Pueblo, New Mexico Ecosystem Restoration	Aquatic Ecosystem Restoration	July-2019
Whittier Breakwater, Alaska	Navigation	July-2019
Lowell Creek Tunnel Flood Diversion, Alaska	Flood and Storm Damage Reduction	August-2019
Matagorda Ship Channel (Widening and Deepening), Texas	Navigation	August-2019
Fire Island to Montauk Point, New York	Flood and Storm Damage Reduction	August-2019
Unalaska (Dutch) Harbor, Alaska	Navigation	August-2019

East Rockaway Inlet to Rockaway Inlet and Jamaica Bay, Atlantic Coast of New York	Flood and Storm Damage Reduction	August-2019
Sacramento River Bank Protection Project, California	Flood and Storm Damage Reduction	August-2019
Jefferson County Ecosystem Restoration, Jefferson County, Texas	Ecosystem Restoration	August-2019
Ecorse Creek, Michigan	Flood and Storm Damage Reduction	September-2019
Northwest El Paso, Texas	Flood and Storm Damage Reduction	September-2019
Inner Harbor Navigation Canal Lock, Louisiana	Navigation	September-2019
Delaware River Dredge Material Utilization, NJ	Navigation	September-2019
GIWW Brazos River Flood Gates & Colorado River Locks, Texas	Navigation	September-2019
Savan Gut Phase II, St. Thomas, US Virgin Islands	Flood and Storm Damage Reduction	September-2019
DIRECTOR'S REPORTS		
Dry Creek, Sonoma County, California	Aquatic Ecosystem Restoration	29-Mar-2019 (actual)
Kenai River Bluff Erosion, Alaska	Flood and Storm Damage Reduction	10-Apr-2019 (actual)
Passaic River Tidal Protection Area (P.L. 113-2)	Flood and Storm Damage Reduction	June-2019
DISPOSITION STUDIES		
Willamette Falls Locks, Willamette River, Oregon	Navigation	July-2019
WATERSHED STUDIES		
Minnesota River Watershed Study, MN & SD (Minnesota River Authority)		August-2019
West Maui Watershed, Maui, Hawaii		August-2019
Merrimack River Watershed Study, New Hampshire & Maine		July-2019
Red River of the North Basin, ND, MN, SD & Manitoba, Canada		November-2018

The 2019 Report to Congress on Future Water Resources Development is being finalized and is scheduled to be transmitted to Congress in June 2019. A Federal Register Notice requesting proposals from non-Federal interests for the 2020 Report to Congress on Future Water Resources Development was posted in April 2019. Proposals will be collected through an online server for 120 days, closing in August 2019. The proposals

will then be evaluated based on the criteria provided in the Water Resources Reform Development Act of 2014, Section 7001, as amended. The analysis of each proposal will be provided to the ASA(CW) for consideration and final determination. The anticipated date to provide the 2020 report to Congress is February 1, 2020.

12. Last month, the GAO issued a 122-page report highlighting the need for federal agencies to take additional actions to conduct meaningful consultation. The Corps was one of the 21 federal agencies featured in the report.

The report noted that the Corps' Civil Works program adhered to regulations promulgated consistent with Section 106 of the National Historic Preservation Act (NHPA). The Corps' Regulatory Program, which relies on different regulations dating back to 1990, did not. Furthermore, the Fall 2018 Unified Agenda of Federal Regulatory and Deregulatory Actions noted that the Corps seeks to revise its regulations to conform to NHPA requirements.

Would you update the Committee on the status of the Corps' general efforts to improve tribal consultation, and more specifically, the Corps' efforts to update its Regulatory Program regulations to ensure NHPA compliance?

Response: The Army intends to fully comply with the GAO recommendation to update its tribal consultation policy to ensure that tribal input during coordination is documented and tribes are informed on how their input was used in the agency decision-making process.

The GAO report also highlighted some ongoing points of disagreement between the Corps and the ACHP, e.g. the definition of "undertaking" which the Corps interprets as the federal action but the ACHP interprets as the "overall project regardless of level federal involvement".

The Army maintains that the Corps Regulatory Program continues to fully comply with the NHPA. The Corps compliance occurs by utilizing not only its regulations at 33 CFR 325 Appendix C but also 2005 interim guidance which relies, in part on ACHP's regulations at 36 CFR 800, and 2007 interim guidance. These guidance documents were developed to ensure full compliance after the NHPA was amended and 36 CFR 800 was modified.

The Corps understands that reliance on multiple regulations, policies, and guidance documents to comply with Section 106 and consultations with Tribes can create uncertainty for tribes, the regulated public, stakeholders, and Corps staff. To improve clarity and predictability, the Corps is working with the ASA(CW) to update the Regulatory Program's regulations by codifying these guidance documents and policies and address the wide range of tribal consultation requirements.

13. The WINN Act of 2016 amended Section 203 of WRDA 2000 to expand the Tribal Partnership Program to allow the construction of water resource development projects on

Indian lands. Drought continues to plague much of the West and climate change has altered precipitation patterns, increasing flooding and decreasing available water supplies.

Has the Corps used this construction authority to build any new projects for Indian tribes, and has the Corps funded any studies or projects that deal with water supply assessments or planning activities under Section 203? If not, what is preventing the Corps from doing so?

Response: The FY 2020 Budget includes \$500,000 in the Investigations account under the Tribal Partnership Program. There are currently nine on-going feasibility studies, seven on-going watershed assessments, and two technical assistance activities with cost-sharing agreements signed between the Department of the Army and the non-Federal sponsor. The Corps has not yet completed a feasibility study under the Tribal Partnership Program that might recommend construction under this authority.

14. Regarding the Harbor Maintenance Trust Fund (HMTF), Section 2102 of WRRDA 14 provided definitions and a formula for equitable allocation of funds among different types of ports. Would you please explain why this provision has never been implemented?

Response: The Corps has consistently met the targets for emerging harbors and Great Lakes harbors. Expanded uses is traditionally a non-federal responsibility.

15. As Congress tries to make full use of the HMTF collections, it appears there are needs to update the formula to ensure there is equitable distribution for all of ports, no matter if they are high and moderate use, emerging harbors such as those on the Great Lakes, underserved, used for subsistence or are considered a donor or energy transfer port. What components does the Corps believe should be built into an HMTF formula?

Response: The Corps budget is performance based and focuses on highest performing projects with high economic, environmental, and public safety returns to the nation with the funds available.

Senator BARRASSO. Thank you very much for your testimony.
Now, Lynn Budd, Director of the Wyoming Office of Homeland Security.

**STATEMENT OF LYNN BUDD, DIRECTOR,
WYOMING OFFICE OF HOMELAND SECURITY**

Ms. BUDD. Good morning, Chairman Barrasso, Minority Ranking Member Carper, and distinguished members of the Committee. My name is Lynn Budd. I am the Director of the Wyoming Office of Homeland Security. We are the homeland security and emergency management agency for the State of Wyoming. We support local jurisdictions in times of emergency and disaster through the coordination of State agency resources and facilitate assistance from our Federal partners.

In Wyoming, the most frequent natural disaster events that we face are flooding due to ice jams, spring runoff, and flash flooding. Less frequently, tornadoes, landslides, and wildfires.

Wyoming works with three Corps districts: Omaha, Sacramento, and Walla Walla. As a headwater State, our water passes through approximately two-thirds of the landmass of the lower 48 States, and we take our stewardship of these waters very seriously.

When we think about spring flooding, our focus starts in October as we begin to monitor snowpack levels across the State. In addition to monitoring snowpack levels, we closely monitor seasonal water weather developments in coordination with Jim Fahey, our NOAA hydrologist, who tailors a flood forecasting outlook for Wyoming. This is an annual cycle for us. Stream gauge data is critical to flood forecasting and flood prediction, life safety, and property protection.

The Committee's inclusion of Section 1203(f) within AWIA directed expedited activities to restore and maintain existing mid-and high-level elevation snowpack monitoring sites operated under the SNOTEL program, which is very important to our State. Not only do these SNOTELs and stream gauges need to be restored and maintained, but additional equipment should be deployed. For example, in Teton County this year, above 8,000 feet, where the SNOTELs are, the snowpack was reading at just above normal or at normal, compared to the valley floor, which was at about 300 percent of normal level. This will create saturated soils with no room for spring runoff.

This situation makes it more difficult to predict the level of possible flooding. Stream gauge funding at the Federal level needs to be rethought. A clearer funding mission and expedited implementation would aid all users of this critical data.

Comparatively speaking, 2019's potential flood season for Wyoming is not as severe as previous years. We are still monitoring additional snow accumulation, temperature forecasts, and any anticipated rain on snow events throughout the summer.

In the past decade we have worked closely with the Army Corps in more than 25 technical and direct assistance projects through the State in all 23 counties, including the Wind River Reservation. As with any relationship, there are always opportunities for improvement. We can identify three areas for improvement with our relationship with the Corps.

First, the Snake River System. Better communication and stakeholder engagement at the local level when evaluating water management strategies for Jackson Lake in the spring and early summer is very important. The potential for flooding on the Snake River can create fear in residents and property owners downstream. There is a lack of public confidence that the Corps considers the impact of downstream tributaries when calculating Jackson Lake releases into the Snake River.

Second, Glendo Reservoir. We support the implementation of Forecast Informed Reservoir Operations, or FIRO, in Wyoming, as demonstrated at the Lake Mendocino Reservoir in California. Our arid western climate water management is the key.

Last, Big Horn Reservoir. Implementation of a regional sedimentation management plan in the Big Horn Reservoir will be very beneficial to ensure the restoration of active water capacity as originally designed. While we have highlighted these three actions, the application of these solutions combined could receive exponential benefits for the State.

Last, funding the fight against aquatic invasive species. With our Office's dual mission of emergency management and homeland security, we have the mission of critical infrastructure protection, specifically the water sector. Wyoming sits as the headwaters State of the Nation. Rivers flow downstream to the Missouri, Platte, Mississippi, Colorado, Snake, and Columbia watersheds.

Quagga and zebra mussels represent the most immediate and eminent AIS threat to Wyoming. We do not have those in our State yet, but Colorado, Utah, South Dakota, and Nebraska do. These mussels can choke off the water supply pipelines for industry and municipalities and have other major economic impacts for our State and others.

Wyoming's AIS prevention program started in 2010 with public outreach, watercraft inspections, and monitoring of waters. Every water user in Wyoming and every other State that benefits from Wyoming waters will be impacted if these species make their way to the Wyoming water system. Stable funding for these prevention programs is imperative.

Overall, Wyoming has a very strong relationship with the Corps. We look forward to continuing the development of new projects in order to better protect the residents of Wyoming and their property.

[The prepared statement of Ms. Budd follows:]

**Testimony of Lynn Budd
Director, Wyoming Office of Homeland Security**

**United States Senate Committee on Environment and Public Works Hearing
May 8, 2019**

Good morning Chairman Barrasso, Minority Ranking Member Carper, and distinguished members of the committee. Thank you for the opportunity to speak to you today about Wyoming's history with flooding, Wyoming's relationship with the U.S. Army Corps of Engineers, and your committee's work including the ongoing battle against aquatic invasive species.

My name is Lynn Budd and I am the Director of the Wyoming Office of Homeland Security. We are the homeland security and emergency management agency for the State of Wyoming and the State Administrative Agent (SAA) for preparedness, mitigation and recovery grants.

We support local jurisdictions in times of emergency and disaster through the coordination of state agency resources and facilitate assistance from our federal partners. In Wyoming, the most frequent natural disaster events that we face are flooding due to ice jams, spring runoff and flash flooding; less frequently, tornados, landslides and wildfires.

Today, our primary focus is to talk about our relationships with our federal partners, specifically the U.S. Army Corps of Engineers (Corps) as it pertains to flooding and other water related issues throughout our state.

Wyoming and the Corps; Spring Flooding Preparations

Wyoming works with three Corps districts, Omaha, Sacramento, and Walla Walla. As a headwater state our water passes through approximately two-thirds of the landmass of the lower 48 states and we take our stewardship of these waters very seriously. The Corps has been a valuable partner in this effort. In addition to the Corps we work closely with our partners at Natural Resource Conservation Service (NRCS), National Weather Service (NWS) meteorologists, Bureau of Reclamation (BOR), along with state and local partners.

When we think about spring flooding our focus starts in October as we begin monitoring snowpack levels across the state, the beginning of the water year. In addition to monitoring snowpack levels, we closely monitor seasonal weather developments as they develop throughout the year. Jim Fahey, National Oceanic and Atmospheric Administration (NOAA) hydrologist with NWS Riverton, tailors a flood forecasting outlook for Wyoming, and we hold a March flood planning summit with state and local partners to evaluate areas for enhanced preparations and possible state and federal support that will be translated into actionable plans.

Stream gauge data are critical to flood forecasting and flood prediction. Life safety and property protection decision-making relies heavily upon this critical information along with the immensely valuable scientific information which these gauges provide to both the public and private sectors.

The committee's inclusion of Section 1203(f) within America's Water Infrastructure Act (AWIA) directing expedited activities under Section 4003(a) of the Water Resources Reform and Development Act of 2014 is very timely.

This section calls for "restoring and maintaining existing mid and high elevation snowpack monitoring sites operated under the SNOTEL program of the Natural Resource Conservation Service; and operating streamflow gauges and related interpretive studies in the Upper Missouri River Basin..."

Not only do these SNOTELs and stream gauges need to be restored and maintained but additional equipment should be deployed. For example, in Teton County this winter there has been record snowfall on the valley floor. The SNOTELs used to gauge the snowpack are high in the Teton range (greater than 8,000 feet) and have been reading at or just above normal. However, on the valley floor where there are no SNOTELs, they have had an extraordinary winter with snowpack at an estimated 300% of normal level; areas are holding three to four feet of snow where there is normally one foot.

This situation makes it more difficult to predict the level of possible flooding. With a large amount of snowpack at lower elevations the soil will become saturated prior to snowmelt runoff and could exacerbate the effects of additional water coming from snowmelt in the high country. Additional stream gauges, coupled with additional SNOTELs, would assist local and state decision makers in flood potential prediction. Engagement of local expertise may also be critical in assessing and predicting associated events such as mass wasting or excessive soil movement.

Lack of funding curtails the establishment and maintenance of these networks at all levels of the federal, state, and local government. The network provides great information but is a mosaic of federal, state, and local contributors. Funding for maintaining the existing network is vital along with the expansion of the existing capabilities to include a more robust watershed assessment. Stream gauge funding at the federal level needs to be rethought. A clearer funding mission and expedited implementation would aid all users of this critical data.

Comparatively speaking the 2019 potential flood season is not set to be as severe as previous years according to the data to date. While we are early on in our flood snowmelt season, we are still monitoring additional snow accumulation, temperature forecasts, and any anticipated rain on snow events. This variability in the weather, including early spring thunderstorms causing flash flooding makes flood potential prediction quite challenging. Spring snowmelt flooding can occur from mid-April to July so continued funding and monitoring is key.

In the past decade we have worked closely with the Corps on more than 25 Technical and Direct Assistance projects throughout the state in all 23 counties including the Wind River Reservation. The Corps also works directly with local communities on civil works projects. These projects have included flood control measures before and during an event. They have also assisted with landslide and ice jam mitigation projects.

We frequently hear from our local partners their appreciation for the Corps' support and contribution to their communities; for example:

- the operation and maintenance of the federal levy projects in Teton county;
- the removal of Goose Island in the Big Horn River at Worland;
- ice jam flood fight assistance in the town of Greybull;
- Silver Jackets flood risk assessment for the town of Hudson;
- Section 205 Flood Risk Feasibility study on the Middle Fork of the Popo Agie River for the town of Lander;
- geotechnical and hydraulic flood risk assistance to the Boondoggle landslide on the upper Wind River;
- multiple deployments on the upper North Platte River at Boozer Creek in Saratoga; and
- Porcupine landslide on the Greys River in Lincoln County.

Opportunities for Improvement

When we think about opportunities for improved relationships between the Corps and Wyoming for addressing life safety issues, agricultural impacts and recreational/tourism needs, we can identify three possible areas for improvement.

Snake River System

Better communication may be utilized to assist local officials and residents in their understanding of the methodology used when evaluating water management strategies for Jackson Lake in the spring and early summer. It is worth noting that the availability of additional SNOTEL and stream gauge data is also a form of communication as the public has an avenue to inform themselves on current conditions.

While the releases are controlled by the BOR, when the reservoir level reaches the flood pool stage the water release is directed by the Corps. These triggers are defined within the dam's water control manual and provide no room for deviation. The potential for flooding of the Snake River can create fear in residents and property owners downstream.

In high flow years, there is a lack of public confidence that the Corps considers the impact of downstream tributaries when calculating Jackson Lake releases into the Snake River. This perception causes concern for life safety due to the possibility of levee and dike failure.

More effective communication could make a significant difference in the community's understanding of the natural spring flood cycle and will provide the Corps opportunities to build stronger relationships and confidence within the community.

Glendo Reservoir

We support the implementation of Forecast Informed Reservoir Operations (FIRO) in Wyoming as demonstrated at the Lake Mendocino reservoir in California (Attachment A). FIRO is a novel approach to reservoir operations, where data from watershed monitoring and modern weather and water

forecasting are used to help water managers selectively retain or release water from reservoirs in a manner that reflects current and forecasted conditions. With varying snow accumulations from year to year, use of FIRO will allow for more flexibility of storage and control of the reservoir water release. This allows for the holding of water when the downstream tributaries are already at capacity, and the conservation of water to extend the irrigation season for agricultural purposes and recreation with a constant focus on life safety priorities.

Big Horn Reservoir

Implementation of a regional sedimentation management plan in the Big Horn Reservoir will be very beneficial, as described in Section 1134 of the AWIA of 2018.

Recognizing sediment is having an impact on the capacity of this and other reservoirs, the removal of sediment ensures the restoration of active water capacity as originally designed. As reservoirs fill with sediment, the ability to successfully manage regular inflows as well as spring run-off is impaired creating impacts to life-safety, agriculture production and recreational opportunities.

As we identified the three actions outlined above, we recognize each can be implemented as described. However, when the application of these solutions are combined exponential benefits can be realized.

Funding the Fight Against Aquatic Invasive Species

With our office's dual mission of emergency management and homeland security, the protection of our water quality systems come to the forefront. Within our mission of critical infrastructure protection, including all 16 sectors, the Water and Wastewater sector is one of the top priorities in the State of Wyoming. The committee's visionary foresight to address aquatic invasive species in Section 1170 of the AWIA is much appreciated by the State of Wyoming.

Wyoming sits at the headwaters of the nation. Wyoming rivers flow downstream to the Missouri, Platte, Mississippi, Colorado, Snake and Columbia watersheds. Sitting at the headwaters of the nation's waterways, aquatic organisms that find their way into Wyoming waters would have a downstream ride to much of our nation. Given this geographic position, the exclusion of harmful aquatic species from Wyoming is important to more than half of the U.S. states and waterways.

Aquatic Invasive Species (AIS) are exotic, nonnative organisms can cause significant economic and biologic harm. Quagga and zebra mussels represent the most immediate and imminent AIS threat to Wyoming and are not yet in any Wyoming waters. However, these mussels are now found in Colorado, Utah, South Dakota, and Nebraska waters.

Impacts

AIS often attach to boats, equipment, and clothing used in the water, and can be easily transferred on these items from one body of water to another. Quagga and zebra mussels colonize in enormous numbers,

choking off water supply pipelines for industry and municipalities, fouling irrigation canals and diversion screens, and resulting in lost angling and water-based recreational opportunities. Once established in connected waterways, there is no practical way to eradicate these invasive mussels.

Prevention

The Wyoming AIS prevention program started in 2010 with legislation to allow for the interdiction of watercraft and other water conveyances (primary vectors for zebra and quagga mussels) and the establishment of program personnel and budget. The program focuses on preventing the spread of AIS to and within Wyoming through public outreach, watercraft inspections, and monitoring of waters.

This has been a team effort utilizing volunteers, state employees from the Wyoming Game and Fish Department, Wyoming Department of Transportation and the Wyoming Department of Agriculture. In addition, our federal partners have been instrumental to this fight including U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation and the U.S. Forest Service.

Challenges

The threat of new invasive species is ever present and the likelihood of them reaching Wyoming increases every year. Every water user in Wyoming and every other state that benefits from Wyoming waters will be impacted if these species make their way to a Wyoming water system. Increased support and partnerships with other agencies will help to further strengthen the Wyoming AIS Program and prevent impacts to water delivery, recreation, and native species.

The Wyoming AIS program is currently funded largely by boaters, sportsmen and soft (no long-term commitment) dollars. In spite of Wyoming's commitment in manpower, we are falling short in our ability to finance this fight adequately. The realized costs if zebra or quagga mussels infest Wyoming water, the impact will go far beyond our state boundaries.

Your committee's work and the designation of funding for the AIS battle in the Upper Missouri Basin can greatly strengthen Wyoming's ability to successfully fight off the spread of AIS, build a more informed and active public, and protect the waters that reach across two thirds of the lower 48.

Overall, Wyoming has a very strong relationship with the Corps. We have many years of experience cooperatively working together to protect the safety Wyoming's communities through a variety of flood control measures and civil works projects. As with any relationship, there is always room for improvement. The opportunities that I have highlighted here today are representative of Wyoming's highest priorities for such improvement. We look forward to continuing the development of new projects in order to better protect the residents of Wyoming and their property and to best ensure our commitment to caring for our wide-open landscapes.

The Corps approves major deviation for Forecast Informed Reservoir Operations effort

By Carol Coleman January 26, 2019

In January 2019, The U.S. Army Corps of Engineers, South Pacific Division approved a major deviation that allows for Forecast Informed Reservoir Operations-developed tools and concepts to be tested this winter at the pilot reservoir Lake Mendocino in the Russian River valley in northern California.

This request will allow a maximum of 3.8 billion gallons of additional water, enough to supply approximately 97,000 people for a year, to be stored in Lake Mendocino during the winter rainy season to improve water supply reliability and environmental conditions in the Russian River while continuing to ensure flood management capacity of the reservoir.

"This is a major step along the way in defining how FIRO can be implemented," said Cary Talbot, a division chief at the U.S. Army Engineer Research and Development Center's Coastal and Hydraulics Laboratory and program manager for ERDC's FIRO effort. "The goal is to incorporate forecasting safely in water management and support an update to the Lake Mendocino water control manual."

FIRO is a proposed management strategy that uses data from watershed monitoring and modern weather and water forecasting to help water managers selectively retain or release water from reservoirs in a manner that reflects current and forecasted conditions. Since 2014, a large interagency group consisting of experts in civil engineering, hydrology, meteorology, biology, economics and climate from several federal, state and local agencies and universities has been investigating how weather forecast information can inform water management decisions such that a better balance between flood risk management, water supply and ecological concerns can be realized and safely put into practice.

"The Corps changed their policy in 2016 to allow for forecast information to be used in water management," said Talbot. "But while this policy change opened the door, it didn't spell out how this was to be done. That's what FIRO is doing, defining the how."

The deviation request was submitted on behalf of the Lake Mendocino FIRO Steering Committee. The committee was formed to explore methods for better balancing flood risk management and water supply needs. Representatives from ERDC, Corps Districts, Sonoma Water, the Center for Western Weather and Water Extremes at Scripps Institution of Oceanography, the National Oceanic and Atmospheric Administration, the U.S. Geologic Survey, the U.S. Bureau of Reclamation and the California Department of Water Resources are participating in the committee.

"This is a unique situation," said Talbot. "There is daily interaction between all participating organizations generating multiple perspectives. From day one the research effort has been designed with the water management operators at the table."

Last year, members of the group filed the request to allow a 10 percent deviation from established flood risk management operating rules, which was supported by a Preliminary Viability Assessment that contained detailed modeling, analysis and scientific research, and demonstrated that FIRO can provide water managers the information they need, with adequate lead time, to selectively retain or release water from reservoirs.

"When it comes right down to it, the goal is to inform the reservoir operator to make better decisions to release or retain water," said Talbot. "FIRO has more flexibility. The more data they have, the better."

Lake Mendocino, located near Ukiah, California, is operated jointly by the Corps and Sonoma Water. The Corps manages the flood risk management operations at the reservoir while Sonoma Water manages the water stored expressly for water supply. Following a severe drought in California, Lake Mendocino was chosen as a pilot reservoir when Congress asked the Corps to conduct a research project investigating improving forecast capabilities to help with water management.

"The ability to leverage newer technology and knowledge base as it pertains to weather forecast enhances our ability to safely deliver the multiple missions at Lake Mendocino," said Nick Malasavage, chief of Operations and Readiness Division for the U.S. Army Corps of Engineers San Francisco District. "In particular, the steps we are now taking to further develop and incrementally implement the FIRO concept adds an additional tool to maintain our primary responsibilities for flood risk management."

With the success of the effort in Lake Mendocino, the committee hopes to effect change and put FIRO into action and expand to other areas of the country.

"Each reservoir is different and must be looked at individually," said Talbot. "We don't get to do a lot of research in water operations as most of the tools already in place are working well. The FIRO effort allows for investing into next generation water management tools and investigating how those tools might inform water managers to make better water management decisions."

Lynn Budd
Director



Mark Gordon
Governor

June 6, 2019

Senator John Barrasso, M.D., Chairman
Senator Thomas R. Carper, Ranking Member
Senate Committee on Environment and Public Works
410 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senators Barrasso and Carper,

Per your letter of May 23, 2019, please find below my response to the question for the record:

1. Information from snowpack monitoring helps people in Wyoming and across the West evaluate their flood risks. Even with a good flood forecast, one unexpected storm can quickly change the flood threat. Section 1203 of America's Water Infrastructure Act directs the Corps to expedite flood and drought monitoring activities in the Upper Missouri River Basin, including additional stream gauges, which were originally authorized in 2014. How would having additional stream gauges better help Wyoming prepare communities for droughts and floods?

A robust network of stream gauges provides vital information to the scientific water community which includes those highly involved in water supply forecasting and runoff modeling such as the U.S. Geological Survey, U.S. Bureau of Reclamation, the Natural Resource Conservation Service, National Weather Service, and the U.S. Army Corps of Engineers, along with their respective state agencies.

Stream gauges provide the data collection that is key for forecasting and modeling for state planning and preparedness activities with regard specific flood events. Communities in Wyoming, often with limited resources, need as much time as possible to prepare for an unexpected storm, especially early spring storms whose effects can be multiplied with a rain on snow event. Any amount of additional warning as to the volume of water that may be headed their way would be beneficial to preparedness activities.

This is vital information for our missions of preparedness and response, but also complements mitigation and recovery actions. Communities and individuals that have accurate and timely information regarding a flood threat can better prepare, or mitigate the impact of a flooding event. This not only reduces the financial and psychological impact to the local community, but

can reduce the need for federal funding in the recovery process. Stream gauge data also provides excellent hydrologic information which informs flood models, flood mapping and improved flood risk reduction. On the ground mitigation projects can then be developed to reduce the consequences of flooding in the future. The Federal Emergency Management Agency (FEMA) is responsible for helping those communities and individuals recover from these types of events. If the community can be better prepared, the need for state and federal support may be reduced.

With regard to stream gauges and drought conditions, the data derived from stream gauges could assist scientists and in turn agricultural producers. However, according to NOAA's National Centers for Environmental Information, streamflow is only one of the indices that should be considered to get a complete picture of drought conditions.

Please let me know if I can be of further assistance.

Regards,



Lynn Budd, Director
Wyoming Office of Homeland Security

Senator BARRASSO. Thank you so much for that very useful testimony. We are grateful that you are here today with us. Thank you. Now, Chip Kline, the Chairman of the Coastal Protection and Restoration Authority.

STATEMENT OF KYLE R. "CHIP" KLINE, JR., CHAIRMAN, COASTAL PROTECTION AND RESTORATION AUTHORITY BOARD

Mr. KLINE. Thank you, Mr. Chairman and Ranking Member Carper, for the opportunity to testify today. My name is Chip Kline, and I have the honor of serving as Executive Assistant to Louisiana Governor John Bel Edwards for Coastal Activities and Chairman of the Coastal Protection and Restoration Authority Board.

My message today is simple. It is one you have heard before, and as recently as just last week from Senator Whitehouse: It is time for the Federal Government to wake up.

Louisiana is a flood-prone State, and a State that has lost close to 2,000 square miles of land since the 1930's. At the same time, we are a State that is home to vitally important assets and resources that provide value to this entire Nation.

In 2018, Congress provided \$1.4 billion to the Corps for projects in Louisiana to address flooding and hurricane protection. Unfortunately, as is often the case, while the need for these projects was identified many years ago, they were only funded for construction after our communities suffered the financial and disrupting challenges of a flood. This approach is painful, costly, and unsustainable. Here are two examples:

A Comite River Diverse project completed its Chief's Report 8 years after the flood of record in 1983. Construction funds were not appropriated until the area suffered another catastrophic event in 2016. In the case of the West Shore Hurricane Protection Project, the study phase began in 1971, but construction funding was not provided until 2018, 6 years after Hurricane Isaac flooded the communities the project would have protected.

Louisiana has been proud to offer a different approach through our Comprehensive Coastal Master Plan, a science-based plan that combines hurricane protection and coastal restoration into one mission and forces us to proactively address the impacts of flood risks, climate change, and a lack of sediment in our coastal marshes.

The single most effective hurricane protection project identified in our Master Plan is the Morganza to the Gulf Hurricane Protection System. It was authorized in 1992 and would protect 150,000 people across two parishes. It is a region of our State that is home to Port Fourchon, which services over 90 percent of the oil and gas rigs in the Gulf of Mexico, Louisiana Highway 1, a critical transportation corridor that gives the entire Country access to infrastructure that provides close to 20 percent of the Nation's oil and gas. This project would protect resources that are critical to the economic health of this Country. Yet, it has not received a single dime of construction funding from the Federal Government.

These examples are not unique and my message is not new, but here it is again: the Federal Government needs to fundamentally change how it funds hurricane protection and coastal restoration

projects in this Country. Yes, decisions to allocate funds need to be made in a principled manner, but the Federal Government's track record of constructing projects after a disaster strikes means there is a flaw in your process, a flaw that costs the taxpayers of this Country hundreds of billions of dollars more by waiting on natural disasters to happen.

We need the Federal Government to mimic Louisiana's proactive mindset in addressing hurricane protection and coastal restoration. In order for this to happen, the Corps needs to expand its vision for what its mission is and Congress needs to arm them with the resources to carry out that mission. Coastal restoration should be just as much of a priority as navigation and flood control.

The Mississippi River and its land building ability is literally our lifeline to addressing the crisis of coastal land loss. The Corps only manages the river as a navigation tool, rather than a navigation and restoration tool. Together, the Corps and Louisiana's Coastal Program can accomplish great things together and be a model for the Nation, but more resources are needed. Given the severity of the crisis we face in South Louisiana, a different approach is also needed.

Mr. Chairman, on behalf of the over 2 million people who call South Louisiana home, I implore this Administration and this Congress to wake up to what is happening in South Louisiana. Thank you very much.

[The prepared statement of Mr. Kline follows:]

Testimony of
Kyle R. "Chip" Kline, Jr.
Executive Assistant to the Governor of Louisiana for Coastal Activities

Before the
Senate Environment and Public Works Committee
Hearing on
"Oversight Hearing on the U.S. Army Corps of Engineers' Civil Works Program"

May 8, 2019

Chairman Barrasso, Ranking Member Carper and Members of the Committee, thank you for the opportunity to testify today on the U.S. Army Corps of Engineers' Civil Works Program. My name is Chip Kline and I have the honor of serving as Executive Assistant to Louisiana Governor John Bel Edwards for Coastal Activities and as Chairman of the Board for the State's Coastal Protection and Restoration Authority (CPRA).

CPRA is a first-in-the-nation state agency tasked with the development and implementation of a comprehensive plan to address coastal wetland loss, ecosystem restoration and hurricane protection. I have been asked to address the issues raised by the fluctuating funding levels made available by Congress to the Corps through the appropriations process, the effects of those variations in funding on the missions of the Corps, and to provide a state perspective. On behalf of the state of Louisiana, which serves as the frontline of protection for our nation's greatest energy resources, fisheries, ports, and trade activities, we urge Congress to meet the needs of the nation through full funding of the Corps. My message today is simple and it is one you heard last week from Rhode Island Senator Sheldon Whitehouse, "it is time for the federal government to wake up to what is going on in South Louisiana."

In 2018, Congress provided \$1.4 billion to the United States Army Corps of Engineers for disaster-related funding for projects and studies in Louisiana to address flooding. Unfortunately, as is often the case, the need for these projects was identified years ago but only matched with the funding to construct them *after* our communities suffered the financial and life-disrupting challenges of a flood. I am sure many of you have similar stories in your states as I do in mine. We are grateful that Congress provided the funding, but this approach is

painful, costly, and unsustainable, and as a result, the federal Government needs to fundamentally change how it funds hurricane protection, flood control, and coastal restoration projects in this country.

Two of the projects funded through the Bi-Partisan Budget Act of 2018 are big ticket items with the ability to reduce flooding for tens of thousands of Louisianans: they are the Comite River Diversion and the West Shore Lake Pontchartrain Hurricane Storm Damage Risk Reduction Projects. The Comite Diversion had a signed Chief's Report in August of 1991. Unfortunately, the flood of record for the area occurred in 1983. This flood covered 357,000 acres across six parishes and inundated 5,300 homes and 200 businesses. Despite this hard lesson learned, the project only received the necessary funding for completion after historic flooding hit in August of 2016, flooding which caused at least \$3.8 billion in residential property damage.ⁱ

The West Shore Lake Pontchartrain project was also provided with construction funding in 2018. It received a Chief's Report in 2016, but Congress first authorized the study for the project in 1971. Over 60,000 residents in the project area have had little to no hurricane protection all this time and in 2012, Hurricane Isaac flooded 7,000 homes and submerged Interstate 10 for several days slowing emergency response and disrupting commerce.ⁱⁱ

Louisiana is a flood-prone state. We recognize this. Louisiana is also home to vitally important assets and resources that provide value not just to the Gulf Coast, but to the entire nation. The Mississippi River is the country's artery for trade and commerce of all kinds. From agricultural products in America's farm belt to the petrochemical products manufactured and

shipped across the globe, the Mississippi ties the country together economically and connects our harvests and products to international markets. The Gulf of Mexico is also our front porch. The Gulf is home to around 20% of our domestic oil supply and over 90% of the deepwater oil and gas activities are serviced out of Port Fourchon at the southern-most tip of Lafourche parish.ⁱⁱⁱ On top of the resources themselves we also house and protect 125,000 miles of pipelines which carry tens of billions of crude oil to the rest of the nation.^{iv} We are also the number 1 producer of shrimp, oysters, blue crabs, crawfish, and alligators.^v The country needs Louisiana and needs to care about Louisiana.

With homes, lives, and assets like these at risk, the federal government must join with us in taking a smarter, more-proactive approach to flood risk. Louisiana has been proud to offer just such a tactic through our *Comprehensive Master Plan for a Sustainable Coast*, or Coastal Master Plan. Our Coastal Master Plan is a science-based framework for decision-making and project selection. It evaluates current and future risk and then selects the best investments to build community resilience by lowering coastal flood risk and building or maintaining the ecosystem of our coast. Our plan is resource constrained both by sediment availability (a necessary building block for coastal restoration) and by an ambitious but realistic level of funding of \$50 billion dollars. The 124 projects identified in the 2017 edition of the Coastal Master Plan, if fully implemented, can build or maintain 802 square miles of land and reduce expected annual damages from coastal flooding by \$150 billion by year fifty. Put another way, even if only considering the direct cost of damages caused by a disaster event, the projects identified in the Coastal Master Plan will pay for themselves three times over. Importantly, these estimates are extremely conservative because they do not consider the full costs of

disaster response and recovery nor do they measure the disruption to people and the economy. As an example, Hurricane Katrina in 2005 resulted in around \$161 billion in federal disaster spending (in 2017 dollars) and the majority of these funds were for emergency relief caused by an inadequate and incomplete hurricane protection system.

Louisiana's Coastal Master Plan is used every day to drive investments in flood protection and ecosystem restoration. Since 2007 it has directed the successful completion of 111 projects across all 20 of our coastal parishes. It has been our guide as we have grappled with how to restore the environment after the *Deepwater Horizon* oil spill and it is our playbook when other funding opportunities present themselves at the federal level. Our rigorously developed plan shows that Louisiana knows what investments it wants and needs to make in order to provide a more resilient coast for our people, economy, and environment for the next fifty years.

We work exceptionally hard to put different funding streams that are available to us to the service of our Coastal Master Plan, but even so, building even the most effective projects can be difficult without assistance from our partners in the federal government.

The single most effective flood control project identified in the Coastal Master Plan is the Morganza to the Gulf Hurricane Protection Project. Morganza to the Gulf protects 150,000 people across two parishes. It also encloses 1,700 acres of wetlands where we are experiencing some of the highest rates of wetland loss in the nation. This region is home to Port Fourchon which services over 90% of the oil and gas rigs in the Gulf of Mexico, LA Highway 1, a critical transportation corridor that gives the entire country access to infrastructure that provides 20%

of the nation's oil and gas. While not as large a population center as New Orleans, incremental storm damage in this region was found to be comparable in magnitude due to the high concentration of critical infrastructure for the state and the nation. Total replacement costs from an eastern storm to the Houma region were found in an economic study by LSU to reach \$4.9 billion by year 25 or \$8.1 billion by year 50.

Morganza to the Gulf has been supported by the State with over \$210 million in funding and by the locals with \$234 million in funding. It has not received a single dime for construction funding from the federal government. While I fully recognize that the decision to allocate funds must be made in a principled manner, I am suggesting that the federal government's track record of only finding value in constructing flood protection projects after a disaster strikes means that there is a flaw in your process. Money is spent to study a project to make sure it is a wise investment, which makes sense. But then the criteria used to evaluate value is so narrowly tailored that few projects make the grade. Louisiana is not waiting for disaster to strike and the federal government should not either.

We need the federal government to appreciate our proactive approach to coastal protection and restoration and we need the federal government to be the best partner it can be in this mission. I fully recognize that the Corps is among the most important agencies we depend on and I implore Congress to enable the Corps to do two things today: expand its vision for what its mission is and arm the Corps with the resources to carry out that mission.

Louisiana's Coastal Master Plan shows how to conceive and implement a holistic program that fully accounts for the needs of the ecosystem, flood protection, and a sustained

economy. Where smart planning can help maximize project benefits and bang-for-the-buck not just by evaluating risk before a disaster but also by designing suites of projects that work together to enhance coastal resilience. We strive to situate our ecosystem restoration and our protection projects in such a way as to create synergies and a more sustainable system overall. We believe that the Corps would also like to approach its three-part mission of flood protection, navigation, and ecosystem in a holistic manner but we need them to be funded in such a way as to allow for that.

Regarding ecosystem restoration, one of the fundamental causes of Louisiana's coastal land loss problem is a lack of sediment in our wetlands. Historically, natural flooding from the Mississippi and its distributaries provided regular influxes of new sediment to maintain wetland systems. For this reason, reconnecting the Mississippi River to the surrounding wetlands is one of the most important interventions proposed in our Coastal Master Plan. Two projects were built by the Corps in 1991 and 2001 that do just that on a small scale. The Caernarvon and Davis Pond fresh water diversions were constructed to help manage salinities and improve the ecosystem in their respective basins by drawing water from the Mississippi River and sending it into nearby wetlands. These projects have shown how even at relatively small flows and even without a focus on sediment capture, the Mississippi River can build land and sustain wetlands at a tremendous scale. The receiving areas at Caernarvon and Davis Pond are teeming with wildlife and flourishing ecologically compared to the shape they were in before the introduction of these projects. Because they create a permanent connection between the River and the wetlands through a fixed structure, rather than a dredge pipe that only brings sediment in during construction, these projects also represent long-term and extremely good investments.

But, they do need to be maintained and they do need to be operated to achieve the greatest possible benefits.

When the first Corps structure was completed at Caernarvon in 1991 the Corps was provided with about \$500,000 annually for operations and maintenance which adequately matched the project's needs. However, when Davis Pond, a more complex structure including guide levees and a pump station, was completed around ten years later no new funds were provided for operation and maintenance (O&M), and so \$500,000 is being provided for two structures that have a combined need of \$1.5 million in O&M annually. CPRA has been deferring project needs since 2017 to accommodate the lack of funding in the USACE's budget but funds are running low. CPRA is prepared to utilize its full budgeted 25% of the cost share for these diversions to maintain essential items, but federal funding is expected to run out in federal fiscal year 2019 with a projected deficit of \$449,373.

These important fresh water diversion projects also provide an example of how the Corps' mission as expressed through its authorizations can be too narrow and inflexible to meet the changing needs of an ecosystem. As I mentioned, Davis Pond and Caernarvon were built to manage salinities in their respective influence areas, but they have also proven themselves to be effective at building and sustaining wetlands. As the State continues to move forward with the implementation of much larger sediment diversions across the coast the eventual operation of those structures may curtail the need for the salinity-based operations of the fresh water diversions. The Corps needs to be able to recognize the multiple benefits a project can deliver.

Funding also limits the Corps when it comes to their more prominent navigation and flood control missions. The most significant example of where Corps funding levels directly impact Louisiana's coastal protection and restoration is with the soon-to-be-completed Greater New Orleans Hurricane Storm Damage Risk Reduction System, or HSDRRS.

Congress mandated the Corps to begin paying 65% of the costs of operating and maintaining the Inner Harbor Navigation Canal, Gulf Intracoastal Waterway West Closure Complex, and Harvey Canal sector gates, all crucial and costly elements of the HSDRRS but has not been appropriated funds to actually meet those obligations. The Corps has also recently begun General Reevaluation Reports to examine future levee lifts and other maintenance needs of the HSDRRS. These are just two examples of opportunities for the federal government to support the longevity of existing investments that have worked and also lift some of the burden from the local entities who, without federal assistance, would be left entirely on their own to fund the O&M of this incredibly important flood protection system.

While we strongly support the Corps and encourage Congress to enable them to perform their mission, a holistic approach must be taken to address resilience needs of Louisiana's coast. After Hurricane Katrina the federal government invested \$14.5 billion in HSDRRS, to complete the portions of the Corps project that had not been completed prior to the storm and repair the portions that catastrophically failed as a result of the storm. Louisiana was obligated to pay for those portions of the system that were upgraded to meet the 100-year protection standards required by the National Flood Insurance Program (NFIP) at a 65 federal/35 state cost share. In 2009 the State entered into a Deferred Payment Agreement with

the Corps to commence payback upon completion of the system and extend payments over 30 years. Louisiana's portion of the original costs to upgrade HSDRRS components for NFIP certification were estimated to be \$1.155 billion, but due to eight years of construction delays by the Corps and calculating the 30 year payback period, the state will ultimately pay \$3.189 billion which amounts to annual payments of close to \$106 million a year for 30 years.

We understand that the state has a responsibility to pay its share of improvements to this system, but a 62% cost increase due to delays and accruing interest is not in the best interest of the citizens of the state. What is more, the investments that instead could be made through Louisiana's Master Plan will protect the very system the federal government has invested so heavily in.

Together the Corps and Louisiana's Coastal Program can accomplish great things and be a model for the nation in terms of state and federal cooperation and in terms of a holistic, systems approach to coastal resilience. But both partners must be up to the task and given the resources to carry their part of the load. Congress and the Corps have got to find a way to fund flood protection projects before disaster strikes. To broaden the way the Corps calculates project benefits or, perhaps Congress should consider bringing back earmarks specific for hurricane protection, flood protection, and coastal restoration projects, so that proactive investments in flood risk mitigation can preempt the need for vastly larger investments in emergency response and disaster recovery.

I want to close my testimony by posing a question. Can we recognize good things when they are happening? Louisiana has looked out 50 years across a range of possible scenarios of

environmental change. We know that without action our state could add an additional 4,000 square miles of land loss on top of the 2,000 square miles we have already lost since 1930. Without action, expected annual damages from flooding could increase tenfold in fifty years. We have taken on the inherent uncertainty involved in planning and discerned a prudent way forward in our Coastal Master Plan. In this plan, Louisiana has combined ecosystem restoration and coastal flood risk reduction into a unified approach that could save \$150 billion in avoided damages after 50 years. We have committed to a science-driven process for selecting projects that is also vetted by the public. Our plan has received unanimous, bi-partisan approval in the Legislature and has garnered support from across the environmental, business, and academic communities. We are now marshalling every resource that becomes available to buying down our risk and enhancing the natural system by implementing the projects in this plan. I believe we should be the model for smart, holistic, and proactive investments that can build resilience. For us to be successful we must have a strong relationship with the United States Army Corps of Engineers and we must have the buy-in and support of the federal government as well. After all, the projects in our plan are good investments for the nation and for the people of Louisiana.

With smarter federal funding as I have mentioned in the form of full funding for the Corps and project completion funds made available earlier before disasters occur, we can leverage these investments and make the projects produce much higher benefits for the nation. As a state, we know how to partner and to make federal investments produce better results. We are ready, willing and able to help our federal partners. We appreciate the support of this committee as we implement our Master Plan and continue to partner with the Corps to further enhance the safety and sustainability of our coast.

Thank you for the opportunity to speak to the committee today. I would be happy to answer any questions you may have.

ⁱ <https://www.mvn.usace.army.mil/About/Projects/Comite-River-Diversion/>

ⁱⁱ <https://www.mvn.usace.army.mil/About/Projects/West-Shore-Lake-Pontchartrain/>

ⁱⁱⁱ <http://portfourchon.com/seaport/port-facts/>

^{iv} [Economic Evaluation of Coastal Land Loss in Louisiana](#), December, 2015.

^v Coastal Protection and Restoration Authority of Louisiana. 2017. Louisiana's Comprehensive Master Plan for a Sustainable Coast. Coastal Protection and Restoration Authority of Louisiana. Baton Rouge, LA.

Senate Committee on Environment and Public Works
Hearing entitled, “Oversight Hearing on the U.S. Army Corps of Engineers’ Civil Works
Program”
May 8, 2019
Questions for the Record for Mr. Kline

Ranking Member Carper:

1. One of the Corps’ most significant problems is the agency’s limited resources. Consistently, Congress seems to give the Corps just enough money to limp-along each year, funding projects piece by piece rather than fully-funding entire projects upfront. Then, a storm hits and the federal government has to spend significantly more money to rebuild projects over and over again. One of the key themes of the last WRDA bill was that the Corps should be building the entire project once and doing so in a resilient way.

Looking at Louisiana, would you please talk about how this piece by piece funding has impacted the state and compare that to the funding provided to the new sea wall and pump station in New Orleans?

Response:

It is our experience that providing funding for the design and construction of large-scale projects in a piece meal fashion rarely leads to efficiencies in implementation. Extending the project often leads to: changes in project staff due to turnover resulting in delays and cost increases; the potential for changes in application of rules through the regulatory process resulting in changes to the project; the potential for change in guidance from leadership and administration both from the federal and non-federal sponsor resulting in project modifications; changes of ownership of land, utilities, railroad, or pipelines resulting in costly updates; and in the case of dynamic environmental changes in site conditions, additional collection of data to confirm the site conditions. Delays in the completion of projects also results in the delay of benefits to the citizens.

In New Orleans, the Hurricane Protection System has been authorized and under construction since the 1960s. When Hurricane Katrina hit New Orleans, the uncompleted parts of the project were unable to provide the hurricane protection envisioned and other parts of the system failed. Even with significant funding and work since Hurricane Katrina, the system still hasn’t been fully completed. Post-Hurricane Katrina, Congress has provided significant funding and clear authority to the Corps to complete the system, and since that time, the Corps has worked diligently to accomplish that mission.

Implementation of the Comite River Diversion Project in Louisiana, which was authorized in 1991, was significantly delayed, in large part due to limited funding for the federal cost share by Congress. If the Comite River Diversion had been fully funded and constructed prior to 2016, it would have reduced damages from flooding from the rain event in the Baton Rouge metropolitan area. Prior to 2016, Congress provided either no funding or just enough money for the project to limp along. After the flooding event of

2016, Congress provided the full federal cost share for this project, and the project is now moving forward with construction.

2. Instead of making more federal investments in resiliency, the Trump Administration has revoked policies and cut funding for the Corps of Engineers that would better prepare communities for the impacts of climate change. Specifically, the Trump Administration has not taken any action to prioritize and carry out Federal disaster resilience investments, and has instead revoked resiliency actions taken by the previous Administration, which potentially increases the fiscal exposure of the Federal Government due to climate change
 - a. Would you agree that it would be in the best interest of this country to fund projects fully and account for climate change to make projects more resilient, such as the projects in New Orleans that were built to deal with sea level rise over the next 100 years?

Response:

First and foremost, restoration and risk reduction efforts must be based on sound and robust science, but it is also important to recognize that substantial uncertainties exist, especially in regard to climate change. In particular, we do not know with certainty the rate of sea level rise we can expect over the life of a restoration project. In Louisiana, we also know that the risk of doing nothing is far greater than the risk of acting with incomplete knowledge. In our Master Plan, we have identified the key environmental drivers that influence our coastal landscape (sea level rise and subsidence, precipitation, evapotranspiration, and hurricane frequency and intensity). We then use three scenarios (Low, Medium, and High Environmental Scenarios) to represent a range of possible future conditions for Louisiana to consider.

In addition to considering different environmental scenarios, CPRA also models individual projects and combinations of projects in order to maximize benefits. By using predictive models to analyze the effects of individual projects over the next 50 years under multiple future environmental scenarios, CPRA is able to select groups of projects that provide land building and reduce flood risk. The planning that goes into the development of our Master Plan ensures our projects will be resilient to both current conditions but also a range of potential future environmental scenarios. The same level of planning is used in decision-making with regard to project funding. High performing projects that provide synergies over the next 50 years are prioritized in order to create positive cumulative effects coastwide.

- b. By cutting the funding, or not fully funding these types of programs, what are the potential impacts this may have on life safety, the economy and the environment?

Response:

It is often difficult to assign a value to ecosystem services, i.e. the benefits that the environment provides to people. In Louisiana, these benefits range from fisheries to flood reduction and infrastructure protection to nature-based tourism. In 2010, seven independent researchers examined Louisiana's coast provision of ecosystem services and found that the Mississippi River Delta provides at least \$12 - \$47 billion in benefits to people each year.¹ A 2015 report prepared by Louisiana State University and the RAND Corporation estimated that direct and indirect impacts of land loss in coastal Louisiana put between \$5.8 billion and \$7.4 billion in annual output at risk. Similarly, this study estimated that increased storm damage could have a total impact on the nation of between \$8.7 billion and \$51.5 billion, and increased disruption to economic activity leading to \$5 billion to \$521 billion in total lost output, including indirect and induced effects.² CPRA has also attempted to quantify the damage reduction that results from implementation of our projects. Our 2017 Master Plan includes 124 projects that build or maintain more than 800 square miles of land and reduce expected damage by \$8.3 billion annually by Year 50. This equates to more than \$150 billion in economic benefits over the next 50 years.

Thirty-two of these 124 projects were identified as part of CPRA's Flood Risk and Resilience Program, which focuses on implementing nonstructural projects, increasing flood risk awareness, and supporting state-level policies that promote wise development and greater resilience across the Louisiana coast. The 2017 nonstructural risk reduction projects include over 26,000 structures recommended for mitigation at a cost of \$6 billion. This includes approximately 1,400 floodproofings, 22,400 raised elevations, and 2,400 voluntary acquisitions. The National Institute of Building Sciences (NIBS) 2017 Natural Hazard Mitigation Saves: 2017 Interim Report provides an examination of the benefits of federal agency grant programs and reports that there is a \$6 benefit for every \$1 invested in mitigation measures. (NIBS, 2017).

3. Mr. Kline, the State of Louisiana has been hit hard by hurricanes and extreme weather from climate change. Since Hurricanes Katrina and Rita, the State of Louisiana has had to adapt its model for project design and development many times, in many new directions, taking on projects itself because the Corps has not been capable of addressing the magnitude of the problems in Louisiana.
 - a. Why did the state choose to pursue a massive environmental restoration project without federal support, despite studies showing that a large factor causing accelerated erosion over the past 40 years, and the need to restore the environment is actually due to the federal levee system?

¹ 2017 Coastal Master Plan. Batker, D., et al. Gaining Ground. Wetlands, Hurricanes and the Economy: The Value of Restoring the Mississippi River Delta. Earth Economics. Tacoma, WA.

² Barnes, S. et al. Economic Evaluation of Coastal Land Loss in Louisiana. Prepared by the Louisiana State University, Economics & Policy Research Group and The RAND Corporation for the Louisiana Coastal Protection and Restoration Authority (2015).

Response:

As noted in Governor Edwards' Emergency Proclamation declaring a state of emergency in coastal Louisiana, our state experiences one of the fastest rates of coastal erosion in the world. Coastal Louisiana has lost more than 1,800 square miles of land between 1932 and 2010, including 300 square miles of marshland between 2004 and 2008 alone. Multiple factors have contributed to this massive problem, including effects of climate change, sea level rise, subsidence, hurricanes, storm surges, flooding, disconnecting the Mississippi River from coastal marshes, the *Deepwater Horizon* oil spill, and other natural and human impacts, many of which have been the results of activities benefitting the entire United States.

In 2005, following Hurricanes Katrina and Rita, the Louisiana Legislature established CPRA and charged it with developing, implementing, and enforcing a comprehensive integrated coastal protection plan. Regardless of the cause of our land loss, CPRA is charged with and is committed to partnering with all levels of government and other stakeholders to ensure that the Louisiana coast supports our communities, the nation's critical energy infrastructure, and our bountiful natural resources for generations to come by securing funding, improving flood risk reduction, and creating and maintaining coastal wetlands and important fish and wildlife habitat. Our citizens deserve nothing less.

Why did Louisiana undertake this massive project? Louisiana needed immediate and sustained action on a massive scale, and it was clear that we needed to begin to help ourselves while we continued to advocate for our share of the federal budget that must address the concerns of all states and our territories. We couldn't wait. Additionally, the federal government seemed to be operating in a bureaucratic cycle of paralysis by analysis. In other words, when it was obvious that action needed to be taken in coastal Louisiana, the federal government instead insisted on performing additional studies. This was exacerbated by the fact that the Corps could not get federal funding for implementation of large-scale restoration projects. In order to protect human life and property, Louisiana chose to begin planning, designing, and implementing these projects itself.

- b. How is the State leveraging natural features with this storm and flood protection project in Louisiana?

Response:

CPRA was formed to develop and implement a plan of integrated ecosystem restoration with storm and flood protection. Louisiana's coastal ecosystem should be viewed as green infrastructure and is an integral part of our storm surge risk reduction system. It serves as our first line of defense against hurricane storm surges. Our Coastal Master Plan leverages existing natural features through restoration of barrier islands, ridges and marshes, not only as critical habitat, but as defense against storm surge. As such, restored natural features support the federal, state, and local

investments made in grey infrastructure like levees, floodwalls, and floodgates. In addition, we recognize it as important to leverage the natural processes that built coastal Louisiana to help restore it.

- c. Should we change the Corps' process to ensure environmental restoration is evaluated and included into all aspects of Corps projects?

Response:

Most Corps projects do not lend themselves to greater emphasis on environmental restoration, and we would welcome any change in process that would better facilitate that. Economic, societal, and environmental evaluations should be a part of all aspects of Corps projects. For years, the New Orleans District has indicated that its priorities are navigation, flood control, and ecosystem restoration which must be balanced like a stool with three legs, but navigation and flood control seem to be given priority over ecosystem restoration.

I would also like to share a thought that is not directly responsive to your question. We believe environmental restoration projects should receive expedited federal permitting review. Every day that the permitting process unduly delays the construction of an environmental restoration project means a day when further environmental damage can occur. We are not advocating reducing the environmental standards employed in our permitting process, but rather we should be attentive to removing all unnecessary delays that may have crept into our permitting system over the years.

- 4. Expanding the use of beneficial dredged material is really important to protect communities from extreme weather while enhancing important habitat for nesting birds and other wildlife. What benefits are being observed from the beneficial use of dredged material in the pilot program so far? What is the current thinking about moving the pilot phase into a more permanent program?

Response:

There were no pilot beneficial use projects authorized in Louisiana. However, the state of Louisiana wholeheartedly endorses moving the beneficial use of dredged material from a pilot to a permanent program with additional funding. Sediment is a valuable commodity in coastal Louisiana, and we encourage maximum use of it beneficially. Due to the severity of land loss in Louisiana, the USACE should be required to beneficially use sediment that is made available through its maintenance dredging operations.

- 5. What challenges does the Corps face in budgeting, planning, constructing, operating and maintaining projects for extreme weather events that may be exacerbated by climate change? Are there new lessons that we have learned that need to be applied to future efforts?

Response:

One of the challenges that faces the Corps or any other agency budgeting, planning, constructing, operating and maintaining projects for extreme weather events that may be exacerbated by climate change is projecting future conditions of sea level rise, subsidence or rain events. Recent rain fall events in Louisiana and Texas exceed norms that have been used to plan and design our communities. The primary lesson learned is that the best science available must be used when planning, designing, constructing, operating, and maintaining risk reduction projects. Changing conditions and site specific data need to be considered during all phases of projects. In Louisiana, it is our understanding that the USACE has taken sea level rise and subsidence into account in the design and implementation of risk reduction projects.

Senator Markey:

6. I appreciated your testimony about the problem of funding disaster relief rather than investing in resilience. What specific approaches have worked well for securing funding and support for proactive, preventative projects in Louisiana, and how might they be scaled up to the national level?

Response:

Louisiana's Coastal Master Plan originates from a post-Katrina mindset and mandate that identified the State of Louisiana's prior approach to hurricane vulnerability and the land loss crisis as, "inadequate, fragmented, uncoordinated, and lacking in focus and strong direction" (Louisiana Revised Statutes Title 49:214.1). But through the successful development and continuous implementation of this plan, the state has developed a forward-looking playbook for storm surge disaster mitigation and the reduction of land loss in Louisiana.

The state has gone to great lengths to identify and enumerate the current and future risk faced by coastal Louisiana and then to select the most effective projects to mitigate that risk and provide for greater environmental sustainability. Understanding what the problems are in a comprehensive manner and what the best project solutions are to those problems lays the groundwork for proactive disaster risk mitigation and proactive environmental restoration projects. This understanding has positioned us to mobilize multiple funding streams toward projects identified in the Coastal Master Plan. The State provides a dedicated stream of funding from state mineral revenues. CPRA has also been able to secure state surplus funding for Coastal Master Plan projects in years when a surplus has been available. The Coastal Master Plan also helps us steer Parish and municipal investments toward more effective projects, efforts we support through incentive programs, by providing matching dollars, or competitive grants.

The best example, however, of how a proactive plan of far reaching coastal investment priorities is with the federal Gulf of Mexico Energy and Security Act (GOMESA)

funding stream. GOMESA provides for revenue sharing with Gulf Producing States and their Political Subdivisions for a portion of qualified Outer Continental Shelf revenues. Using the Coastal Master Plan as the guide for these investments, the State of Louisiana has constitutionally dedicated all of these funds to the implementation of its Coastal Master Plan. The state uses this funding stream to proactively build storm surge risk reduction projects included or consistent with the Coastal Master Plan and to coordinate with Parish governments to also utilize the GOMESA funding they receive to do the same. Not only does this funding stream allow for smart annual investments, but because it is an ongoing revenue stream and not a grant reimbursable program, the State and its coastal political subdivisions can pool this funding year after year to make larger project investments or can bond out future revenues to build larger projects or implement projects sooner rather than later.

GOMESA funds are very important to the ability of Louisiana to address our coastal protection and restoration needs. We believe it is particularly appropriate for the federal government to share part of its offshore revenue with Louisiana because without question the canals cut across our coastal wetlands to bring federal oil and gas onshore for distribution nationally have contributed to our coastal loss. No state has suffered the coastal problems Louisiana has experienced due to the multiple pipelines that cut across our coastline bringing federal oil and gas onshore. While we are very grateful for the GOMESA funds we receive, our federal share pales in significance when the share of federal onshore mineral revenues that states receive. For example, Wyoming often receives \$900 million annually or more in federal mineral revenues. GOMESA sharing for the four Gulf coast states is capped at \$500 million, with the Louisiana share to date being less than \$100 million annually. GOMESA sharing with the Gulf coast states needs to increase.

Nationwide, the creation of a pro-active natural disaster mitigation and resilience-building funding stream coupled with scientifically-sound state resilience plans would allow for investments in effective projects before disasters strike. This funding stream could be built into related revenue generators the way that GOMESA links oil and gas production on the Outer Continental Shelf with the need to mitigate for the environmental damage that production entails. Some examples might include carving this funding stream from a future carbon tax or cap and trade system; or somehow factoring mitigation investments into a more comprehensive federal approach to natural disaster risk that might link the National Flood Insurance Program with other programs within the Federal Emergency Management Agency and related ones at Housing and Urban Development and the United States Army Corps of Engineers.

7. How does Louisiana communicate its coastal protection and resilience priorities to the Corps of Engineers, and how effective has the Corps been in carrying out those priorities?

Response:

In Louisiana, a Coastal Master Plan is prepared every six years that strives to ensure that the collective efforts of project investments reduce storm surge-based flood risk to communities, provide habitats to support an array of commercial and recreational activities, and support infrastructure critical to the working coast. The Coastal Master Plan includes a list of the coastal protection and restoration projects that Louisiana has identified to maintain land and reduce risk to our communities. The Coastal Master Plan, which clearly articulates our priorities and is authorized and approved by our state legislature, is shared with the Corps of Engineers and other federal agencies, state agencies, parishes, local communities, flood protection districts, and the public.

The Corps has worked primarily in four areas to assist in carrying out the priorities identified in the Louisiana Coastal Master Plan: Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA); permitting; Beneficial Use of Dredged Material (BU); and the Hurricane and Storm Damage Risk Reduction System (HSDRRS).

- **CWPPRA.** The Corps is the Program Administrator for CWPPRA which provides targeted funds to be used for planning and implementation of projects that create, protect, restore and enhance wetlands in coastal Louisiana. The Corps has been effective in their role as Program Administrator of CWPPRA and in collaboration with their federal and state partners.
- **Permitting.** The Corps has regulatory authority over 10/404 and 408 permits required for most coastal protection and restoration projects in Louisiana. The processing of permits has sometimes not been as timely as we would like and is an ongoing challenge.
- **BU.** Based on data from 1996 through 2013, the New Orleans District of the Corps dredged an average of 78 million cubic yards (MCY) of material annually during maintenance dredging of federal navigation channels. During this time period, approximately 16 MCY were beneficially used within the Federal standard. We appreciate the work by the Corps to use this material beneficially and encourage more such use. The beneficial use of dredged material in Louisiana has been effective, and there is significant potential to increase the wise use of the sediment resources that are dredged annually.
- **HSDRRS.** The Corps is the lead agency for implementation of the HSDRRS which protects parts of multiple parishes in southeast Louisiana. The HSDRRS is a significant effort including strengthening levees, floodwalls, gated structures and pump stations that form the 133-mile system, as well as improved approximately 70 miles of interior risk reduction structures in the last eleven years. While not complete, we believe that the HSDRRS is stronger and more resilient than it has ever been and the Corps, with shared responsibility and commitment from its partners, seems to have been effective in implementing the HSDRRS. However, statements attributable to the Corps regarding the efficacy of HSDRRS have appeared in the local media in New Orleans. These statements raise concerns regarding whether HSDRRS has been designed and built appropriately. We know that the system being built before

Hurricane Katrina, upon which HSDRRS is based, was not effective. The State of Louisiana wants to be reassured that HSDRRS has been designed and built properly before ownership and responsibility for HSDRRS shifts to the state.

- a. If the Corps has not been effective, what do you believe are the primary reasons?

Response:

There are three reasons that we believe that permitting has not been as effective as it could be: government shutdowns, an understaffed department, and systemic delays that have crept into the permitting process over the years. First, even when the Corps is not affected by a government shutdown, when other federal agencies that are part of the regulatory process are closed, then the permit process grinds to a halt. Second, we've been informed that the regulatory sections at the Corps are understaffed, and each permit analyst is carrying a load of projects that are significantly higher than previously experienced. We are told that the work load is leading to delays. We request that Congress sufficiently fund regulatory work at the Corps so that permits required for both public and private projects can be processed in a more timely manner. Finally, the efficiency of the federal permitting process is an ongoing problem. Again, we are not calling for reduced environmental standards to be applied in the permitting process. Rather, continuous vigilance is needed to root out undue delays that can find their way into any bureaucratic process. We are pleased that the Corps and other federal agencies entered into a Memorandum of Understanding with us regarding the application of the federal permitting process to the Mid-Barataria Sediment Diversion Project. The MOU was developed under the FAST Act process and with the cooperation of the Council on Environmental Quality and the other federal agencies involved in the permitting process. This MOU has resulted in a reduction in the permitting process time line of at least two to three years. This type of efficiency needs to continue to occur across the federal permitting process for infrastructure projects.

8. What are your recommendations for best practices or reform in Corps of Engineers authorization, Congressional Corps of Engineers appropriations, and/or broader Congressional funding for disaster mitigation and resilience in order to encourage infrastructure projects that promote resilience?

Response:

We suggest that two actions are needed. First, Congress must direct, clearly and without equivocation, that all infrastructure projects located in coastal or flood-prone areas that are either funded by the federal government or permitted by the federal government be infused with resiliency techniques and concepts throughout. With the data and knowledge already accumulated regarding the changing environmental conditions that these projects will encounter over a life-time, it is foolish and fiscally irresponsible not to design and build such projects in the most resilient manner possible. Second, rather than wait for inevitable disasters to occur, then pay for the ever increasing costs of restoration,

Congress should make increased disaster mitigation and resiliency funding available to disaster-prone areas. Congress should also allow these funds to be used broadly to mitigate against future disasters. These two policies, we believe, would lead to less human and economic loss in the future and less disaster recovery spending in the long run.

Research by FEMA and the National Institute of Building Sciences in a 2018 report titled “Natural Hazard Mitigation Saves” demonstrated that FEMA and HUD federal mitigation (or adaptation) grants provided over a twenty-three year period were associated with a national benefit of \$6 for every \$1 invested. The study quantified a number of benefits from mitigation, including reductions in future deaths, nonfatal injuries, and PTSD; sheltering costs for displaced households; repair costs for damaged buildings and contents; loss or revenue and other business-interruption costs to business whose property was damaged; loss of economic activity in the broader community; and insurance costs other than insurance claims. For all of the benefits identified in the referenced study, it is recommended that Congress provide broader funding for disaster mitigation and resilience to encourage infrastructure projects that promote resilience.

Senator Whitehouse:

9. In your written testimony, you call for a “proactive approach to coastal protection and restoration” and that “the federal government’s track record of only finding value in constructing flood protection projects after a disaster strikes means that there is a flaw in your process.” What role do you see for the Corps in changing this paradigm?

Response:

I think serious consideration should be given to the Corps’ cost-benefit-ratio calculations as a means to start taking a more proactive approach. Federal law requires a project’s benefits to exceed its costs, but the methodology for measuring benefits and costs is imperfect. Typically, benefits are only counted if they can be attached to a hard dollar value, and more intangible assets like ecosystem services, human cultural significance, or improved resilience, in general, are left unquantified. The harder it is to monetize a benefit, the harder it is for the Corps to recognize it in their benefit/cost analysis.

An example of this is in the “federal standard” for dredge material disposal. The Corps simply looks at the dollars and cents involved in disposal methods, i.e. does it cost less to dump the dredged material into the bottom of the Gulf of Mexico or to use it to restore an acre of coastal marsh? The benefits of marsh restoration are only “somewhat quantifiable” and therefore not fully valued in the decision.

It is not possible to use money as the single measure of all relevant costs and benefits. There also may be important equity and quality considerations in the distribution of costs and benefits that are not addressed by maximizing the difference between total benefits and total costs. In short, the Corps takes too narrow a view of the potential social impacts of a project or course of action. With enhanced competition for limited funds, evaluating

a more complete range of social impacts would give the federal government a better understanding of which projects to designate as priorities. A 2018 report from the Texas A&M Transportation Institute compares the Corps' benefit cost analysis to that of other agencies, including the Department of the Interior and the Environmental Protection Agency, that do account for intangible or external costs and benefits in their processes. ("How Project Selection in the Corps of Engineers is Affected by Benefit-Cost Ratio (BCR) Analysis" prepared by the Center for Ports and Waterways, Texas A&M University Transportation Institute for the National Waterways Foundation).

10. You also suggest "Congress should consider bringing back earmarks specific for hurricane protection, flood protection, and coastal restoration projects." I agree there may be a place for earmarks with appropriate safeguards in place to better prioritize the Corps' work and funding priorities. How would the return of limited earmarks support Louisiana and other coastal states' work?

Response:

Earmarks are an example of a system for funding projects that formerly existed outside of the painfully slow federal funding allocation process that currently applies to USACE projects. I raise this issue primarily as an example of an alternative system for funding projects. Set up properly, individual members of Congress could advocate for a project in a holistic manner. By strictly confining earmarks to the realm of natural disaster mitigation and the restoration of important ecosystems--project types we know are far cheaper to fund for construction than the disaster response, clean up, and recovery processes they mitigate or prevent—we can insure that the projects that are funded, although locally significant, will also benefit the nation as a whole through avoided disaster spending.

11. I recently had the opportunity to visit Louisiana and see firsthand the changes the state is facing. The state's Coastal Master Plan takes a comprehensive approach to maintain around 800 square miles and prevent around \$150 billion in damage over the next 50 years.
 - a. Did the Corps provide any assistance or support in the development of the plan?

Response:

For the 2012 Master Plan, the Corps had extension staff working at CPRA providing technical support. We also had a contract with the U.S. Engineer Research and Development Center (ERDC) to provide technical support related to adaptive management, subsidence, and predictive modeling.

For both the 2012 and 2017 plans, the Corps had representatives on the Framework Development Team. For the 2023 plan, the Corps is participating on

the Coastal Advisory Team, and we will be contracting with ERDC to develop the storm suite for the storm surge modeling.

- b. How has the Corps supported the implementation of the projects in the plan?

Response:

Generally, the Corps has only supported projects that have been authorized as federal projects and for which federal funding has been provided. However, in some cases, the state or local entities have implemented federally authorized projects with their own funding when federal funding has not been fully appropriated by Congress. The Corps does serve in a regulatory role relative to projects they do not implement, but in their regulatory capacity, the Corps is an independent party (i.e. not a project proponent or opponent). We are constantly challenged by delays in the federal permitting process, which includes the Corps among other agencies. We are pleased to report that an MOU under the FAST Act for our Mid-Barataria Sediment Diversion promises to save us two to three years in the permitting process.

- c. How many of the projects identified in the plan require new starts and project authorizations for the Corps?

Response:

The Master Plan does not separately categorize projects by reference to Corps required authorization. The below list details structural protection projects in the Coastal Master Plan alongside our best understanding of the Corps' involvement.

- i. **Greater New Orleans High Level (001.HP.04)** – This is a lift/improvement to the Hurricane Storm Damage Risk Reduction System that would presumably require additional authorizations. Components of this project are currently being studied by the Corps under “West Bank and Vicinity Levee Lifts,” “Lake Pontchartrain and Vicinity Levee Lifts” (Bipartisan Budget Act 2018 (BBA 18) Studies)
- ii. **Upper Barataria Risk Reduction (002.HP.06)**--being studied by the Corps under “Upper Barataria Basin” (BBA 18 Study)
- iii. **West Shore Lake Pontchartrain (001.HP.05)**--A study has been completed by the Corps. This project was recently provided funds under BBA-2018 and is currently moving forward upon recent execution of a Project Partnership Agreement for the Corps. It is currently in Engineering and Design Phase with construction anticipated to be completed within 5-6 years.
- iv. **Lake Pontchartrain Barrier (001.HP.08)** – Unknown
- v. **Slidell Ring Levees (001.HP.13)** – no authorization.

- vi. **Morganza to the Gulf (03a.HP.02b)** – Authorized in Water Resources Development Act (WRDA) 2007. No federal funds have been appropriated for construction of the Morganza to the Gulf project; however, the non-federal sponsor is using state and local funds to construct independently interim features along the authorized alignment in advance of the federal project.
 - vii. **Larose to Golden Meadow (03a.HP.20)** – Authorized in 1965. This project is considered completed relative to the federal authorization and all upgrades and improvements are being carried out using state and local funds independent of federal funding.
 - viii. **Amelia Levee Improvements (03b.HP.08)** – Unknown
 - ix. **Morgan City Back Levee (03b.HP.10)** – Unknown
 - x. **Franklin and Vicinity (03b.HP.12)** – Unknown
 - xi. **Bayou Chene (03b.HP.13)** – funded by state, not federally authorized
 - xii. **Iberia/St. Mary Upland Levee (03b.HP.14)** – Unknown
- d. How long do you anticipate the process will take for Master Plan projects requiring Corps design or construction support to be completed?

Response:

It is difficult to forecast, generally, the estimated completion date for Corps' designed or constructed project given that design schedules are contingent upon congressional appropriations. Some projects, such as Morganza to the Gulf, have never received congressional appropriations. The West Shore Lake Pontchartrain Project received study authorization in the 1970s, but didn't receive construction funds until 2018, through BBA-18. The Corps anticipates a 5-6 year construction completion time for the West Shore Lake Pontchartrain Project.

12. In your experience with the Corps, has the Corps invested the same amount of support, provided comparable technical expertise, and shown similar interest between the coastal and inland projects the state needs?

Response:

The Corps support has primarily been with regard to hurricane risk reduction projects and flood control projects. The Corps has generally provided little support with regard to coastal restoration and ecosystem restoration in Louisiana and generally lacks the relevant experience to carry out such projects in a manner as efficient as CPRA in this area.

Senator ROUNDS. [Presiding.] Thank you, Mr. Kline, and thank you to all of you for your opening statements. They will all be made a part of the record.

At this time we will go to individual questions.

For those of you who are here, we have five votes in a row on the floor of the Senate right now. We are just in the middle of them, so you will see a lot of members coming and going back and forth as we try to keep the Committee hearing going and also make those votes in a timely fashion.

With that, I will ask Senator Inhofe for any questions he may have.

Senator INHOFE. Thank you very much, Mr. Chairman. I might add that when this happens, and it does happen quite often, we normally get more stuff done with about half of them here, so I think we are going to be all right.

I do have a couple questions. I am sorry, Mr. James, that I was not here during your opening comments because I would have enjoyed that. We have had some similarities in our background and some of the frustrations are similarities, too.

Let me just mention to get one thing behind us here. I want to thank the Corps for their work in getting WRDA 2018 guidance done as quickly as you have. The city of Bartlesville, Oklahoma, and this is one that we have worked on for a long period of time, Bartlesville is a small city north of Tulsa. It is one that had really serious problems in water storage, so what we did was get together and try to find out a way that we could knock down some of the price that came through as \$100 million over a 10-year period. Now, that is something where that community, there is just no way that they would be able to come up with that, so people and communities are forced into situations where they might have to do it themselves and figure out ways to do it to come into compliance and all that.

What happened was, in that case, that was right before the last WRDA bill, Water Resources Development Act, and I actually had to put an amendment on there to negotiate that down to something that was livable. Now, it ended up working. That is a happy ending story.

By the way, none of the stuff I am going to mention happened during your watch; it was always before. That is one of the problems you and I talked about even before your confirmation.

Unfortunately, there is another city, a larger city, Enid, Oklahoma. It seems like the Corps price structure is affecting that about the same way as it did Bartlesville, Oklahoma. During talks with the local district, the Corps provided the community with price estimates and the city planned accordingly. Now, when I say planned accordingly, they actually had to pass a bond issue, and we are talking about around a \$4.5 million estimate as to what it was going to cost for this storage to take place.

Now, we passed the bond issue. In fact, the bond issue was in 2016. After that took place, we found out that I would use the word they were blindsided by the Corps coming in and saying what they failed to do was to get all of the compound interest rates from the time when this first went into effect, which would have been in 1976. That is when Kaw Lake was actually made.

Now, the Corps has the authority to make changes, and they did not do it in the case of Bartlesville, so in Bartlesville I had to actually put an amendment on the WRDA bill. Now, it looks like, if this is not changed, we will have to do the same thing here.

I would just like to kind of explore what your thoughts are as you are faced with these situations and you are getting a whisper from your left, so you might want to take that into consideration, too, how we handle situations like this. Now, if they had known that this thing that started out to be a \$4.5 million contract or liability, they had to end up adding to that \$8.5 million, making the total amount \$13 million instead of the \$4.5 that came from a bond issue, that is just, on its face, something that should not happen. It happened because they were not aware there is a lot of noise about when they were preparing the \$4.5 million bond issue what the cost was going to be. That is what happened and that is how we got into that situation.

I have two things that I am concerned about. I would like to know, in that particular case, is there something that we can actually do right now? I think it is within the purview and authority of the Corps to do something about that. Then, second, to preclude that from happening again.

Does all of that make sense to you in terms of what happened?

Mr. JAMES. Yes, sir. If I may let General Spellmon address that first, and then I will followup quickly with my thoughts.

Senator INHOFE. Good.

General SPELLMON. Yes, sir. We are taking action here. We owe the Secretary, by August, a revised rulemaking for the water supply rule. The situation that you are describing really can be traced back to the 1958 Water Supply Act, where the Secretary of the Army is authorized to provide storage to local communities for water supply purposes, provided that those entities agree to pay their fair share of the cost to store that water.

In some of these cases, you have entities that are requesting storage behind a dam that may have extensive operation costs, maintenance costs, repair or rehabilitation costs, so the entity ends up bearing a percentage of that burden. The rule that we are taking to the Secretary in August, we are trying to bring more consistency and clarity to the public in the way we go about this at over 100 reservoirs across the Corps.

Senator INHOFE. Well, yes, consistently. What about fairness? Should not that be in there too? What is your reaction? It always bothers me when I hear a response this is something we started in 1958, as if we have been doing it wrong all these years, so let's keep doing it wrong. That is my fear is of what you are recommendation may be to the Secretary.

General SPELLMON. Yes, sir. Over those 100 reservoirs that I just described, I would tell you there is very little consistency across the Corps in this practice, and that is the intent of the revised rule that we want to take to the Secretary.

Senator INHOFE. Mr. Secretary, is there anything specifically on the Kaw Lake problem that could be, well, I know it could be, but should be addressed now?

Mr. JAMES. Yes, sir. To answer that directly, it should be addressed the same way that the Bartlesville was addressed, in my

opinion. Hopefully, you would not have to add legislation to do that.

I will just make this comment. I am looking forward to get this water supply rule, this new one, on my desk. I am trying to help the Corps stretch what appropriation we get as far as I can help them stretch that appropriation.

Senator INHOFE. Sure. Sure.

Mr. JAMES. You know, when I came to this town, I was kind of known as the flood control guy, and I guess I was kind of the flood control guy where I have lived all my life. I have discovered since then that there are other issues in parts of the Country that I was not aware of, water supply being one of those issues. I have tried to learn that issue, tried very hard to learn that issue, and I am looking forward to get that. In the long run, I will try to be helping the users as best I can without breaking law, and I will also try to be helping the Corps get it right.

Senator INHOFE. I have extended my time here. I would only say one thing, something the Chairman is fully familiar with. I sometimes comment to people I had a hard job one time: I was the mayor of a city. I would hate to be the mayor of the city of Enid after going through all the expense of passing a \$4.5 million bond issue only to find out it should have been \$13 million. That is kind of awkward, isn't it?

Senator ROUNDS. Yes, sir. Thank you.

I am going to followup on the same question to begin with, gentlemen, with my first question, and that is, to Secretary James and General Spellmon, the Army Corps of Engineers has been grappling with the proposal of a so-called surplus water rule for the better part of the last decade. I, myself, do not even agree with how the Corps uses the term surplus water; it is offensive to me and so many other citizens in the West who view it as an unlawful taking of what is constitutionally protected. It is a constitutionally protected right of the States to the natural flows of river systems.

The Flood Control Act of 1944 highlights the preeminent role of States and localities with respect to water rights. Surplus water appears undefined in Section 6 of the Flood Control Act. In the decades since passage of the Act, with the exception of the previous Administration, the Corps has declined to define surplus water.

Yet, in December 2016, the Corps sought comment on a proposed surplus water rule. The original deadline of this action was February 2017. The comment period was extended and is now closed. According to OMB's Office of Information and Regulatory Affairs, the Army's final action on rulemaking is expected in August 2019 and the rule is expected to go into effect in October 2019.

First of all, it was never the intention of Congress to Federalize all of the water in our Country's major rivers. My question for you both is, where are we now with this proposed rulemaking action and how will you balance the responsibilities of the Corps as authorized by Congress with the rights and interests of the States.

General SPELLMON. Sir, with the Secretary's permission, I will begin. Where we are today, we just ended an 11-month comment period on the proposed rule. We are working our way through about 180 comments that we received from a variety of States,

Tribes, and stakeholders; and certainly the topic that you raised of natural flows was one of the recurring themes that we heard.

In the revised rule there is no intention by the Corps to impinge on States' rights to water or Tribal rights to water, and we want to make sure that is clear in the rule that we bring to Secretary James, but also is in our actions.

As you said, sir, our objective is to complete this rule in 2019. We have some more consultation with Tribes to conduct next month and we look forward to getting this on the Secretary's desk.

Senator ROUNDS. Very good.

Mr. Secretary, I understand you have been good in trying to work through some of the issues with us with regard to getting access to the water. As you know, this is one of those cases where the States do have, and it is unquestioned, in my opinion, that they have access to the natural flow of the river systems. In some cases the Corps has actually tried to stop access to that by prohibiting access across the Corps right-of-way along those areas where the Corps manages the river systems.

Is it your intent that that will not be an action that you will continue on with while this rulemaking process continues?

Mr. JAMES. That action will not continue unless it were to impede or endanger a Corps project. In other words, they want come in too close to the dam or something like that, sir.

Senator ROUNDS. Very good. That would be a change in policy and I appreciate your work on that. I know we have talked about that several times.

Mr. Secretary, first of all, I want to say also to you thank you for meeting with me over the last few months to discuss the authorities Congress provided to the Army Corps of Engineers to use Operations and Maintenance funding to implement a snowpack monitoring system in the Upper Missouri River Basin.

You have a snowpack monitoring system right now in the mountain States; you simply do not have one in the Plains region. Your own internal recommendations suggested in 2014 that one be implemented.

I also want to thank you for putting the initial funding in place, and I know that your team is reviewing your programs to find unobligated funds to provide the remainder of the \$1.5 million Fiscal Year 2019 commitment for this important system.

Finally, I want to thank you for the \$3.5 million you have programmed in for the President's Fiscal Year 2020 budget. This system will give the good people of the Corps' Missouri River Water Management team better information to make better decisions in a more timely manner with respect to dam releases that impact all of the people in both the Upper and the Lower Basins, and I most certainly appreciate your assistance in that. I know at times it sounds more like I am chewing on you, but I do appreciate the work that you are doing to put that in place.

General Spellmon, I urge you to personally review the implementation plan that the Northwestern Division is currently working on in order to immediately in-place snowpack monitoring sites as soon as the final report is submitted this summer. Synchronizing the planning, management, and technical teams, now that the funding is in place, is critical to assuring that the Corps reaches an initial

operating capability this year and the entire system is fully operational next year. The citizens of every State in the entire Missouri River Basin will be safer and more secure when this system is in place.

Would you give me your commitment to that, sir?

General SPELLMON. Yes, sir.

Senator ROUNDS. Thank you.

Gentlemen, unofficial estimates for repair of the Corps' infrastructure resulting from the March and April flooding has ranged from \$5 to \$8 billion. The Corps' outreach to member offices indicate that water levels are still not low enough to permit detailed inspections of the entire system.

I know the Corps uses econometric and other analysis to provide rough waters of magnitude of damages for floods. While we know that any disaster supplemental needs to address the devastation in the Midwest, and I am aware of the award of initial repair contracts, I am curious to know how the Corps can ever address design flaws or weaknesses if they begin rebuilding the system to the same standard immediately after a flood event. This does not show stewardship of the American people's resources or common sense, especially when we know the system should be improved or redesigned.

General Spellmon, in your professional military judgment, what do you need to get us out of this continual loop where the Corps rebuilds to the same standard after ever significant flood, even though you know that the improvements should be made to the system? Are the constraints that P.L. 84-99 places on rebuilding too restrictive to permit an innovative reconstruction effort? Do you need additional authorities? Are there commonsense improvements that you could make now that exceed the constraints of law or policy that Congress can help you with?

Kind of an open-ended question, but I really would like to have you work your way through that. Once again, I am asking for this not so much in terms of the administrative side of this thing, but in your professional military judgment.

General SPELLMON. No, sir. Thank you for the question. First, regarding the constraints on PL 84-99, no, sir, we do not have a constraint. WRDA 2016 gave the Corps authority to do some upgrades on levee systems in situations like this. We have not used that authority. Let me explain why.

The levee systems that were overtopped between Omaha and Kansas City were largely Federal. We could go in and upgrade those levees, but that water is going to go to Missouri, where the levees that overtopped were primarily non-Federal.

Sir, the authority that we would ask for from Congress would be to do a comprehensive flood risk study on the Lower Basin. What that would allow us to do would take some concepts that have been a recommendation for over 26 years, put some technical rigor behind them, bring in the public, get public comment, and then we could bring those recommendations to General Semonite, Secretary James, the Administration, and eventually to Congress.

Senator ROUNDS. Thank you.

Secretary James, would you like to add anything to that?

Mr. JAMES. Yes, sir, I would. In your opinion, General, does that require an authority from the Committee?

General SPELLMON. Sir, it would be a new start authority for a study, a feasibility study.

Mr. JAMES. That is what I thought.

That is the only way to fix that area. It has to be designed as a system; and not only levees, but—may I just speak for a moment?

Senator ROUNDS. Yes, sir.

Mr. JAMES. In the MRT system in the Lower Mississippi Valley, it is not just big levees from Cairo, Illinois all the way to the Gulf, that is not what it is. There are three floodways in it; it has back-water areas; it has levees on one side of the river that are subservient to the elevation of the levees on the other side of the river. That is due to the fact that the hill line is very close on that less elevation levee, so it is designed to go over it first, instead of going over the other side of the river and maybe flooding 100 miles.

It is a system, it is not just levees. I would recommend, after we have seen what happened in the Missouri Valley, that the Corps be given the authority to at least look at what we could do to help protect that area.

Now, sir, I might as well bring this up now, then you can chew on me the next time you see me again. As you know, those reservoirs upstream, up in the upper part of the Missouri Valley, have eight different uses connected to them, and it is very hard to manage those reservoirs. I think my opinion is that we need—and I know how important water supply is in those reservoirs, and I want to help. I also know how important flood control is in those reservoirs.

For example, we have water supply allocated in reservoirs up there and there is nowhere close to that much water being used for water supply. If just temporarily, that water should be able to be drawn down into the used area for flood prevention. Instead, we stop it up here where it is not even being used. You and I can talk about that, or the Committee, later on, but all that needs to be looked at if we are going to try to protect the Lower Missouri Basin in the future.

Speaking of the MRT Project, it has been flooding as well. It is the top three or four floods of its history, as the Missouri has been going on. It is not even in the paper. It was designed in 1928. I know we can design a system, it is just a matter of authority and, of course, the appropriation.

Senator ROUNDS. I look forward to working with you on that process in the future.

Mr. JAMES. Thank you.

Senator ROUNDS. My time has expired and our members are starting to come back in.

Senator Carper, are you ready with your questions?

Senator CARPER. You know I am.

Senator ROUNDS. There we go.

Senator CARPER. How did he do, pretty good? He is going to make a hell of a chairman, isn't he? He and Ben. Ben has already been chairman.

The real Chairman has rejoined. Mr. Chairman, Senator Rounds has been kind enough to recognize me to take the next questions, and I am ready to.

Again, thanks for bearing with us this morning as we go through all these votes. It is very strange to have five consecutive votes like this on a Wednesday morning when everybody is having hearings, but it is what it is. Thanks for your patience.

My first question would be, Mr. Secretary, for you and for General Spellmon, if I could. It deals with AWIA implementation. What I am going to ask you to do is give us an update on three sections of AWIA that were required in 2018 legislation. I hope we telegraphed this pitch so you are prepared to address this. The three sections we are interested in hearing about today are Section 1102, Section 1103, and Section 1207.

Section 1102 deals, as you may recall, with a study of the future of the United States Army Corps of Engineers, Section 1103 deals with a study on economic and budgetary analyses, and Section 1207 calls for a study on innovative ports for offshore wind development. If we could just take them in that order. Again, I just want to get an update on what is going on with respect to the studies required by Section 1102, 1103, and Section 1207.

Mr. Secretary, please.

Mr. JAMES. Yes, sir. As far as the studies on the Corps of Engineers, there were studies proposed by the Administration that there be studies done to look at moving the Corps of Engineers outside of the U.S. Army. That study has not been funded and we can not do that study.

Now, the Secretary of the Army did order me to do a study from the Army Science Board for both the processes of the Corps, which bothered us, and General Spellmon indicated how much progress we have made on that, and the other thing was the permitting, how do we do our permitting and how effective or ineffective is that, and we are required to do just a multitude of permits a year. That study is going on now and we will forward the results of that study to you immediately.

Senator CARPER. Now, last evening I was told by John Keane, who is sitting right behind me, that we received a report from the Bureau of Reclamation on Snake River that was mandated in WRDA without a specific appropriation. I would just suggest that maybe the Corps should be able to do the same with respect to Section 1102, 1103, and 1207.

General Spellmon, any thoughts?

General SPELLMON. Sir, I think the actual provision is for the Secretary of the Army to reach out to the National Academy of Sciences to conduct this study. It is not an internal look by the Corps of the Corps.

I would just add that the studies are important, but we are not waiting for the studies. We have heard the frustration from the field and member stakeholders and, as the Secretary said, we are taking a number of actions in our construction program and our regulatory program to get after those frustrations and get better at project delivery.

Senator CARPER. I understand it is not just about reorganization, but also about budgetary techniques, and I would just ask you to think about that and share any thoughts you have with me.

Let me just back up a little bit. I understand a number of reports that I have mentioned have been started. As I understand it, the implementation guidelines for the 2018 AWIA law indicates that commencement of the reports is subject to appropriations. I also understand that Congress has provided the Corps with \$193 million in funding for Fiscal Year 2019 in the Expenses account that can and some have believed should be used to complete these reports.

Am I correct in my understanding that funds in the Expense accounts can be used to complete the reports? If not, who determines whether a congressionally mandated report needs a specific appropriation to complete it versus a report being funded generally under the expense account? Is it the Corps who makes the decision or OMB that actually has that call?

General SPELLMON. Sir, I will start. You are correct, we can use expense dollars, and we have used expense dollars already to complete several of the 47 reports that are required by the Corps in this particular legislation. Our immediate focus has been getting out the implementation guidance to the field. With the Secretary's approval, we will now transition and do our mission analysis on those 47 reports and start teeing up the dollars what we can do internally, and then we will come back to the Chief and the Secretary where we may need some additional help.

Senator CARPER. All right. We will come back and explore this with you further. Thank you both.

Senator BARRASSO. [Presiding.] Thank you, Senator Carper.

Senator Ernst.

Senator ERNST. Thank you very much.

General Spellmon, I want to thank you very much for coming to Iowa, doing that field hearing; that was very, very helpful not only to the local stakeholders, but those of us that were able to take that information and present that back to the Committee. Again, General, thank you so much for that.

General Spellmon, I know that Senator Rounds had already touched largely on this, but I would like to go back and revisit it. Just because our flood season is not over yet, and as long as those levees are down, the farms, the businesses, the homes, everything, those communities will remain at risk.

I know that you are currently working on the levees, several of those major breaches in southwest Iowa, but, going forward, what administrative tools, authorities, or additional funds does the Corps need to expedite and fully carry out the levee repair and rebuilding process under the 84-99 program? Just go a little bit further with that and be specific maybe to southwest Iowa as you could, sir, please. Additionally, if we do need to provide additional authorities and flexibility, please let us know what that is.

General SPELLMON. Yes, ma'am. Since the field hearing, just a couple of updates. At the field hearing, I mentioned to you there were four critical levee repairs that we needed to put in place essentially to stop the bleeding, to help get some of that water off of

the basin. We have contracted already three of those that are underway.

The fourth is being contracted today. They have a period of performance anywhere from 60 to 90 days. What that will allow us to do is get the water off of the floodplain, and then we get into the detailed assessments on the other 110 breaches that we know we have to get out and repair.

Ma'am, I do not have any restrictions to report to you from PL 84-99. The only additional authority I mentioned to Senator Rounds that would be helpful for the Corps is a study authority, and that is to do a comprehensive study on the lower basin so that we can add some technical rigor to concepts that people have been discussing for about 20 years, and I am talking about flood easements, potentially some limited levee realignments, some storage basins, if you will. Then we can get public comment on those ideas and bring those back to the Chief and Assistant Secretary James, and then eventually to Congress.

Senator ERNST. OK. I appreciate that very much. If we were to do a study like that, what would an anticipated timeframe of a study be, General?

General SPELLMON. Ma'am, obviously, we would want to expedite this. We have to get some repairs on the levee breaches that I mentioned earlier because, obviously, farmers have crops they have to get in the field. Before we rebuild that entire system the way it is today, we would want to expedite this study. We are not starting from ground zero. A lot of work has already been done on this particular topic on this basin that we could leverage to expedite.

Senator ERNST. OK. I appreciate that very much.

As well, Secretary James, thank you again for all of the great work that you have been able to do in the last couple of years. Very impressive work has been done, especially in Iowa. Thank you for that. I have been told by various Corps officials that the mainstem system has been operated with flood control as the No. 1 priority for the past 12 to 13 months, but during this particular event, a significant amount of water entered the Missouri and its tributaries below those reservoirs on the system, meaning that the role of the reservoirs was minimized in this latest event.

Do you believe that making flood control the unquestioned No. 1 purpose of the system would decrease the likelihood and the severity of damage from most of our flood events?

Mr. JAMES. Senator, when I came here last year, I was known as the flood control guy, and I still believe in flood control. There has got to be everything, the environmental restoration, flood control, navigation, water supply, recreation, and so forth, particularly in reservoirs. If you do not assess and take care of the flood control first, the rest of it does not matter, because sooner or later you are going to get wiped out just like this year.

Senator ERNST. Right.

Mr. JAMES. I mentioned to Senator Rounds a few moments ago, before you came in, that this study that the General is talking about for the lower Missouri system, that also has to look into the upper system and take that into account. We have to decide how much water we can withdraw from those reservoirs without hurt-

ing their water supply in order to be ready to catch some flood water.

Now, I know this one came from down south, I get that, but I will grant you they all do not do that.

Senator ERNST. Exactly. Large in part what we have seen in the past is more of the water coming from below or, excuse me, above those reservoir systems.

Mr. JAMES. Exactly.

Senator ERNST. I do appreciate it.

Gentlemen, I appreciate the fact that you know how significant this is to the Midwest, and what we have seen in my home State of Iowa we see it now on the eastern side as well. Thank you for putting the attention into it, and I look forward to working with you on this issue.

Senator BARRASSO. Thank you, Senator Ernst.

I would just, to the members of the panel, again apologize on behalf of the Committee. We just started the third of five votes. They just rang the buzzer for that, so it is possible that some of us may ask questions that have previously been asked by other senators, as we are coming and going, so we apologize for any redundancy and we appreciate your patience with all of us.

Senator Cardin.

Senator CARDIN. Thank you, Mr. Chairman.

I do thank our witnesses, particularly our governmental witnesses, for what you are doing in regard to very important water projects. As the Senator from Maryland, you are not going to be surprised to learn that my principal concerns are going to be with the Chesapeake Bay and the work that the Army Corps is doing with the Chesapeake Bay, and I thank you very much for that.

There are several Senators that are part of the six States that represent the Chesapeake Bay watershed. I am working with Senator Capito on the reauthorization of the Chesapeake Bay program. It is bipartisan. We have the support in the House of our colleagues to increase the authorization on that program to \$90 million. I also point out that the Army Corps is a key partner in that arrangement.

Secretary James, I very much appreciate your personal visit to Poplar Island and see firsthand, yes, the importance of having sites where we can take dredge material, because the economic impact that has on keeping our channels at the depths that they need to be, but also how unique, no longer unique, but for its time doing an environmental restoration, so it had the popular support of the community, but also the positive impact it had on our environment.

As you know, Poplar Island was once a habitable island on the Chesapeake Bay. It eroded to virtually nothing and now is a vibrant environmental restoration project, and we see the completion of that in sight with Mid Bay being the next. I appreciate the Army Corps' support for that and the continued funding that we have been able to get, so that, to me, has been a good news story and I thank you very much for all your help in that regard.

The Chesapeake Bay Comprehensive Plan was just recently submitted by the Baltimore District. We are pleased about that. It carries out the Chesapeake Bay Watershed Agreement of 2014, with all stakeholders participating. I think that the major strength of

the Chesapeake Bay program is that the stakeholders have all bought in, States have all bought in, and we need the Army Corps to carry out many of the projects.

I want to ask you specifically about oyster restoration, because oyster restoration is one of the key elements in restoring the Chesapeake Bay. Over the last century we have seen a loss of oysters in the Bay to about less than 1 percent of its historic level. That is an incredible loss of the most important filtering agent for clean water in the Chesapeake Bay.

The Army Corps has participated in 740 acres of oyster bars in the State of Maryland. General, we thank you for that help; that has been encouraging and been very helpful. Congress has encouraged more funding for oyster restorations. They are in more general funding categories in which we need to do a better job in funding. I will be the first to acknowledge that.

The Water Resources Development Act was very, I think, forward in saying we need to deal with water infrastructure in America, with resiliency, with adaptation, deal with our coastal waterways, etcetera.

My question to you is what can we do to accelerate the oyster restoration efforts in the Bay and other areas, and how are those decisions affected by the funds that are made available to you in the various programs that you have.

General SPELLMON. Sir, I will start. First of all, we do acknowledge in the Corps that these are important projects not only to the economy, but to the ecosystem, as you have outlined.

In the Corps, we have been working to ensure that we maintain a capability to leverage about \$5 to \$8 million each year, pending appropriations, to get after this program. There are many other worthy projects just like this across the Nation, so we have been able to keep going on this particular program in the Chesapeake, frankly, largely through approved reprogramming off of a variety of budget lines, so we will continue to exercise all the flexibility we can to get after this important set of projects.

Senator CARDIN. I thank you for that. We would like to be more specific, and under our rules we have restrictions on what we can do because of restrictions on so-called earmarks, so we have to work with you to find creative ways, since you have the resources, because I think we all agree that we have to be more aggressive. It is working; it just takes time and it takes a lot of effort, and the leadership in the Army Corps is vitally important.

I really do thank you for that commitment, and let's find ways that we can advance these programs and help you during the appropriation process.

Thank you, Mr. Chairman.

Senator BARRASSO. Thank you, Senator Cardin.

General Spellmon, the people of Teton County in my State remember vividly the flooding from the Gros Ventre River and Flat Creek in 2017. They are concerned about inadequate preventive drawdown of water from the Jackson and the Palisades Reservoirs to capture the snowpack runoff, as you can imagine.

As you know, both your agency and the Bureau of Reclamation have a responsibility to protect these communities from flood risk. America's Water Infrastructure Act requires the Corps and the Bu-

reau of Reclamation to develop a Flood Prevention Action Plan, key word action. The Flood Prevention Action Plan should include actions that the Corps and the Bureau will take to mitigate flood risk in the Snake River Basin.

The law required the plan to be provided to this Committee by April 21st, last month. The Corps did not meet the deadline. The Committee received a report yesterday, the day before this hearing. The report is 20 pages long. It restates what the Bureau and the Corps already do to mitigate flood risk in the Snake River Basin.

The only new actions, if you will, that the Corps and the Bureau will take to protect my constituents, and you are sitting next to our Director of Homeland Security for Wyoming, involves, No. 1, inviting one Corps staffer to an informal meeting in May, adding a Bureau of Reclamation staffer to an email list, and having the Bureau work better with the media to highlight public informational meetings.

I would just say, Senator Spellmon, do you think this is really sufficient to reduce the flooding risk for the people of Teton County?

General SPELLMON. Sir, we did have the opportunity to review and work with the Bureau of Reclamation on this particular report. In fact, I had a good conversation with the Regional Director for the Bureau just this weekend. There were five broader focus areas that we took away from this particular report that we want to work on and, frankly, sir, I had a conversation with our Walla Walla District Commander just this past week on this effort and he even shared with me that the district could do better in the State of Wyoming on communicating with stakeholders about the level of flood risk.

Sir, we are going to take this on, the broad focus areas, and get after it with all of your constituents and stakeholders.

Senator BARRASSO. Well, thank you. It is good to hear that we are going to get there.

Director Budd, your agency is tasked with mitigating and responding to flood risk in Wyoming, is that correct?

Ms. BUDD. Yes, sir, that is correct.

Senator BARRASSO. Has the Corps or the Bureau consulted with your agency in developing a Flood Prevention Action Plan?

Ms. BUDD. No, they have not.

Senator BARRASSO. Have you heard from other relevant officials in the State about whether they have been consulted?

Ms. BUDD. In preparation for this testimony today, we contacted several State agencies, as well as our partners on the ground in Teton County, and there was one contact made with the local emergency manager in Teton County by the Bureau of Rec, and that is all we could find.

Senator BARRASSO. You would agree with the General that they can really step this up; more needs to be done to focus on the concerns of the people.

Ms. BUDD. Yes, Mr. Chairman.

Senator BARRASSO. The reason I raise all this is, as you know, in Wyoming we are entering flooding season. Last month Wyoming Public Media ran an article with a warning: "Cold Winter and Warm Spring Equals Ice Jams and Flooding."

I am going to have this submitted into the record.
[The referenced information follows:]

Cold Winter + Warm Spring Equals Ice Jams And Flooding

By KAMILA KUDELSKA, APR 2, 2019
[The Mountain West News Bureau](#)
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The Climate Prediction Center forecasts a warmer spring than usual in the Mountain West.

This past winter has also been a warm one, though February was particularly cold with lots of precipitation.

"We had a very heavy snow building event during February, which has left us with a great deal of snow water equivalent in the mountains and an increase in flood potential," said Steve King, a northwest service coordinator hydrologist with the National Oceanic and Atmospheric Administration (NOAA).

Jim Fahey, a Wyoming National Oceanic and Atmospheric Administration (NOAA) hydrologist, explained this could increase flooding and ice jams in the region.

"If there's a colder than average winter, you get run off on top of the rivers and there's still ice that will accelerate the ice melt on the rivers and then you will have problems when the ice moves to obstructions like bridges and sharp curves in the rivers," Fahey said.

Flooding potential will be felt in South Central Idaho, Western Colorado and Northeastern Wyoming. In the past couple of weeks, roads and bridges have already closed due to flooding in those regions. That includes a section of I-90 on the border of Wyoming and Montana.

This story was produced by the Mountain West News Bureau, a collaboration between Wyoming Public Media, Boise State Public Radio in Idaho, KUER in Salt Lake City and KRCC and KUNC in Colorado.

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Senator BARRASSO. Wyoming has always faced flood risks, especially in northern Wyoming, northwestern Wyoming, in Worland and Greybull, communities along the Snake River in Teton County.

Director Budd, in your opinion, what are some ways that the Corps could better help the State of Wyoming mitigate this flood risk?

Ms. BUDD. Mr. Chairman, we would like to see continued work at the local level with our rural communities on projects such as you mentioned, Worland, the removal of Goose Island to mitigate the risk of ice jam flooding, as well as the Silver Jackets project that is ongoing in Hudson, Wyoming, in Fremont County, where we had a lot of flooding in the past year. More projects on the ground.

Senator BARRASSO. To Secretary James, will you pledge to work with my State to do all that you can to get input and to help mitigate this flood risk?

Mr. JAMES. Absolutely. I can not imagine two agencies like Bureau of Rec and the Corps of Engineers not working together on flood risk. I discovered, after I got here to this job, that Bureau of Rec has many reservoirs out west that I was not aware of, and I think it gets a little complicated sometimes. Sometimes the Bureau of Rec is responsible for the flood risk management and sometimes the Corps is, but we need to do all we can do to help protect the people.

Senator BARRASSO. Thank you.

Senator Duckworth, I think you are next.

Senator DUCKWORTH. Thank you, Mr. Chairman. I want to thank you and the Ranking Member for holding today's hearing.

Secretary James, I want to commend your leadership in helping to advance several important projects in Illinois toward completion, including the McCook Reservoir agreement and the Brandon Road Lock and Dam, among others. I also want to thank you and the rest of the Corps of Engineers for your efforts to protect communities across Illinois during what has turned out to be a season of tremendous rainfall with significant flooding throughout Illinois and the Midwest. We have had a lot of discussion of flooding, but I really want to focus on urban flooding challenges here with my questions.

As you know, flooding, both rural and urban, is a key justification for the McCook Reservoir project is that it will help to protect 500,000 homes across the Chicago land region from flooding, and much more must be done. Unfortunately, outdated Corps policies greatly undermine your ability to help urban areas address flooding issues, and I fear that we need to fix this issue. It is why I authored Section 1211 of the most recent WRDA bill to require the Corps review Federal policies that restrain its ability to address urban flooding, like the 800 cubic feet per second rule, and report back to Congress within 1 year on potential fixes.

As the law was enacted in late October 2018, this critical review should be half done, but I am told that you have not even started the review, which is very frustrating. I would appreciate your personal commitment, Mr. Secretary, to completing this review before September 30th of 2019, which would be the 1-year mark; ideally well before that date.

Mr. JAMES. Yes, ma'am, you have got my commitment.

Senator DUCKWORTH. Thank you.

In addition, if the Corps is running into bureaucratic hurdles with the Office of Management and Budget in this process, I would first note that this review is not optional, it is required by law; and, second, I am confident this Committee would be very interested if OMB is interfering with implementation of the bipartisan WRDA bill, which Congress passed and the President has signed into law.

Major General Spellmon, will you commit to getting this study done this year also?

General SPELLMON. Ma'am, we will commit to getting the study done. I would just say the 800 cfs rule is a matter of Corps policy; it does not require legislation to change. We will take action to get the report done, but I would just offer an interim. We have made exceptions to this particular policy before, so if there is a particular urban area or project set that you would like us to give up, we can get started and not have to wait for a report or change to policy.

Senator DUCKWORTH. OK. I will take you up on that. Thank you.

I know Senator Carper already touched on the Corps' expense account, but can you talk a little bit about trying to get this done this year, this study?

General SPELLMON. Yes, ma'am. This bill required 47 reports from the Corps and other Federal agencies. Our initial focus, as the legislation was passed, was to work through about 39 sets of implementation guidance out to the field so they could get started. Our focus now will transition to the 47 reports, what can we do with the expense account dollars that we do have, and then we will come back to General Semonite and Secretary James, possibly to Congress, if we need additional funds to complete the remaining reports.

Senator DUCKWORTH. OK, thank you. It is a testament to the Corps' expertise and dedication that most of our Nation's locks and dams continue functioning well beyond their original life cycle. Congress and Administrations past and present have not provided the Corps with the resources that you need to address the 8 billion inland waterway construction backlog. I have toured some of those locks and dams where you have actually had to preventively knock over walls so that they would collapse in the correct way and not impede the locks. As we know, every time an unscheduled lock closure occurs, it raises the cost for shippers, ship freight traffic onto our roadways and rail, and undermines our global competitiveness.

Secretary James, Highway Trust Fund construction projects generally enjoy an 80:20 cost share between Federal and non-Federal sponsors, and construction projects using Airport Trust Fund dollars generally receive a 75:25 cost share, as do harbor construction projects. Yet, lock and dam constructions using Inland Waterways Trust Fund dollars must divide costs between Federal and non-Federal sponsors of 50:50.

If this Committee was able to secure an increase in Federal cost share for lock and dam projects in the next Water Reauthorization, can you describe how this change would benefit inland water projects throughout the Country? If we could find you the money, how would that affect how they would move forward, and would it affect the cost share?

Mr. JAMES. Senator, we always can use money.

[Laughter.]

Mr. JAMES. I will tell you that. The cost share is out of my hands. From what I understand the Administration set that 50:50 cost share on the Inland Waterway Trust Fund several years ago. I do not think I can influence that myself.

Senator DUCKWORTH. Well, I think you have given me something to work on. Thank you.

I yield back.

Senator CRAMER. [Presiding.] Thank you, Senator Duckworth.

Senator Sullivan.

Senator SULLIVAN. Thank you, Mr. Chairman. I want to thank our witnesses here today. In particular, I want to thank Secretary James, General Spellmon. Your work, both of you, is very much appreciated, I think throughout the Country, certainly my State, great State of Alaska. I know we have had a lot of discussions on some of the issues.

Mr. Secretary, I really want to thank you for your responsiveness. You probably know more about Alaska than you ever thought you would, and I appreciate that. I am not sure you do, but it is what it is.

Let's talk about some of the Arctic issues that are happening. I think that both in this Committee and your jurisdiction as both, obviously, the Army Corps, but it relates to national security as well, and I just wanted to touch on a couple of projects.

Secretary of State Pompeo was in Finland yesterday at the Arctic Council and really kind of emphasizing the importance of what is going on in the Arctic. I think it is recognized we are pretty far behind from an infrastructure and national security perspective, but we are actually starting to wake up to this. It is quite bipartisan on the Armed Services Committee to do this kind of work.

There are three potential Arctic projects included in the 2020 WRDA, that is the Barrow Coastal Erosion Project, that is literally at the top of the world for us, the furthest northern community in North America; the Cape Blossom Port in Kotzebue; and the Gnome Arctic Deepwater Port.

Can I just get an update from you, Mr. Secretary, or General? We want you to try to meet the timing on these. We know that you are very familiar with them and appreciate your focus. A lot of times, again, these do not get focus, but there is no infrastructure in the Arctic; the Russians are building massive amounts of ports and airfields and we have essentially nothing, and we have to get out act together, so we need your help.

General SPELLMON. Yes, sir. Thank you. I have the opportunity to travel to visit with our Alaska District next week and look forward to getting out and seeing a number of these projects.

Senator SULLIVAN. Are you going to go out to western Alaska, where all these are?

General SPELLMON. Yes, sir.

Senator SULLIVAN. Great.

General SPELLMON. The Corps has been building harbors and channels for over 100 years in Alaska; we are committed to it. I think 57 of them are still in operation, but the Port of Gnome, as you know better than anyone, sir, is a great example of why we

need to modernize. That draft feasibility report will go out by the end of this week, and I will just refer to my notes. We are on schedule to have a final chief's report by June of next year.

Senator SULLIVAN. Great. On that issue, you know, we have talked, Mr. Secretary, there is this issue of what kind of draft we would want for that, particularly as the Navy, the Secretary of the Navy has talked about doing more freedom of navigation operations up there. I know you are waiting essentially for word from DOD, OSD, and the Secretary of the Navy on the demand signal for something that could at least, in my view, hold a destroyer, so we are going to work on that.

Do you have any thoughts on that right now? We actually think if we are looking at a strategic deep draft port and it can not handle a basic size Navy ship, it is a very significant missed opportunity. The Secretary has stated they are going to do a freedom of navigation operation with Navy destroyers up and over the Pole this summer. First time we have done that since the 1980's, but importantly.

Do you have any thoughts on that in terms of what is needed and what we need to do or the Secretary of the Navy needs to do to make it so your draft report can handle the size ships we need? Heck, I would like to be able to handle an aircraft carrier there, but what do you think, Mr. Secretary?

Mr. JAMES. Well, sir, if you can get the authority, I will support anything you get.

Senator SULLIVAN. Right now you are not hearing directly—you need that authority—my understanding is not the authority, but the demand signal, as the Pentagon likes to use that term, from the Navy, is that correct, on what they need?

Mr. JAMES. The demand signal, I think that is correct, probably. Is that where we are on that, is that the Navy would need to concur that that needs to be there? I am sorry, sir, I am just not sure where we are.

Senator SULLIVAN. OK. Well, look, we have had a good working relationship, Mr. Secretary. We will work together with you on that and the Secretary of the Navy. What I do not want to do is have a report, and you know we have been working on this Gnome project for quite some time and there has been some back and forth. It has been, to be frank, a little bit frustrating for all of us.

What we do not want to do is having something and then, like, a year from now go, geez, we actually really should have made that at least acceptable for a Navy destroyer, when, remember, in the Arctic, in the western part of Alaska, America is an Arctic nation because of Alaska, but we do not have anything capable of doing that right now, and the Russians and, heck, the Chinese, I mean, go read the reports, they are all over the Arctic because of the resources, because of the opening sea lanes.

We clearly need infrastructure, and what I do not want to have happen is us, a year and a half from now, going, darn, you know that report, we should have been able to make sure we had at least a destroyer capability to resupply and refuel, if not something like a carrier.

Mr. JAMES. Sir, I will work with you any way I can on that. You let me know and I will come visit.

Senator SULLIVAN. Thank you. Thank you, Mr. Secretary, General, and the rest of the witnesses. I appreciate the cooperation.

Thank you, Mr. Chairman.

Senator CRAMER. Thank you, Senator Sullivan.

Senator Whitehouse.

Senator WHITEHOUSE. Thank you, Chairman.

Welcome, all. Particularly welcome to Chip Kline, and thank you for your hospitality during my climate visit to Louisiana. You and Governor Edwards were extremely helpful and I appreciate it.

Secretary James, I am looking forward to the June 14th meeting in Rhode Island for the coordination between our projects and the Army Corps, but I wanted to go over some of the projects that seem to be stalled in various places that we have talked about. You were kind enough to visit, so you have seen some of this.

The project for the abandoned pilings in the waterway between Providence and East Providence that I showed you that morning was authorized first in 2016 after a lot of conversation with the Army Corps about how they were not obstructions to navigation because boats could navigate around them. Just think about that for a second. It is my view as a boatman that that is actually the definition of what an obstruction to navigation is; you have to navigate around it.

When we failed at that, we actually got it into the authorization thanks to bipartisan support from my colleagues, and I really would like to move forward on that project. There is a small sum in your current budget for a derelict bridge that is in the target area, and I hope we can work together to expand the funding so that, as long as you are in the target area, we can do the whole job rather than just do part of the job.

We have the contractors available; we have the design and testing of the specialized equipment to remove the pilings accomplished. Everything is green-lighted and go if we can only get this to move forward, so I would ask you to lean in a little bit on your team and see if they can be a little bit more cooperative with respect to finishing off that project.

Mr. JAMES. I would be happy to, sir. I did visit with you there and it is definitely a danger to navigation and recreation, from my viewpoint.

Senator WHITEHOUSE. We spent a lot of money in Rhode Island cleaning up that waterway so that it is actually fishable and swimmable now, so there is a whole different set of recreational uses than originally when, in ancient times, it was a part of commercial traffic up to Pawtucket. There is no commercial traffic up to Pawtucket now; it is recreational, and we need to clean this up.

Mr. JAMES. When I was there, there was a guy working on how to get those pilings out without disturbing the soil.

Senator WHITEHOUSE. Yes.

Mr. JAMES. Was that perfected? Is that what you are talking about?

Senator WHITEHOUSE. Yes. Kent Dresser is his name, Captain Dresser.

Mr. JAMES. Good.

Senator WHITEHOUSE. We have actually even modeled it with some private funding to make sure that it works. Now that we

have everything ready to go, and as long as you are there to take down the derelict bridge end, it would be great to just finish the job up there and do it all at once.

Mr. JAMES. All right, sir. We will look at it.

Senator WHITEHOUSE. In 2016 I got a new authorization for a study on innovative materials through the National Academy of Sciences. The Army Corps said, no, we are not going to do that, so I got it again in 2018 to require it out of existing Army Corps resources. I do not know if there has been any progress made on that study, but I would like to move that forward. I do not know how many times I have to get these things into legislation that passes in strong bipartisan fashion before the Corps responds, but could you get me a response? Are you familiar with that?

Mr. JAMES. Absolutely, sir. I know exactly what you are talking about.

Senator WHITEHOUSE. If you can give that a little boot also, I would appreciate it.

Mr. JAMES. A what?

Senator WHITEHOUSE. A little boot in the rear end.

Mr. JAMES. Oh, OK. OK, I got it.

Senator WHITEHOUSE. A little encouragement; put it that way.

Mr. JAMES. OK. All right. Yes, sir. We will talk about that.

Senator WHITEHOUSE. Particularly if sea level rise comes on to have new materials that are less immune to rust and corrosion to find the role for composites. It is really hard to design that in if the book has not been developed that says what the standards are for the new materials. That is basically the problems that we are trying to solve.

A third issue is the antiquated Corps permit for the Providence and Worcester property that is just up the river from all those pilings that we saw. There is an ongoing negotiation between the local city, East Providence, our major environmental group, Save the Bay, the owners of the property; and we would like to make sure that the Army Corps joins in a productive way in those negotiations. What we are trying to do is come up with a solution for the property that suits the modern uses and needs. The permit was decades ago, when a commercial use was planned. There is going to be no commercial use.

There is a whole plan along that shorefront for residential and recreational development, and we need you guys to be a part of that conversation, because otherwise we are stuck in a situation which we are negotiating with each other and then throwing things up to you, and then it is like, nope, go back and do it again. We need you actually in the room being productive.

You do not need to give away any particular position. I am not trying to tell you what your negotiating position should be, but if you are not in the room, it is a big time waste for everybody else, because ultimately you have to rewrite that permit.

General SPELLMON. Sir, I am not familiar with this, and we will dive in and get you a response.

Senator WHITEHOUSE. OK. I appreciate it. I have raised it I can not tell you how many times, so it would be great to have it get a little bit of attention.

The last thing is—I guess my time is out—you have a flood and coastal storm damage reduction business line. You are familiar with that. It says coastal storm damage right in it, but over the past 10 years the Corps has spent between 19 times and 120 times more on inland versus coastal. I keep asking for you to report on what is the deal and why can not we get more resources into coastal, particularly when we have people like Mr. Kline here saying we have huge problems coming and we need a lot of resources not just to respond when the disaster happens, but to know how to prepare to save property, to save lives, to protect assets and all of that.

It is not as if there is not a massive need. I know you are down to 13 to 1 in the coming budget, which is, I guess, a step in right direction from 120 to 1, but on behalf of coastal States everywhere, I know you guys love the Mississippi River, but you are the U.S. Army Corps of Engineers, and it would be really great to step up for this account to meet the coastal storm damage responsibilities, particularly the planning ones.

Comment, response?

General SPELLMON. Sir, I will start. First of all, there are many worthy projects on the coast, and I would just say we want to thank Congress. In the Bipartisan Budget Act of 2018, Congress provided the Corps about \$4.3 billion for just coastal projects alone, so that is about 20 that we are setting now, writing contracts on, and will go into construction next year, but we realize we have more work to do.

Senator WHITEHOUSE. Good. The report was due March 19th. It is not here.

General SPELLMON. Sir, I will followup with you.

Senator WHITEHOUSE. Thank you.

Senator CRAMER. Thank you, Senator Whitehouse.

At this point I will recognize myself and start out, General Spellmon, by just associating myself with the comments of Senator Rounds regarding the surplus water rule, the definition of surplus water. For the life of me, how we can even have something like this is beyond me, but, nevertheless, we look forward to the new rule in the definition. Just know that I support what Mike was saying.

I also say, Secretary James, one of the things I noticed about moving from the House to the Senate is it is much easier to get a secretary to come to your office, but I have to say on your behalf that you came to my office when I was a House member too, so I appreciate your responsiveness and your attention. That means a lot.

With that in mind, I very much appreciate the recent visit. We have a number of issues and I just want to address one of them with you here in this forum because I think a little bit of progress has been made since you and I visited, and that is with regard to Select Energy's application for increase flows and volumes for out at Lake Sakakawea, the Missouri River system, for use in fracking.

As I stated then, these are applications that have been pending for 2 years, since May 2017. They got lost in the shuffle, somehow got caught up in an order to consider them at a different level, including Washington, DC.

Just to put some context around it for everybody, Lake Sakakawea, of course, is a large reservoir on the Missouri system.

It usually has too much water and, of course, right now not only does it have a lot of water, there is a lot still coming, and probably the worst yet to come.

These requests are well under the State of North Dakota's allocations; they are well under even the U.S. Army Corps of Engineers' additional 100,000 acre feet decision that came out of an environmental assessment in 2012. They are existing permits that are just asking for greater volumes. It should not be a complicated matter. It has been 2 years.

Since you and I talked, our staffs have been talking and evidently there is an agreement that it should be settled within 30 days. My only question to you in this hearing is would you commit to that, to getting that resolved in the next 30 days.

Mr. JAMES. Sir, I reserve not committing to it getting it solved, but I will commit to making every effort in my office I can to get it resolved. If it has been going on 2 years, there must be some kind of reason, and I do not want to tell you something that I can not come through on.

Senator CRAMER. Well, I appreciate that, but the reason clearly is not a lack of water in the Missouri River system. These are people who have committed that if it ever gets to a drought stage, that they would no longer take the water. In other words, the private sector has agreed to terms that should never be a problem, and this little bit of water, it is hard to describe how quickly water goes into the system versus goes out.

You could not come up with a number large enough for it to make a difference to the people being flooded downstream from us, so I know deadlines are very difficult for the Corps. We all know deadlines are very difficult for the Corps. They are difficult for most of Federal Government, but the Corps has really written the book on not meeting deadlines and commitments; and what is at stake here is human safety. That water will move throughout North Dakota, and still does, in trucks on highways and bridges. That water will move; just not in as efficient or safe a manner as it can if we use the existing pipeline infrastructure.

The other thing that is at stake is America's national security. I find it ironic that the Army itself has stonewalled American Energy Security, because I would much rather, much rather use the peaceful tools of energy development than the weapons of war in an energy fight. I appreciate your commitment to do everything you can. I will call you in 30 days, and let's hope that we are successful.

Mr. JAMES. I hope I will have it to you in 10, but I can not promise it.

Senator CRAMER. All right. Thank you.

I just want to make sure, before we go to a second round—all right, Senator Markey.

Senator MARKEY. Thank you, Mr. Chairman. Much appreciated.

Thank you all so much for what you do. Mr. Secretary, I am not telling you anything you do not know, Mr. Secretary. Cape Cod is the arm of Massachusetts. The two bridges spanning the Cape Cod Canal are the vital arteries delivering the island's life blood. All 200,000 residents rely on these bridges for access to the mainland, but during the summer, as you know, the population explodes

three, four, five, six times on a daily basis; and, unfortunately, regrettably, these two 80-year-old bridges, which are crucial evacuation routes as well, are deteriorating.

You were kind enough to join me to take a look at those bridges and the Army Corps of Engineers does maintain the Cape Cod Canal bridges and is currently conducting a study which will almost certainly conclude that the bridges need to be replaced within the next 5 to 10 years, which could cost \$800 million to \$1 billion. If the Sagamore Bridge is not replaced within the next 5 years, the Corps may need to perform a major rehabilitation that could cost \$150 million just to repair it, and still have to replace the bridge in the next decade or so after that. That is \$150 million that could be spent, I think, more wisely. Extending the life of a functionally obsolete bridge, one that does not have adequate lane and shoulder widths, is an infrastructure nightmare.

Mr. Secretary, you are the steward of our Nation's water resource funding. Would you support swiftly replacing these bridges so that we can avoid spending \$150 million to repair a bridge that would still need to be replaced in a decade or so?

Mr. JAMES. Senator Markey, I will have to check on my authority to do that. The Corps is not in the bridge business, as you know, sir, and at one time since you and I met, I understood that the DOT there was looking at maybe replacing or restoring those bridges at the State level, so until I find out those answers, sir, I really can not give you a promise other than to promise you I will get those answers and get back with you.

Senator MARKEY. I appreciate that. Our problem is that the Army Corps does own the bridges.

Mr. JAMES. Yes, sir.

Senator MARKEY. The Massachusetts Department of Transportation does not own them.

Mr. JAMES. You know, when I went there with you, I came back and asked how in the world does the Corps own two bridges, and they said back when that was done, that was a Federal channel and the bridges over those became owned by the Corps, which does not make sense to me because there are bridges in St. Louis, Missouri, Memphis, Tennessee, and Caruthersville, Missouri and up the Ohio River system, and the Corps do not own those bridges. I don't think I got a very good answer.

Senator MARKEY. Did they tell you how great the Massachusetts congressional delegation was in the 1930's?

[Laughter.]

Mr. JAMES. I was told that.

Senator MARKEY. It does make sense, though, to rebuild rather than repair those bridges, you do agree with that?

Mr. JAMES. From an engineering perspective, yes, sir, I think so.

Senator MARKEY. That is why I think it is so important for us to work together here, because this is kind of an opportunity, the way we had in the 1930's, to pass a big infrastructure bill, to pass a surface transportation bill so that we are providing the funding at a magnitude that makes it possible for us to provide funding that can help to solve these problems that are created only because of the great work that was done in the 1930's.

The dependence which we have on the work that was done by the Army Corps back then is now far greater than it was then. Our population is three or four times greater as a State, and the whole world comes to the Cape as well. That is why I am looking forward to working with the Chairman and the Ranking Member of this Committee to put together a supplemental funding program that can help to provide for the reconstruction or building anew of a lot of the infrastructure from times gone by and to just put it on a separate track.

Just one final thing. Does the Corps support divesting of the bridges? Would it be helpful if Congress provided the Corps with more directives and authorities on how to divest the Corps-owned bridges to willing State and non-Federal sponsors?

Mr. JAMES. I really hate to answer that directly, but I would say yes, they would certainly entertain a way to divest of those bridges, because that is really not their work, their expertise.

Senator MARKEY. Thank you. By the way, again, I thank you for your great work, and all of you on this panel.

Senator BARRASSO. Thank you, Senator Markey.

Senator MARKEY. I am looking forward again, Mr. Chairman, Senator Carper, to working with you going forward so that in this reauthorization bill we have a chance to make some legislative changes as well as funding changes as well. Thank you.

Senator BARRASSO. Thank you.

Senator Carper.

Senator CARPER. Thanks, Mr. Chairman.

A question if I could for Mr. Kline, Chip Kline. One of the Corps' most significant problems, as you know, is the agency's limited resources. We are culpable for that, we are complicit in that because we do not provide enough resources; and I think you and our panel of witnesses are aware of that. Consistently, Congress seems to give the Corps more work to do than we give them the resources to do that work, so they limp along each year.

We fund, too often, projects piece by piece rather than fully funding projects upfront. Then a storm hits and the Federal Government has to spend large amounts of money to rebuild projects over and over again. One of the key themes of last year's WRDA bill, as you may recall, was that the Corps should be building an entire project once and doing so in a resilient way, rather than on a piecemeal basis.

I want us just to focus on Louisiana for just a moment in this regard. Would you just talk with us a little bit about how this piecemeal funding has impacted your State, the State of Louisiana? Compare that to funding provided to the new sea wall and pump station in New Orleans.

Mr. KLINE. Yes, sir. Thank you, Senator Carper. I do not think that there is a better example to point to than the hurricane protection system around the greater New Orleans area to answer your question, and I think it is important for members of this Committee to realize that the hurricane protection system around the greater New Orleans area was first authorized in the 1950's.

Fast forward to 1965, Hurricane Betsy hits. The system was not yet complete. There were portions of the system that were funded, there were portions that were not, and, as a result, catastrophic

flooding happened as a result of Hurricane Betsy. Hundreds of millions of dollars were then expended to respond to the disaster.

Fast forward 40 years, from 1965 to 2005. Hurricane Katrina hits. The hurricane protection system around the greater New Orleans area was not yet complete. The components that were complete failed because they were not built properly and, as a result, thousands of people lost their lives, livelihoods were destroyed because of that piecemeal approach.

As I referenced in my opening comments, Senator Carper, the process by which the Federal Government funds these projects is flawed. If full funding was appropriated on the front end, you and I would probably not be having this conversation right now.

Senator CARPER. Thank you, sir.

A question for the whole panel, and we will start with Lynn Budd, from Wyoming, right? I was in Wyoming this last weekend.

Ms. BUDD. Very good. It is wonderful.

Senator CARPER. It is called Camden Wyoming in Delaware.

Ms. BUDD. Well, you will have to come to our State.

[Laughter.]

Senator CARPER. I have been, and I will be back. I will be back. I might bring my wife.

The Army Corps reports that it has a major backlog of construction projects now estimated to say, they used to say just over \$90 billion, now I am told it is close to \$100 billion. That is not a good direction to be going. These projects include both those that have been authorized but unfunded and those that have started and stopped due to funding constraints. It is clear that the Army Corps needs more resources, looking at a \$90 billion plus backlog, because \$7 billion in annual civil works funding is obviously not enough to reduce the kind of backlog, so a question for each of you. If you want to lead off, you can; if you do not want to, you do not have to.

A two-part question: how can Congress assist the Corps in working with local sponsors so we can get our Nation's critical infrastructure projects moving, more of them? In addition to the lack of sufficient funding, because it always does come back to money, does the Corps face other obstacles as it attempts to reduce its backlog that Congress should be examining?

That may not be a fair question for you, but I am sure it is for others at the table. Maybe someone whose first name is General, Major General Spellmon, please. You want to take a shot at that? Anything in addition to the lack of sufficient funding that the Corps faces as it attempts to reduce its backlog that Congress should be examining?

General SPELLMON. Yes, sir. You are correct, the backlog, by our latest estimates, is about \$98 billion, one-third of that being flood risk management projects.

Sir, the example I would give you would be the commitment to fund projects to completion. That is, after Congress appropriates dollars to begin a project, we ought to see it all the way through. The example I like to give the Herbert Hoover Dike. This is a 143-mile dike around Lake Okeechobee in southern Florida. It has had some seepage and stability concerns for some time, so we are in the process of putting in a 56-mile cutoff wall about 80 feet below the

dike surface. With incremental funding, it took us 13.5 years to get to the halfway point of that cutoff wall. Congress has made the decision in the Bipartisan Budget Act of 2018 to fully fund the remainder, so it will only take us 3 years to get the second half of that project complete.

That would be my recommendation, sir, to the Committee and to Congress, is once we start, a commitment to finish our work.

Senator CARPER. All right, thanks.

All right, we have been joined by one of our colleagues. I will yield back my time so Roger has a shot. Go ahead.

Senator BARRASSO. Thank you, Senator Carper.

Senator WICKER.

Senator WICKER. Thank you. I know how it feels to be chairing a committee and see a straggler come in the last minute.

Senator BARRASSO. Let the record reflect that this Committee would never consider the senior Senator from the fine State of Mississippi as a straggler; only a stalwart member of this Committee and a valued member, and we always welcome his presence and his thoughtful questioning.

Senator WICKER. Well, thank you for that.

Senator CARPER. I am Tom Carper and I approved this message.

[Laughter.]

Senator WICKER. I hate to complain, but, Mr. James, let me ask you about the Jackson County Airport Authority. The Mobile District Corps has denied a request to extend a regional general permit, RGP, for the Jackson County Airport. This permit allows for Clean Water Act compliance for aviation-related development on a 300-acre site near the Trent Lott International Airport. This means economic development and jobs for the Americans who live in and around the area of Jackson County.

First issued in 2005, the permit had been extended twice, in 2009 and 2014. Suddenly it is not OK to do that anymore according to the Mobile Corps of Engineers. The District gave only 2 weeks' notice that the permit would be allowed to expire. Of course, this caught our economic developers and job creators off guard and presents a crippling blow to economic possibilities on the site.

Secretary James, you and President Trump have said repeatedly that we need to find ways to streamline the bureaucracy and move much quicker for construction of projects, so I wonder how this action by one Corps district, who has decided to do it differently than other Corps districts and differently than they have done in the past, I wonder how this complies with this.

I think we have made you aware, at least made staff aware of this. I realize it is a rather detailed and complex issue, but are you aware of this? If not, will you look into it and see if you can help us get through this bureaucratic roadblock to creating jobs and economic development for Americans?

Mr. JAMES. Senator Wicker, I apologize, I am not aware of it, but we will get to the bottom of it as soon as possible.

Senator WICKER. OK.

Mr. JAMES. We will report back to you on it.

Senator WICKER. I do appreciate that. You might want to put something on the record there; the Chair might appreciate this. If these streamline approaches to economic development are not uti-

lized, then we are going to be hurting for job creation in an area where this has come to be something that we have expected and something that we have enjoyed working with.

I do appreciate that and, with that, Mr. Chairman, I will forego other questions, submit some for the record, perhaps, and yield back my time.

Senator BARRASSO. Well, thank you very much, Senator Wicker. I know as Chairman of the Commerce Committee you have a lot of additional responsibility, so I appreciate you always focusing and getting the job done for the people of your home State. Thank you very much.

In closing, I would like to say that this Committee authored, and Congress passed, America's Water Infrastructure act for a reason. We gave the Corps deadlines in the Act for a reason. I think it is unfortunate that the April 21st deadline for the submittal of the Snake River Flood Prevention Action Plan was not met and that the report, I believe, is light, as we have heard today, on new substantive actions to better protect my constituents from flood risk. Wyoming has not been adequately consulted by the Corps, as we have heard from our Director of Homeland Security. Had it been, the Corps could have produced a substantive Action Plan by now.

Today, Secretary James has pledged to work with us in Wyoming to improve our ability to mitigate our flood risk. I think this is an important step forward and I promise you that I will hold the Secretary, as well as the Corps of Engineers, their feet to their fire on this important step.

If there are no more questions, and there are not, members may also submit followup questions for the record. The hearing record will remain open for 2 weeks.

I want to thank all the witnesses for being here, for their time and their testimony, especially Lynn Budd, the Director of Homeland Security for the State of Wyoming, and Leland Christensen, who is sitting behind her, who is the Assistant who I have served with in the Wyoming legislature. It is good to have all of you here today.

With that, this hearing is adjourned.

[Whereupon, at 12 p.m. the committee was adjourned.]

[Additional material submitted for the record follows:]



United States Department of the Interior

BUREAU OF RECLAMATION
Washington, DC 20240

IN REPLY REFER TO:

91-00000
2.2.4.23

MAY 07 2019

The Honorable John Barrasso
Chairman, Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

This letter transmits the Snake River Basin Flood Prevention Action Plan developed by the Bureau of Reclamation as required by Section 4302 of the America's Water Infrastructure Act of 2018 (P.L. 115-270). Reclamation consulted with the Northwestern Division and Walla Walla District of the U.S. Army Corps of Engineers (USACE) and coordinated with local stakeholders in collecting information and preparing the document.

The action plan discusses Snake River Basin facilities owned by Reclamation and USACE. It describes the structure of the Reclamation and USACE water management teams, management and operations of the reservoir system, stakeholder coordination, and improvements of flood risk management. The action plans for Wyoming, Idaho, and Oregon are included as appendices. They describe flooding risks and issues as well as steps to manage and reduce risks by geographic area within each state. These plans also discuss stakeholder coordination and actions to improve coordination statewide.

If you have questions about the attached action plan, please contact Mr. Roland Springer, Area Manager, Snake River Area Office, at (208) 383-2246.

Sincerely,

Brenda Burman
Commissioner

Enclosure

Identical Letter Sent To:

The Honorable Raul M. Grijalva
Chairman, Committee on Natural Resources
House of Representatives
Washington, DC 20515

The Honorable Rob Bishop
Ranking Member, Committee on Natural Resources
House of Representatives
Washington, DC 20515

The Honorable Peter A. DeFazio
Chairman, Committee on Transportation and Infrastructure
House of Representatives
Washington, DC 20515

The Honorable Sam Graves
Ranking Member, Committee on Transportation and Infrastructure
House of Representatives
Washington, DC 20515

The Honorable Lisa Murkowski
Chairwoman, Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

The Honorable Joe Manchin
Ranking Member, Committee on Energy and Natural Resources
United States Senate
Washington, DC 20510

The Honorable Thomas R. Carper
Ranking Member, Committee on Environment and Public Works
United States Senate
Washington, DC 20510



**America's Water Infrastructure Act of 2018
(P.L. 115-270) Section 4302(c):**

Snake River Basin Flood Prevention Action Plan

P.L. 115-270 directs that the report be sent to the "Committee on Environment and Public Works and the Committee on Energy and Natural Resources of the Senate, and the Committee on Transportation and Infrastructure and the Committee on Natural Resources of the House of Representatives"

May 2019

Prepared for
United States Congress

Prepared by
**U.S. Department of the Interior
Bureau of Reclamation**

In Coordination with
**U.S. Department of the Army,
U.S. Army Corps of Engineers**

MISSION STATEMENTS

U.S. DEPARTMENT OF THE INTERIOR

The Department of the Interior (DOI) conserves and manages the Nation's natural resources and cultural heritage for the benefit and enjoyment of the American people, provides scientific and other information about natural resources and natural hazards to address societal challenges and create opportunities for the American people, and honors the Nation's trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities to help them prosper.

BUREAU OF RECLAMATION

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Introduction

This Snake River Basin Flood Prevention Action Plan has been developed by the Bureau of Reclamation (Reclamation) in consultation with the U.S. Army Corps of Engineers (USACE) in accordance with Public Law 115-270, America's Water Infrastructure Act of 2018, Section 4302. The plan describes the actions the Secretary of the Army and the Commissioner of Reclamation take to reduce flood risks within the Snake River Basin. The plan focuses on areas most likely to experience flooding within the next 2 years and includes a description of Reclamation and USACE facilities, water management teams, operational considerations, stakeholder coordination efforts, and opportunities for improving flood risk management.

Appendices A through C contain state-specific flood-prevention action plans related to the Snake River Basin in Wyoming, Idaho, and Oregon. A plan for the State of Washington is not included, as water levels in the Lower Snake River are managed via USACE dams and flooding is not anticipated within the next 2 years. Additionally, plans for the States of Nevada and Utah are not included, as no Reclamation or USACE facilities exist within the small portions of the Snake River Basin in those states. The state-specific plans include descriptions of flood risks and issues, steps to manage and reduce flood risks, areas likely to experience flooding, stakeholder coordination, and actions to improve coordination.

Snake River Basin Facilities

Dams

Reclamation, in cooperation with its transferred works partners, operates 23 on-stream dams within the Snake River Basin totaling nearly 6.7 million acre-feet of active capacity, as well as three off-stream dams. USACE operates six dams within the Snake River Basin. Two provide nearly 2.3 million acre-feet of storage capacity, while the other four (on the Lower Snake River) are run-of-the-river dams supporting an average of 34 million-acre feet of runoff annually from the basin. Figure 1 contains a map of the basin and dams owned by Reclamation and USACE within the Snake River Basin. Table 1 contains summary information for each dam.

Reclamation coordinates with USACE on operations at 10 reservoirs in accordance with Section 7 of the Flood Control Act of 1944 (Section 7). Reclamation or its transferred works partners operate the remaining 16 Reclamation reservoirs without Section 7 flood control requirements. Many of these dams provide incidental flood control based on refill guide curves developed for dam safety purposes. For the period 1950 to 2015, it is estimated that Reclamation and USACE dams in the Snake River Basin have prevented more than \$5.5 billion in flood-related damages in the Pacific Northwest.

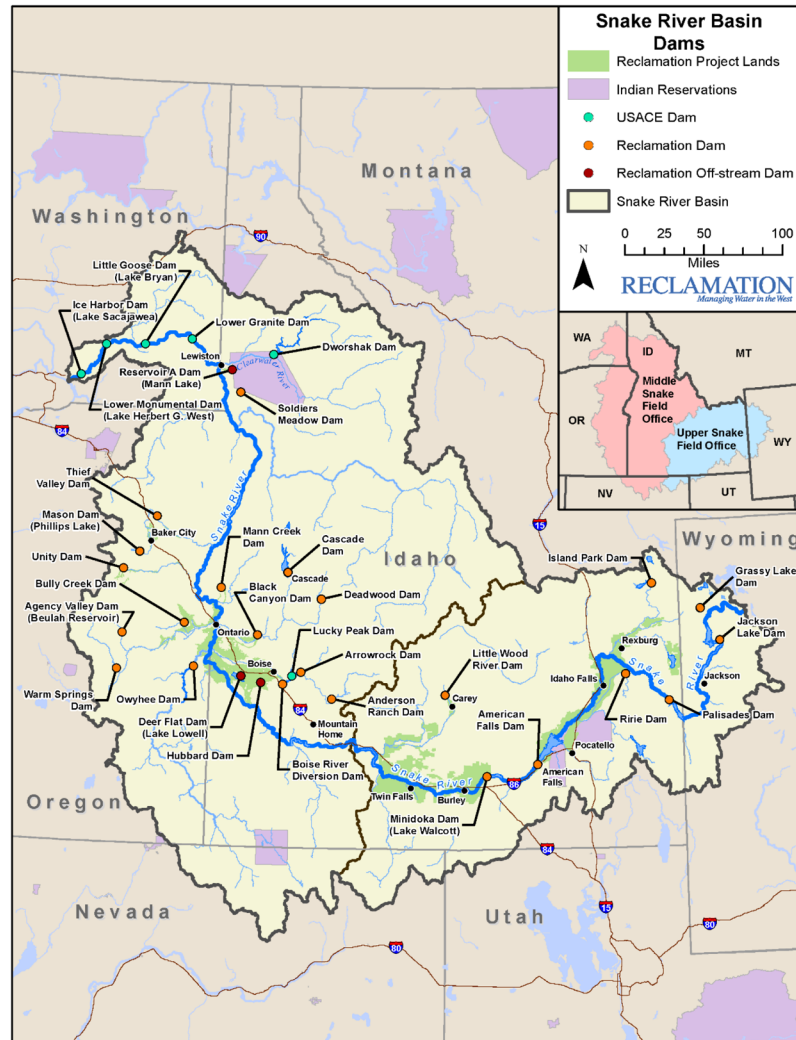


Figure 1. Reclamation and USACE Dams in the Snake River Basin

Table 1. Reclamation and USACE Dams in the Snake River Basin

Sub-Basin/Reservoir	Active Capacity (acre-feet)	Average Annual (Oct-Sep) Runoff (acre-feet) ¹	State	Owner
Upper Snake River Basin				
Jackson Lake ²	847,000	1,033,000	WY	Reclamation
Palisades ²	1,200,000	4,537,000	ID	Reclamation
Island Park	135,205	472,000	ID	Reclamation
Grassy Lake	15,180	5,500	WY	Reclamation
Ririe ²	80,540	88,000	ID	Reclamation
American Falls	1,672,590	8,370,000	ID	Reclamation
Minidoka	95,180	8,420,000 ³	ID	Reclamation
Malad River Basin				
Little Wood River ²	30,000	111,000	ID	Reclamation
Boise River Basin				
Anderson Ranch ²	413,100	650,000	ID	Reclamation
Arrowrock ²	272,200	1,643,000	ID	Reclamation
Lucky Peak	264,400	1,867,000	ID	USACE
Boise Diversion Dam	1,200	1,867,000	ID	Reclamation
Deer Flat ⁵	173,000	N/A ⁵	ID	Reclamation
Hubbard Dam ⁵	4,060	N/A ⁵	ID	Reclamation
Weiser River Basin				
Mann Creek	10,900	30,500	ID	Reclamation
Payette River Basin				
Cascade	646,460	684,000	ID	Reclamation
Deadwood	153,992	164,000	ID	Reclamation
Black Canyon	31,200	2,216,000	ID	Reclamation
Clearwater River Basin				
Soldiers Meadow	2,370	N/A ³	ID	Reclamation
Reservoir A ⁵	2,440	N/A ⁵	ID	Reclamation
Dworshak Dam	2,015,000	3,800,000	ID	USACE
Eastern Oregon				
Owyhee	715,000	776,000	OR	Reclamation
Warm Springs ²	169,639	151,000	OR	Reclamation
Agency Valley ²	59,212	108,000	OR	Reclamation
Bully Creek ²	23,676	38,000	OR	Reclamation
Unity	24,970	63,000	OR	Reclamation
Mason ²	73,000	75,000	OR	Reclamation
Thief Valley	13,307	N/A ³	OR	Reclamation
Lower Snake River				

Sub-Basin/Reservoir	Active Capacity (acre-feet)	Average Annual (Oct-Sep) Runoff (acre-feet) ¹	State	Owner
Lower Granite ⁴	N/A	34,000,000	WA	USACE
Little Goose ⁴	N/A	34,000,000	WA	USACE
Lower Monumental ⁴	N/A	34,000,000	WA	USACE
Ice harbor ⁴	N/A	34,000,000	WA	USACE
TOTAL	8,972,221	-	--	

¹ Calculated natural runoff from the watershed upstream of each facility

² Section 7 flood control reservoir

³ Annual runoff not tracked by Reclamation

⁴ Run-of-river facility

⁵ Off-stream dam

Levees

In addition to the reservoirs and dams identified above, the USACE supports nearly 170 miles of Federal and non-Federal levees throughout the Snake River Basin. Some of the non-Federal levees are included in the P.L. 84-99 program, which means they are eligible for rehabilitation by USACE should they become damaged in a flood event. Assistance for flood mitigation is available from USACE at any location in the Snake River Basin. From 1950 to present, it is estimated that this levee system in the Snake River Basin has prevented \$1.5 billion in flood-related damages in the Pacific Northwest.

Some key levee systems along the Snake River Basin include those in the vicinity of Jackson, Wyoming; Heise, Idaho; and Blackfoot, Idaho. In Idaho, Snake River tributaries with levees include the Clearwater River, Weiser River, Payette River, Boise River, Big Wood and Little Wood Rivers, Salmon River, Little Lost River, Portneuf River, and other small tributaries. Tributary rivers in Oregon with levees (Federal and non-Federal) include Grande Ronde River tributaries, Burnt River, Malheur River, and other small tributaries.

Information regarding levees throughout the Snake River Basin and their ownership is available in the National Levee Database (<https://levees.sec.usace.army.mil/#/>).

Reclamation and USACE Water Management Teams

Reclamation's water operations in the Snake River Basin are managed by the Middle Snake Field Office in Boise, Idaho, and the Upper Snake Field Office in Heyburn, Idaho, with oversight and assistance by the Pacific Northwest Regional Office Water Management Group in Boise, Idaho. USACE water operations in the Snake River Basin are managed by two teams. The Walla Walla District Water Management Team in Walla Walla, Washington, manages the Upper and Middle Snake River and tributaries. The Columbia Basin Water Management Team in the Northwest Division office in Portland, Oregon, manages the Lower Snake River and provides oversight.

Managing the Reservoir System

The Snake River Basin's hydrology is primarily driven by snowmelt. The reservoir systems are critical in supplying water during the dry summer months for the irrigation of crops; for hydropower and navigation in the Lower Snake River Basin; and for other uses across the basin. The reservoir systems typically follow an annual pattern of filling in the spring with snowmelt runoff and drafting during the summer for irrigation and other water supply needs.

Flood-risk management operations at Reclamation and USACE reservoirs within the Snake River occur in most years. Water supply reservoirs in the Snake River Basin typically fill and are depleted each year and generally require active operations to balance reservoir fill with flood-risk management during the spring runoff season. Reclamation and USACE cooperate each spring to manage reservoir fill based on snowpack and runoff conditions.

Reservoir Operations Considerations

USACE has authority for flood-risk management at Reclamation's Section 7 flood control reservoirs in the Snake River Basin. Both agencies coordinate operations leading up to and during spring runoff according to water control manuals developed by USACE for each reservoir with Section 7 flood control authorization. The manuals include flood control rule curves developed by USACE, based on flood risk analysis, which are vetted with Reclamation and shared with stakeholders as needed. The rule curves establish flood control space required in each reservoir at any given time, based upon forecast runoff. Reclamation is responsible for operations of its non-Section 7 reservoirs and executes that responsibility with its operating partners.

Because the Snake River Basin system is primarily snowmelt-driven, the critical operational period for flood risk management occurs in the spring during snowmelt. Prior to and during the spring runoff, the Reclamation and USACE water management team actively monitors and analyzes basin conditions and develops forecasts of anticipated spring runoff volume. The forecasts are used to guide reservoir operations, including determining required reservoir space and associated releases needed to manage downstream flood risks. While the flood control rule curves set required flood control space, decisions on releases must be made in advance of monthly runoff forecasts so a change in forecast does not result in a sudden, potentially large change of flows, which could be detrimental to stakeholders and the riverine environment.

Forecasting future weather presents the biggest challenge for reservoir operators during the spring. If conditions turn out to be wetter than forecasted, reservoirs can fill rapidly, requiring higher releases for flood risk management. If conditions turn out to be drier than forecasted, reservoirs may fail to fill and threaten Reclamation's ability to provide needed water supply to local users. The water management team works diligently to position reservoir storage to be able to respond to either condition and balance flood risk with the fill of the reservoirs during the flood-risk season.

Once the flood risk has passed, Reclamation and USACE operate their dams independently to manage for the other authorized uses, including irrigation, hydropower, fish and wildlife, and recreation.

Stakeholder Coordination

Reclamation and USACE place great importance in communicating current and anticipated reservoir operations to interested stakeholders in the basin and continue to work to ensure the effectiveness of stakeholder coordination. These activities include, but are not limited to:

1. Providing press releases to the media to communicate critical water operations changes.
2. Distributing weekly updates via e-mail to interested parties. (Local citizens can sign up for email updates by emailing a request to bstevens@usbr.gov or jdalling@usbr.gov)
3. Coordinating with partners, including the U.S. Geological Survey, National Weather Service, and Northwest River Forecast Center to issue flood warnings when appropriate.
4. Maintaining publicly available websites with real-time river and reservoir data:
Reclamation: <https://www.usbr.gov/pn/hydromet/select.html>; USACE:
<http://pweb.crohms.org/report/projdata.htm>
5. Stakeholders with additional questions or concerns can contact:

Snake River Area Office
Water Operations Manager
470 22nd St
Heyburn, ID 83336
208-678-0461

Pacific Northwest Region Questions and Comments website:
https://www.usbr.gov/pn/contact_pn.html

6. Presenting current basin conditions, runoff forecasts, and operational plans at numerous forums, including state water supply meetings, irrigation entity board meetings, water user association meetings, emergency management meetings, and other public information sessions.
7. Conducting Emergency Action Plan and joint flood control operation exercises to practice addressing flood scenarios for specific reservoirs on an annual basis, including other Federal, state, and local agencies identified as flood-risk management partners. This ensures lines of communication and roles are clear and improved with each exercise.

Improvements in Flood Risk Management

Reclamation and USACE water management teams continually work to improve operations and coordination efforts within the Snake River Basin. Current areas of focus include:

1. Improving the accuracy and reliability of the water supply forecasts, including developing procedures to take advantage of additional hydrologic data, enhanced computing power, and advanced statistical methods.
2. Improving real-time operations tools, including developing more sophisticated models to simulate reservoir operations in the basin.
3. Improving methods to disseminate operational plans to the public.
4. Refining communication and coordination within and among the Reclamation and USACE water management teams.
5. Enhancing communication and coordination with stakeholders.

Appendices

Appendix A. Flood Prevention Action Plan—Wyoming

This plan describes areas within the Snake River Basin in the State of Wyoming with known flooding issues and a reasonable potential for flooding in a 2-year period. The sections below detail the flooding risks and issues, steps being taken to manage or reduce flooding risks, coordination with stakeholders in relation to flooding or flood risks, and actions to improve coordination.

Snake River near Jackson, Wyoming

Description of Flooding Risks and Issues

The Snake River flows through western Wyoming's Teton and Lincoln Counties. Reclamation operates Jackson Lake Dam, located north of Jackson, Wyoming, as one of the Upper Snake River storage facilities that provides irrigation supply and flood control space for Wyoming and Idaho. A portion of the Henrys Fork watershed that includes Grassy Lake Dam drains to the west in the area between Grand Teton and Yellowstone National Parks. Due to the sparsely populated nature of this area in Wyoming, this facility does not provide flood-risk management in the state.

Larger tributaries of the Snake River that contribute to flows downstream of the dam and affect flood risk include Pacific Creek, Buffalo Fork, the Gros Ventre River, and the Hoback River. Smaller tributaries that present local flood risks include Flat Creek, Spread Creek, and Fish Creek. The Wilson area has significant flood risk, with a system of levees along the Snake River.

The historical maximum release from Jackson Lake Dam is 11,700 cfs. The downstream flood stage is 10.0 feet (25,900 cfs), as measured at the *SNAKE RIVER below Flat Creek near Jackson, WY* (swinging bridge) gage. Tributary flows downstream of the dam, which cannot be controlled and can be more than double the releases from the dam, have a significant impact on flooding in the Jackson area. Thus, the USACE levee system, combined with water management discussed below, are critical.

Steps to Manage and Reduce Flood Risks

Jackson Lake provides a minimum of 200,000 acre-feet of flood control space (with storage limited to 76 percent full) during the winter months. During the spring runoff period, Jackson Lake is required to provide 25 percent of the required flood control space above Heise, Idaho, with Palisades Reservoir providing the remaining 75 percent.

Reclamation and USACE jointly manage flood-risk operations at Jackson Lake Dam to address Snake River flood risk in Wyoming, and coordinate with Teton County, Wyoming, Emergency Management. At the beginning of each month from January through June, Reclamation and USACE have formal discussions regarding snow levels, base flow conditions, and the precipitation outlook and come to an agreement on a runoff volume forecast from the beginning of that month through July. The agreed-upon forecasts are the projected runoff volume used to determine appropriate flood control space in Jackson Lake

leading up to and throughout the spring runoff season. The two agencies coordinate changes weekly, and daily if changes in the forecast occur.

Each January, Reclamation and the USACE hold a formal pre-flood-season meeting to discuss the flood-season outlook. Current reservoir levels, snowpack conditions, and runoff volume forecasts are discussed in this meeting. Subsequent coordination throughout the remainder of winter and spring occurs regularly, at intervals appropriate to the level of the flood-risk outlook. During runoff, coordination occurs frequently, sometimes hourly, depending on the amount of information being processed by the two agencies.

During peak runoff and flood-control operations at Jackson Lake Dam, Reclamation coordinates closely with USACE regarding releases at Jackson Lake Dam to manage peak flows at the swinging bridge gage and potential impacts to the levee system in the Wilson area. Reclamation, USACE, and the Teton County Emergency Management team closely monitor and discuss current and forecasted tributary flows. Reclamation may temporarily reduce Jackson Lake outflows when downstream tributaries are peaking. Jackson Lake operations reduced peak discharge at the swinging bridge gauge in 2017 and 2018 by 4,000 cfs and 3,250 cfs, respectively.

Coordination with Stakeholders

Reclamation's Emergency Action Coordinator maintains contact with local emergency management officials based on Reclamation's Emergency Action Plan (EAP) for Jackson Lake Dam. Reclamation partners with other Federal, state, and local agencies to conduct periodic exercises to keep emergency personnel and other stakeholders informed on duties and actions during a flood.

Reclamation and USACE participate each May in the Teton County Emergency Management flood stakeholder meeting. At this meeting, Reclamation provides a projection of Jackson Lake operations for the year and USACE reports on its levee projects. Other agencies that present at this meeting include the National Weather Service (hydrologic outlook), Teton County Road and Levee Department (levee and culvert areas of concern/maintenance), Teton County Engineer (county areas of concern for flooding/projects), and Town/County Floodplain Manager (Digital Flood Insurance Rate Map mapping updates). Other agencies represented at this meeting include the Teton County Health Department, Red Cross, Teton Conservation District, and National Park Service.

Reclamation and USACE also participate each May in the Snake River Agency Coordination Meeting. At this meeting, Reclamation provides a projection of Jackson Lake operations for the year and USACE reports on levee projects. Other agencies that are involved at this meeting include the Wyoming State Engineers Office (coordination), Wyoming Game and Fish Department (fisheries and recreation), National Park Service (recreation), U.S. Forest Service (recreation), Teton Conservation District (river maintenance) and Teton County (public awareness).

Additionally, Reclamation holds a public information session in Jackson in mid-late May each year to notify the public of water supply conditions and the hydrologic outlook. This

meeting is well attended by river guides and the public. During recent high-snowpack years, Reclamation was able to address many concerns about how flood risk is managed, both during and as a follow-up to this meeting.

The day after the May public information session, Reclamation's Upper Snake Field Office conducts the annual Windshield Snow Survey. This is an opportunity for agency stakeholders to interact with the Upper Snake water operations team as they travel together to view the snowpack in critical locations in Grand Teton National Park and up Highway 191 into Yellowstone National Park.

Reclamation distributes weekly or more-frequent water operations update emails to interested parties in the Upper Snake River basin. Anyone can ask to be included, and the list continues to grow. Distribution includes county sheriffs, emergency coordinators, Wyoming Game and Fish Department, Idaho Department of Fish and Game, Wyoming and Idaho state water resource agency staff and leadership, Department of Environmental Quality, local officials, National Park Service, U.S. Forest Service, Bureau of Land Management, fishing and whitewater outfitters, private landowners, irrigation and water district staff and leadership, power plant owners/operators, Tribal leadership/water operators, and congressional staff.

The Upper Snake water operations team at Reclamation's Heyburn office (208-678-0461) is generally available to discuss water operations with concerned individuals and invests significant time doing so.

Actions to Improve Coordination

Based on outreach to stakeholders in Wyoming and internal discussions, Reclamation and USACE will take the steps summarized below to improve coordination.

- A USACE representative will begin participating in the May public information session in Jackson.
- Reclamation will include local Emergency Management Coordinators in distribution of emails summarizing water orders and operational updates.
- Reclamation will work more closely with local media (print, radio, television) to notify the public of informational meetings and water operations.

Appendix B. Flood Prevention Action Plan—Idaho

This plan describes areas within the Snake River Basin in the State of Idaho with known flooding issues and a reasonable potential for flooding in a 2-year period. The sections below detail the flooding risks and issues, steps being taken to manage or reduce flooding risks, coordination with stakeholders in relation to flooding or flood risks, and actions to improve coordination.

1) Upper Snake - Snake River from Palisades Dam to King Hill, ID

Description of Flooding Risks and Issues

The Snake River above King Hill, Idaho (the boundary between Reclamation's Upper Snake and Middle Snake Field Offices), flows through Bonneville, Madison, Jefferson, Bingham, Bannock, Power, Cassia, Minidoka, Twin Falls, Jerome, and Gooding Counties, with headwaters in eastern Idaho and western Wyoming. The principal tributary to the Snake River in eastern Idaho is the Henrys Fork River. The primary communities subject to flooding in this reach include Heise, Shelley, Blackfoot, Firth, and Burley, Idaho.

Reclamation's Palisades Reservoir is located east of Idaho Falls, Idaho. It is the primary Upper Snake River storage facility that provides irrigation supply and flood control management for eastern Idaho. During spring runoff, Palisades Reservoir is required to provide 75 percent of the required flood control space above Heise; Jackson Lake in Wyoming provides the remaining 25 percent. The historical maximum release from Palisades Dam is 40,300 cfs. Flood stage as measured at the *SNAKE RIVER NEAR HEISE, ID* gage is 8.0 feet (25,800 cfs). This gage is 39 miles downstream of Palisades Dam. Intervening tributary inflow is minor, so the flow at this gage reflects Palisades releases. During the recent high runoff year of 2017, peak flows at the *SNAKE RIVER NEAR HEISE, ID* gage were controlled to 25,200 cfs. Without the flood protection provided by Palisades and Jackson Lake dams upstream, peak flow would have been 44,500 cfs. Flooding risks below Palisades Dam include some rural road crossings, low-lying structures, and farmland adjacent to the river.

The Snake River is bounded by USACE levees beginning in the Heise area that span both sides of the river downstream to the Roberts and Menan areas. The levees protect the communities of Ririe, Archer, Labelle, Lyman, Lorenzo, Thornton, Menan, and thousands of acres of irrigated lands. During flood control operations, USACE and local levee managers in Bonneville, Madison, and Jefferson Counties closely monitor the levees. Reclamation and USACE coordinate in determining releases from Palisades Dam to avoid threatening the levee system's ability to provide protection when possible.

During flood control operations, Palisades Dam outflows are also adjusted within situational flexibility to reduce flooding impacts in the Shelley and Blackfoot, Idaho, reaches (Bingham County) of the Snake River. Flooding risks in this reach of the Snake River include low-lying road crossings, low-lying structures, and farmland adjacent to the river.

American Falls Reservoir, located near Pocatello, is the lowest large reservoir in the Upper Snake system. Although it is not a Section 7 reservoir and has no flood-risk management space requirements, Reclamation may adjust its operations in high runoff years, reducing releases, if possible, to address downstream flooding in the Burley and Rupert areas. Flooding risks include farmland adjacent to the river, as well as residential property (primarily yards) and low-lying structures along the river.

Ririe Dam, located on Willow Creek near Idaho Falls, was constructed by USACE for flood control and later transferred to Reclamation, which now operates it for both water supply and flood control. Under an agreement with the USACE, Reclamation operates the dam according to formal flood control rule curves. The Willow Creek watershed is a mid-elevation watershed subject to rain-on-snow events in late winter or early spring; nearly half of Ririe Dam's storage capacity is vacated in winter to contain these potential flows. Through maintaining reservoir space and clearing the downstream channel of snow to convey winter flows if needed, it is not expected that this drainage would flood in the next 2 years.

The Little Wood River Dam, located near Carey, Idaho, is operated by the Little Wood Irrigation District. The Little Wood River drains the eastern part of the Big Wood River basin; the Big Wood River enters the Snake River near Bliss, Idaho. The dam is operated under formal Section 7 flood control regulations. Flood control operations have the goal of limiting flows of the Little Wood River to 1,200 cfs at Carey, Idaho. Impacts of high flows begin in fields and low-lying areas in Carey, Gooding, and Shoshone, then extend to a park, businesses, and other low-lying areas.

Steps to Manage and Reduce Flood Risks

Formal flood-control procedures for the Snake River above Heise (Palisades Dam and Jackson Dam), Willow Creek (Ririe Dam), and the Little Wood River (Little Wood River Dam) were developed in cooperation with USACE under Section 7 of the 1944 Flood Control Act. Water control manuals for the dams outline the procedures and include flood control rule curves.

From January through June, Reclamation and USACE prepare and coordinate runoff forecasts for Palisades Dam, Ririe Dam, and Little Wood Dam. The jointly determined runoff forecast for Heise (Palisades Dam/Jackson Dam watershed) is used with the flood control rule curves to determine the required upstream reservoir management in Palisades Reservoir and Jackson Lake. The water control manuals require that 25 percent of the flood control space be made available in Jackson Lake Reservoir, and 75 percent of the required space provided by Palisades Reservoir. USACE monitors the condition of levees downstream of Palisades Dam. To the extent possible, outflow from Palisades Dam is adjusted during flood control operations if sections of the levees need repair.

Flood control at Ririe Dam is managed in close coordination with downstream irrigation districts. If high inflows are forecasted during the winter that would encroach upon required winter flood control space, the space-holder mobilizes excavators to clean the floodway

channel of snow and ice, thereby allowing winter flood control releases to be passed safely to the Snake River.

During high runoff in the spring, downstream irrigation districts also have some capacity to accept and pass flood flows downstream that the floodway channel is not able to convey to the Snake River.

The water management team uses the jointly determined runoff forecast for Little Wood River Dam with its flood control rule curves to determine the required flood control space. A portion of the watershed that drains above the Carey gage is not regulated by the dam. To the extent possible, Reclamation operates Little Wood River Dam to avoid simultaneous peak flows from the dam and unregulated tributaries that could compound flooding issues in Carey.

2) Henrys Fork River near St. Anthony and Rexburg

Description of Flooding Risks and Issues

The Henrys Fork River is located in eastern Idaho, in Fremont and Madison Counties. The principal tributaries to the Henrys Fork are the Teton River and Falls River. The primary communities subject to flooding in this reach include Rexburg and St. Anthony, Idaho. Reclamation owns two storage dams in the Henrys Fork watershed: Island Park Dam, located on the Henrys Fork River, and Grassy Lake Dam, located on the Falls River. These facilities are transferred works, which means they are maintained and operated under contract by the Fremont-Madison Irrigation District, headquartered in St. Anthony.

Flooding on the Henrys Fork River is monitored primarily at the *Henrys Fork near Rexburg* gage. Flood stage at this gage is 9.5 feet (7,300 cfs), which occurs quite often; minor flooding has occurred in 30 percent of the historical period. Initial flooding impacts are minimal, with effects to small areas of farmland and a local park. As water levels increase, flooding can affect additional farmland, low-lying farm outbuildings, and some low-lying secondary and access roads adjacent to the river.

Grassy Lake Dam is located in Wyoming, at the headwaters of the Falls River, which drains into the Henrys Fork in Idaho. As the dam is remote, there are no flooding risks in the immediate vicinity downstream of Grassy Lake Dam.

Steps to Manage and Reduce Flood Risks

Island Park and Grassy Lake Reservoirs have limited ability to reduce flows on the Henrys Fork River due to significant tributary runoff downstream of the dams. However, when conditions permit during spring runoff, Reclamation coordinates with Fremont-Madison Irrigation District to manage these reservoirs informally for limited flood control benefits. The primary objective of informal flood control operations is to limit reservoir releases to the extent possible when damaging flows are occurring in the St. Anthony and Rexburg areas.

From January through June, runoff forecasts for Island Park Dam are prepared and incorporated into operational planning. Reclamation operates the dam according to informal

flood-control curves designed to limit spillway discharge during the probable maximum flood, as well as the maximum water surface during years when very large inflows are expected. Island Park Dam has limited flood control ability in moderate to high flood-control years.

With its remote location, managed winter or spring releases from Grassy Lake (20 to 30 cfs in high years) are minimal and used to manage peak reservoir levels and associated spillway discharges. Once initiated, releases continue until Fremont-Madison Irrigation District personnel can safely return to close the outlets after the spring runoff period.

3) Boise River below Lucky Peak Dam

Description of Flooding Risks and Issues

The Lower Boise River, a tributary to the Snake River, is located in southwestern Idaho, primarily in Ada and Canyon Counties. It enters the Snake River west of Parma, Idaho. Communities along the Boise River have experienced tremendous development and encroachment within the floodplain. The Boise River has experienced repeated minor flooding, which could be expected in a 2-year period. A significant flood event with major flood damage will likely occur sometime in the future. County estimates place more than \$10 billion in properties at risk within the floodplain (Ada City-County Emergency Management 2011; Canyon County 2012). Due to recent growth, actual values could be higher.

Steps to Manage and Reduce Flood Risks

In the Boise River system, a total of 949,700 acre-feet of storage is used for joint irrigation and flood-control operations. The flood-control objective is to limit flow at the Glenwood gage (near the Glenwood Bridge in the city of Boise) to 6,500 cfs. Regulation of the three reservoirs is based on forecasts of expected runoff volumes from the Boise River watershed, prepared by the same team that prepares Upper Snake River forecasts. In addition, Reclamation and USACE use daily models for short-term forecasting and regulation.

From November 1 through December 31, a minimum of 300,000 acre-feet of space is maintained in three reservoirs – Anderson Ranch, Arrowrock, and Lucky Peak – with at least 165,000 acre-feet of this space in Arrowrock and Lucky Peak Reservoirs. From January 1 through March, the minimum space in the three reservoirs is 150,000 acre-feet, with a minimum of 55 percent in Arrowrock and Lucky Peak Reservoirs. The actual space requirement from January 1 through the end of the flood-control season is based on runoff forecasts and flood control rule curves.

4) Payette River System – Deadwood Dam and Cascade Dam

Description of Flooding Risks and Issues

The Payette River watershed is in southwestern Idaho; the 62-mile river enters the Snake River at Payette, along the Idaho-Oregon border. Its tributaries are the North Fork Payette

River and South Fork Payette River, both located in mountainous areas with small populations.

Deadwood Dam is located on the Deadwood River, a tributary to the South Fork Payette River. The Deadwood River is in remote terrain with minor flood risk. Historical maximum releases have reached 2,220 cfs. Cascade Dam is located on the North Fork Payette River in Cascade. Flood stage measured at the Horseshoe Bend gage site, downstream of both reservoirs and the confluence of the two forks, is 12,000 cfs. Horseshoe Bend and Emmett are located on the main stem in the lower watershed and could potentially experience overland flooding and minor structural issues associated with this flow.

Steps to Manage and Reduce Flood Risks

Reclamation coordinates releases from Deadwood and Cascade Reservoirs to maintain flows below 12,000 cfs at the Horseshoe Bend gage. Reclamation's water management team monitors flows daily during runoff and makes adjustments as necessary.

Coordination with Stakeholders

Reclamation's Emergency Action Coordinator maintains contact with local emergency management officials with particular attention to Reclamation's facility specific Emergency Action Plans (EAP). Reclamation partners with other Federal, state, and local agencies to conduct periodic exercises to keep emergency personnel and other stakeholders informed on duties and actions during a flood. Coordination activities in different areas of the state are discussed below.

Upper Snake and Henrys Fork Rivers

Stakeholder coordination for the Upper Snake River and Henrys Fork River is managed through Reclamation's Upper Snake Field Office, with participation from USACE as needed. During active flooding, especially if structural measures are needed, USACE is tightly integrated in coordination efforts and works directly with officials from affected areas.

Reclamation holds public information sessions in Jackson in mid- to late May to notify the public of water supply conditions and the hydrologic outlook. After this annual meeting, Reclamation's Upper Snake Field Office conducts the annual Windshield Snow Survey. This is an opportunity for stakeholders to interact with the Upper Snake water operations team as they travel together to view the snowpack in critical locations in Grand Teton National Park and up Highway 191 into Yellowstone National Park.

Reclamation distributes a weekly or more-frequent water operations update email to interested parties in the Upper Snake River basin. Anyone can ask to be included, and the list continues to grow. It includes county sheriffs, emergency coordinators, Wyoming Game and Fish Department, Idaho Department of Fish and Game, Wyoming and Idaho state water resource agency staff and leadership, Department of Environmental Quality, local officials, National Park Service, U.S. Forest Service, Bureau of Land Management, fishing and whitewater outfitters, private landowners, irrigation and water district staff and leadership, powerplant owners/operators, Tribal leadership/water operators, and congressional staff.

Water operations meetings are scheduled regularly with various stakeholder groups throughout each year. Reclamation attends and presents water supply information and water operations outlooks at Idaho Department of Water Resource meetings, including the Idaho Water Supply Committee and Upper Snake Advisory Committee meeting. Reclamation holds regular meetings with Idaho Water District 01, Idaho Department of Fish and Game, Henrys Fork Foundation, U.S. Forest Service, local fishing outfitters, and Shoshone-Bannock Tribes Water Management Leadership. Reclamation also holds meetings when requested by stakeholders. In the past, the Kiwanis Club and similar organizations, county commissioners, and local community groups have requested water operations updates, which Reclamation has provided. Water management staff are regularly contacted by the public and radio and newspaper staff to provide updates.

The Upper Snake water operations team at Reclamation's Heyburn office (208-678-0461) is generally available to discuss water operations with concerned individuals and spends a great deal of time doing so.

Boise and Payette Rivers

Reclamation's Emergency Action Coordinator maintains contact with Ada, Gem, and Canyon County Offices of Emergency Management and Irrigation Districts, with particular attention to Reclamation's facility-specific EAP for the Boise and Payette watersheds. The Middle Snake Field Office conducts stakeholder coordination for the Boise and Payette Rivers in conjunction with the Pacific Northwest Regional Office.

Reclamation and USACE attend monthly meetings with irrigation districts, city, state, and Federal agencies. Reclamation attends regular Water District 63 and 65 board and annual meetings and presents water forecasts and operational plans. Reclamation presents operations information at the Idaho Water Supply Committee meetings beginning in January, where various agencies present current water supply forecasts. Reclamation staff attend local irrigation district managers' monthly meetings. Monthly or more-frequent coordination occurs with Flood District 10, Water District 63, Water District 65, and Idaho Department of Water Resources to address in-stream work that may be affected by flood operations. Reclamation also participates in bi-weekly operations meetings with Idaho Power Company. Reclamation and/or USACE issue press releases to local media to inform the public of important water operation actions.

As releases are adjusted during spring runoff, the Middle Snake Field Office emails notifications of changes in releases to the Boise Project Board of Control, Water District 63 and 65 watermasters, Horseshoe Bend Hydro Electric Company, and Idaho Power Company. Staff also contact the watermasters by phone to verify this information.

Actions to Improve Coordination

Based on outreach to stakeholders in Idaho and internal discussions, Reclamation will take the steps summarized below to improve coordination.

-
- Reclamation will work more closely with local media (print, radio, television) to notify the public of informational meetings and water operations. These notifications would occur not only during flood events, but also during high-profile operational changes with public interest.
 - Reclamation will share opportunities for coordination and information sharing, such as the Idaho Water Supply Committee meeting, with stakeholders, including flood control districts and county floodplain managers.
 - The Middle Snake Field Office will continue to expand outreach for notifications of changes in releases at Boise and Payette River dams. The distribution list will be modified to an opt-in system and notifications will include more information regarding potential operations in a near-term planning window.
 - In 2017, the Boise River was at flood stage for more than 3 months. USACE and Reclamation supported activities led by state and county emergency operation centers to coordinate information dissemination regarding water operations, flows in the river, and areas of current or potential impact. This model will be implemented in future years as needed.
 - Reclamation will continue to discuss operational and outreach issues with Idaho Department of Water Resources to gain the state's perspective on areas for improvement. Recent recommendations from the state include keeping state staff, in addition to local watermasters, informed of operational changes.

Appendix C. Flood Prevention Action Plan—Oregon

This plan describes areas within the Snake River Basin in Oregon with known flooding issues and a reasonable potential for flooding in a 2-year period. The sections below detail the flooding risks and issues, steps being taken to manage or reduce flooding risks, coordination with stakeholders in relation to flooding or flood risks, and actions to improve coordination.

Owyhee, Malheur, Powder, and Burnt Rivers

Description of Flooding Risks and Issues

Reclamation owns dams on four tributaries in eastern Oregon that enter the Snake River in the reach from Nyssa, Oregon, to Brownlee Dam: the Owyhee River, Malheur River, Burnt River, and Powder River. These facilities are transferred works, maintained and operated under contract by the irrigation districts served by the facilities.

Owyhee Dam is located on the Owyhee River approximately 20 miles upstream from its confluence with the Snake River near Nyssa, Oregon. No major population centers exist along the Owyhee River downstream of the dam. Flooding risks are mainly to farmland adjacent to the river. Informal rule curves guide fill of the reservoir.

Warm Springs, Agency Valley, and Bully Creek Dams are located on the Malheur River upstream of Vale, Oregon. Formal Section 7 flood-control requirements guide fill of the reservoirs, with an objective to limit the flow of the Malheur River at Vale to 8,000 cfs, the level at which water begins to encroach onto residential areas.

Unity Dam is located on the Burnt River approximately 60 miles upstream from its confluence with the Snake River. There are no flood-control operations, formal or informal, on the Burnt River.

Mason and Thief Valley Dams are located on the Powder River. Mason Dam is located approximately 15 miles upstream of Baker City, Oregon. Formal Section 7 flood control requirements guide fill of the reservoir with an objective to limit the flow of the Powder River at Baker City to bankfull, approximately 500 cfs. These requirements include the reservation of 17,000 acre-feet of exclusive flood control space, which is to be maintained at all times. Thief Valley Dam is not operated for flood control, as no population centers exist below the reservoir.

Steps to Manage and Reduce Flood Risks

Formal and informal flood control procedures developed for the reservoirs listed above provide the guidance necessary to responsibly fill them to meet flood-control objectives while balancing the other authorized purposes. The procedures include requirements for winter space designed to protect against rain-on-snow events and spring space requirements designed to control reservoir fill during snowmelt runoff.

For reservoirs with formal flood-control requirements, Reclamation and USACE coordinate on water supply forecasts and work together to formulate operation plans, which

Reclamation then disseminates to the transferred works operators for execution. Reclamation and USACE analyze conditions on a daily, and even hourly, basis during active flood operations and coordinate with stakeholders and other agencies as necessary. Reclamation performs the analysis for reservoirs with informal flood-control operations, provides advice, and coordinates directly with the irrigation districts on operations.

Reclamation has established an Emergency Action Plan (EAP) for each of the facilities. The EAP is administered by Reclamation's Emergency Action Coordinator, who maintains contact with local emergency management officials. Reclamation partners with other Federal, state, and local agencies to conduct periodic exercises to keep emergency personnel and other stakeholders informed on duties and actions during a flood.

Coordination with Stakeholders

Reclamation works to maintain open lines of communication with all stakeholders throughout the year. For the eastern Oregon basins, coordination on flood-control operations typically begins in January and can last through June, depending on conditions. Reclamation provides water supply forecasts and projections on operational plans to the irrigation districts that manage the transferred works projects; watermasters; water supply availability committees; Oregon Water Resources Congress; and other local, state and Federal agencies, including the National Weather Service, Malheur County Emergency Management, Oregon Water Resources Department, and Oregon Department of Fish and Wildlife

Reclamation water operations staff meet with operating irrigation district staff and board members during spring runoff to describe and emphasize flood-control requirements to ensure the requirements are understood and met.

Actions to Improve Coordination

Based on outreach to stakeholders in Idaho and internal discussions, Reclamation will take the step summarized below to improve coordination.

- Irrigation districts have a primary role in coordination efforts related to flood operations in their areas, and typically have strong communication networks. In conversations with district representatives, especially as new staff come on-board, Reclamation will emphasize the importance of coordination and information dissemination within local communities.



DEPARTMENT OF THE ARMY
 U.S. ARMY CORPS OF ENGINEERS
 441 G STREET, NW
 WASHINGTON, D.C. 20314-1000

AUG 07 2012

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MEMORANDUM FOR SEE DISTRIBUTION

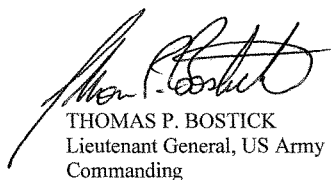
SUBJECT: Reissuance of the U.S. Army Corps of Engineers (Corps) Environmental Operating Principles

1. The seven Environmental Operating Principles (EOP) were introduced on 26 March 2002. These principles were designed to provide direction on how to better achieve stewardship of air, water, and land resources, and to demonstrate a positive relationship between management of these resources and the protection and improvement of a sustainable environment.
2. The Corps stepped up to the mark established in 2002 by establishing the Principles, but the mark has moved. In the last decade science has shown global changes, including climate and sea levels are changing faster than previously believed. Consequently, the Corps environmental vision must better (1) incorporate measures to reduce actions and inactions that may contribute individually or cumulatively to the factors causing global change, and (2) prepare Corps-managed Military and Civil Works infrastructure for adapting to global changes.
3. The Corps level of environmental commitment must expand and intensify. It is essential that each individual understand his or her responsibility to proactively implement the EOP as a key to the Corps mission. The understanding of these principles and implementation will require appropriate training of all staff. This does not require new training courses, but that all existing courses will include information on consideration and implementation of the EOP. Further, as regulations, circulars, and manuals are revised, consideration of EOP will be incorporated. Also the need for increased transparency in how government agencies incorporate the input of all stakeholders in its decision making processes has been stressed through the years and by the Administration. I fully support greater transparency and enhanced consideration of minority populations and low-income populations in Corps decision making.
4. The Army emphasizes sustainability, and the Corps has a major role as stewards of this Nation's environmental resources. Sustainability is the environmental legacy we pass on for future generations to improve upon and enhance.
5. I am revising and reissuing the EOP in a substantially more concise form and with more emphasis on proactively implementing these principles. The reissued EOP and explanations of each are presented in the enclosure.
6. These reissued EOP will soon replace Appendix A of ER 200-1-5. The revised EOP and the associated explanations will, to the extent legally and financially practical, guide all Corps management initiatives and business processes, and encompass the full spectrum of Corps

CECW-CP
SUBJECT: Reissuance of the Environmental Operating Principles

activities. This directive is intended only to improve the organization's internal management and the culture, it is not intended to, nor does it create any new substantive or procedural authority or legal responsibility, nor does it supplant any law, statute, codified regulation, or Executive Order. However, I am holding my senior leaders accountable to support the intent of these principles. I expect all MSC Commanders and staff to be accountable for delivering the improvements outlined in the revised EOP.

Encl
Environmental Operating Principles II


THOMAS P. BOSTICK
Lieutenant General, US Army
Commanding

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ENVIRONMENTAL OPERATING PRINCIPLES II**PREAMBLE**

The United States Army Corps of Engineers (Corps) Environmental Operating Principles (EOP) were developed to ensure that Corps missions include totally integrated sustainable environmental practices. The Principles provided corporate direction to ensure the workforce recognized the Corps role in, and responsibility for, sustainable use, stewardship, and restoration of natural resources across the Nation and, through the international reach of our support missions. Since the Environmental Operating Principles were introduced in 2002 they have instilled environmental stewardship across business practices – from recycling and reduced energy use at Corps and customer facilities to a fuller consideration of the environmental impacts of Corps actions and meaningful collaboration within the larger environmental community.

The concepts embedded in the original Principles remain vital to the success of Corps and its missions. However, as the Nation's resource challenges and priorities have evolved, the Corps has responded by close examination and refinement of work processes and operating practices. This self-examination includes how the Corps considers environmental issues in all aspects of the corporate enterprise. In particular, the strong emphasis on sustainability must be translated into everyday actions that have an effect on the environmental conditions of today, as well as the uncertainties and risks of the future. These challenges are complex, ranging from global trends such as increasing and competing demands for water and energy, climate and sea level change, and declining biodiversity; to localized manifestations of these issues in extreme weather events, the spread of invasive species, and demographic shifts. Accordingly, the Corps is re-invigorating commitment to the Environmental Operating Principles in light of this changing context.

The Environmental Operating Principles relate to the human environment and apply to all aspects of business and operations. They apply across Military Programs, Civil Works, Research and Development, and across the Corps. The EOP require a recognition and acceptance of individual responsibility – from senior leaders to the newest team members. Re-committing to these principles and our environmental stewardship will lead to more efficient and effective solutions, and will enable the Corps to further leverage resources through collaboration. This is essential for successful integrated resources management, restoration of the environment and sustainable and energy efficient approaches to all Corps mission areas. It is also an essential component of the Corps' risk management in decision making, allowing the organization to offset uncertainty by building flexibility into the management and construction of our infrastructure. The re-energized Environmental Operating Principles are:

1. Foster sustainability as a way of life throughout the organization.
2. Proactively consider environmental consequences of all Corps activities and act accordingly.
3. Create mutually supporting economic and environmentally sustainable solutions.

4. Continue to meet our corporate responsibility and accountability under the law for activities undertaken by the Corps which may impact human and natural environments.

5. Consider the environment in employing a risk management and systems approach throughout life cycles of projects and programs.

6. Leverage scientific, economic, and social knowledge to understand the environmental context and effects of Corps actions in a collaborative manner.

7. Employ an open, transparent process that respects views of individuals and groups interested in Corps activities.

The following explanations of each PRINCIPLE are provided to synchronize Corps communications on the EOP and to suggest ways to evaluate the effectiveness of these Principles in guiding Corps practices. The latter may be tailored to better mesh with specific work programs across the Corps' diverse mission areas.

ENVIRONMENTAL OPERATING PRINCIPLES II – EXPLANATIONS

* Throughout these PRINCIPLES the word "Environment" shall mean the holistic environment, including both natural and human needs as these Principles guide Corps of Engineers efforts to foster and promote the general welfare, to create and maintain ecological and physical conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans.

1. Foster sustainability as a way of life throughout the organization.

The Corps must continue to achieve sustainability by making it a way of life which entails the concept of stewardship, wise management, and responsible use of natural resources. It requires that biological systems remain diverse and productive, that we reduce energy consumption and water usage, and that we promote reuse and recycling in construction and operations. Sustainability must be incorporated in all Corps activities to the extent feasible. It has ecological, economic, and social dimensions. Protecting and restoring natural systems and the environment while encouraging productive sustainable economic development that improves the quality of life is our goal, and it applies to all missions, and administrative functions.

Promoting sustainability needs to be both a corporate and individual goal. Its concepts need to be integrated at all organizational levels, from senior leaders to the newest team members. We need to identify more sustainable solutions in our planning processes and decision documents. When needed, training in sustainable practices may be required, whether it be for commanders and senior leaders or team members, and should be incorporated in existing courses. This is not a requirement for development of new training courses, but a requirement that all existing courses include appropriate information on consideration and implementation of the EOP.

2. Proactively consider environmental consequences of all Corps activities and act accordingly.

All Corps entities will exert leadership on environmental issues relevant to projects and programs and engage others early and often. All actions undertaken by the Corps will be considered in their full context incorporating lessons learned from similar actions, in order to ensure that Corps activities avoid adverse environmental consequences, and implement appropriate mitigation where avoidance is not practicable. Operational decision making will continually account for changing environmental conditions or context.

Planning and programming without compromising the environment must be timely, concise, and cost effective. Decision documents will clearly show how effects of a candidate action have been considered. Recommendations that minimize negative environmental effects or enhance positive ones should be supported.

3. Create mutually supporting economic and environmentally sustainable solutions.

Corps employees will endeavor daily to develop options for action that not only achieve their stated mission goal, but also protect the environment and our quality of life. Humans benefit from the range of vital products and processes provided by healthy ecosystems and environments. These products ranging from food and habitat to purification and recreation nourishment are commonly termed “ecosystem services” which need to be evaluated as environmental benefits or costs in Corps decisions. Protecting and restoring natural systems while encouraging productive economic development that improves the quality of life is our goal.

The Corps has major roles as stewards of the Nation’s land and aquatic resources and in balancing all decisions to protect those resources. We also have a mission to restore developed areas that are no longer used and degraded ecosystems, making both available to the public for beneficial use. This Principle takes the goal of achieving environmental sustainability in all Corps missions a step further by pointing the way towards procedures that will enable us to achieve balance between human activities, and restore sustainable natural ecosystems.

Decisions that affect natural systems or processes either as benefits or costs should be accounted for in appropriate monetary and non-monetary metrics. We must employ green engineering design, minimizing waste and maximizing energy efficiency, appropriately sized for the application and considered for the entire life cycle of the project. Our success is highlighted when our actions avoid environmental conflicts and when we develop multipurpose projects with ancillary benefits.

With these enhanced expectations, we can improve the ways projects and activities can achieve traditional services, such as flood control, navigation, and military activities, in an environmentally sustainable manner.

4. Continue to meet our corporate responsibility and accountability under the law for activities undertaken by the Corps which may impact human and natural environments.

Successful projects require effective, comprehensive planning using the full breadth of the vertical/horizontal team. All Corps entities must identify potential environmental concerns when projects/programs are at the conceptual stage and throughout their operational life, engaging counsel and subject matter experts within the organization. In order to avoid delays, an assessment of compliance with environmental requirements must be conducted as early in our planning processes as practicable. Engagement with interagency teams will better anticipate problems and promote collaboration. Coordinate with partners and stakeholders as early as feasible.

Legal challenges on environmental issues must be monitored and lessons learned incorporated in future actions. Employ all available tools to avoid environmental conflict. Document the results of their application and share throughout the enterprise.

5. Consider the environment in employing a risk management and systems approach throughout life cycles of projects and programs.

The use of conceptual models is fundamental to identifying all sources of risk. Analysis should focus on the areas of risk most relevant to the problem at hand. Risk reduction should not be accomplished by designing for overcapacity or overdesign. Design of risk reduction measures should consider the areas of relevant risk and utilize adaptive management as appropriate through the life cycle process. Risk assessments need to address both human and environmental health. Unpredictability of natural and manmade events dictates that we avoid the unwise use of floodplains and vulnerable coastal areas when taken in a systems context. When considering projects, areas with high ecological value and high frequency flood loss should be a focus for restoration or management as natural areas.

Communicating risk to the public for all projects we undertake is a skill which we must master and at which we must excel. We must explicitly describe risks and candidly report the concerns.

6. Leverage scientific, economic, and social knowledge to understand the environmental context and effects of Corps actions in a collaborative manner.

The Corps' experienced workforce and laboratories capabilities position the Corps to be a learning organization, embracing new and innovative ideas from both within the organization and from other agencies to understand the environmental context and complexity of its actions. The best available science, practices, analyses, and tools will be utilized and this will require outreach by the centers of expertise to elsewhere in government and the private sector. The Corps will reach inward to prioritize within the Research and Development Program and other areas to identify and fill gaps in the knowledge base and develop methods to sustain a healthy environment.

The Corps will implement and refine the timely, concise, and cost-effective planning initiative of the Civil Works program, and comparable initiatives in other mission areas. This will require scaling the level of analysis to be conducted to better match the significance of the decision. These efforts will require effective training, including collaborative training with other agencies, cross-training teams to facilitate use of datasets developed by other agencies, increased accessibility to cross-training programs within the vertical and horizontal teams. Utilizing uniform data standards will both serve to assist and measure the leveraging of scientific, economic, and social knowledge bases.

7. Employ an open, transparent process that respects views of individuals, groups, and businesses interested in and affected by Corps activities.

Today, the Corps is called by the nation to deal with complex problems characterized by competing economic and environmental factors and stakeholders with diverse opinions as to how to resolve those competing demands. The Corps will consider ethnic, cultural, and economic values as factors of the human environment as we design our projects and consider how each alternative affects the human environment as well as natural habitat.

The Corps will to the extent practicable make maximum effective use of transparency in scoping and planning actions, which will help to elicit new insights from individuals and diverse stakeholder groups. This will ensure that all Corps decisions on resource management gives appropriate consideration of all interested individuals, groups including minority populations and low income populations, and business. This principle recognizes and emphasizes that all individuals, groups, and businesses, as members of the public, are partners with the Corps. Encouraging dialogue will yield the diversity of opinions that can provide fertile grounds for innovation.

The Corps will make proactive use of innovative public involvement techniques to enhance stakeholder participation and gather the required public comments in response to public notices. The Corps will use current and developing technology including web and social-based media. The Corps will actively learn from Customer Surveys, Restoration Advisory Boards, industry examples, and engaging stakeholders in public sessions.



DAVID IGE
GOVERNOR OF HAWAII
CHAIR

DOUG BURGUM
GOVERNOR OF NORTH DAKOTA
VICE CHAIR

JAMES D. OGSBURY
EXECUTIVE DIRECTOR

May 6, 2019

The Honorable John Barrasso
Chairman
Committee on Environment and Public Works
United States Senate
410 Dirksen Senate Office Building
Washington, D.C. 20510

The Honorable Thomas R. Carper
Ranking Member
Committee on Environment and Public Works
United States Senate
456 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Chairman Barrasso and Ranking Member Carper:

Thank you for holding your upcoming May 8, 2019 Oversight Hearing on the U.S. Army Corps of Engineers' (Corps) Civil Works Program. States have a historic and unique relationship with the Corps and serve a vital role in the implementation of several Corps programs, due to states' inherent and sovereign authority over water resources, as well as their statutory role as co-regulators under the federal Clean Water Act (CWA). Western Governors have responsibly exercised their authority for comprehensive water management and protection within their states and have worked cooperatively with the Corps and other federal agencies in connection with that responsibility.

To inform the Committee's consideration of this important topic, I request that the Committee include the following attachments in the permanent record of the hearing:

- WGA Policy Resolution [2017-01](#), Building a Stronger State-Federal Relationship;
- WGA Policy Resolution [2018-08](#), Water Resource Management in the West;
- WGA Policy Resolution [2018-12](#), Water Quality in the West;
- [February 20, 2019 letter](#) from the Western Governors' Association, National Conference of State Legislatures, Association of Clean Water Administrators, Association of State Wetland Managers, Council of State Governments – West, and the Western States Water Council to the U.S. Environmental Protection Agency and the Corps, presenting to the agencies recommendations that would improve permitting processes under Section 401 of the CWA while preserving states' authority to manage and protect water resources;
- [August 9, 2018 letter](#) from the Western Governors' Association, Association of Clean Water Administrators, Association of State Wetland Managers, Association of Fish and Wildlife Agencies, Conference of Western Attorneys General, Council of State Governments, Council of State Governments – West, National Association of Counties – Western Interstate Region, Western Interstate Energy Board, and Western States Water Council, to Congressional leadership, expressing their collective concerns regarding various proposals to alter the state water quality certification process under Section 401 of the CWA;
- [June 13, 2018 written testimony](#) of Western Governors' Association Policy Advisor, Ward J. Scott, to the Committee on Environment and Public Works, Subcommittee on Superfund,

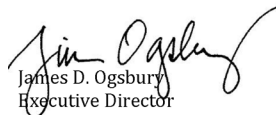
The Honorable John Barrasso
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May 6, 2019
Page 2

Waste Management, and Regulatory Oversight for its June 13, 2018 hearing, Oversight of the Army Corps' Regulation of Surplus Water and the Role of States' Rights;

- [June 6, 2018 letter](#) from Western Governors to the Hon. R.D. James, Assistant Secretary for the Army for Civil Works, regarding the U.S. Army Corps of Engineers' proposed rulemaking, Policy for Domestic, Municipal, and Industrial Water Supply Uses of Reservoir Projects Operated by the Department of the Army, U.S. Army Corps of Engineers (RIN 0710-AA72, Docket ID: COE-2016-0016);
- [October 17, 2017 comments](#) from WGA to the U.S. Army Corps of Engineers in response to a Request for Comment as part of its Review of Existing Rules in accordance with Executive Order 13777, Enforcing the Regulatory Reform Agenda; and
- [February 27, 2017 comments](#) from WGA to the Corps in response to the Corps' proposed rule, Policy for Domestic, Municipal, and Industrial Water Supply Uses of Reservoir Projects Operated by the Department of the Army, U.S. Army Corps of Engineers (RIN 0710-AA72, Docket ID: COE-2016-0016).

Thank you for your consideration of this request.

Sincerely,


James D. Ogsbury
Executive Director

Attachments



**WESTERN
GOVERNORS'
ASSOCIATION**

**Western Governors' Association
Policy Resolution 2017-01**

Building a Stronger State-Federal Relationship

A. PREAMBLE

The Governors of the West are proud of their unique role in governing and serving the citizens of this great nation. They recognize that the position they occupy – the chief elected official of a sovereign state – imposes upon them enormous responsibility and confers upon them tremendous opportunity. Moreover, the faithful discharge of their obligations is central to the success of the Great American Experiment.

It was, after all, the states that confederated to form a more perfect union by creating a national government of limited and defined powers. The grant of specific responsibilities for irreducibly common interests – such as national defense and interstate commerce – was brilliantly designed to make the whole stronger than the sum of its parts.

The genius of American democracy is predicated on the separation of powers among branches of government (*viz.* the legislative, executive and judiciary) and the division of power between the federal and state governments (federalism). Under the American version of federalism, the powers of the federal government are narrow, enumerated and defined. The powers of the states, on the other hand, are vast and indefinite. States are responsible for executing all powers of governance not specifically bestowed to the federal government by the U.S. Constitution. This principle is memorialized in the Tenth Amendment, which states in its entirety, “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”

This reservation of power to the states respects the differences between regions and peoples. It recognizes a right to self-determination at a local level. It rejects the notion that one size fits all, and it provides for a rich tapestry of local cultures, economies and environments.

Because of the Constitutional recognition of state sovereignty, the states have been appropriately regarded as laboratories of democracy. States regularly engage in a kind of cooperative competition in the marketplace of ideas. Western Governors are leaders in innovative governance who employ their influence and executive authority to promote initiatives for improvement of their states’ economies, environments and quality of life.

Despite the foregoing, the balance of power has, over the years, shifted toward the federal government and away from the states. The growth in the size, cost and scope of the federal government attests to this new reality. Increasingly prescriptive regulations infringe on state authority, tie the hands of states and local governments, dampen innovation and impair on-the-ground problem-solving. Failures of the federal government to consult with states reflect a lesser appreciation for local knowledge, preferences and competencies.

The inauguration of a new Administration presents a historic opportunity to realign the state-federal relationship. Western Governors are excited to work in true partnership with the federal government. By operating as authentic collaborators on the development and execution of policy, the states and federal government can demonstrably improve their service to the public. Western Governors are optimistic that the new Administration will be eager to unleash the power and creativity of states for the common advantage of our country. By working cooperatively with the states, the Administration can create a legacy of renewed federalism, resulting in a nation that is stronger, more resilient and more united. Such an outcome will redound to the credit of the Administration and inure to the benefit of the American people.

B. BACKGROUND

1. The relationship between state government authority and federal government authority is complex and multi-dimensional. There are various contexts in which the authorities of these respective levels of U.S. government manifest and intersect. For example:
 - a) **Exclusive Federal Authority** – There are powers that are specifically enumerated by the U.S. Constitution as exclusively within the purview of the federal government.¹
 - b) **State Primacy** – States derive independent rights and responsibilities under the U.S. Constitution. All powers not specifically delegated to the federal government are reserved for the states; in this instance, the legal authority of states overrides that of that federal government.²

¹ The structure of the government established under the U.S. Constitution is premised upon a system of checks and balances: Article VI (Supremacy Clause); Article I, Section 8 (Congressional); Article II, Section 1 (Executive Branch); Article III, Section 2 (Judicial Branch). State law can be preempted two ways. If Congress evidences an intent to fully occupy a given “field,” then state law falling within the field is preempted. If Congress has not fully displaced state regulation over the matter, then state law is preempted to the extent it *actually* conflicts with federal law.

² Amendment 10 of the U.S. Constitution: “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States, respectively, or to the people.”

Governors have responsibilities for the condition of land, air, forest, wildlife and water resources, as well as energy and minerals development, within their state's borders.

- c) **Shared State-Federal Authority** – In some cases, state and/or federal authority can apply, given a particular fact pattern.³ Federal preemption of state law is a concern under this scenario. According to the Council on State Governments, the federal government enacted only 29 statutes that pre-empted state law before 1900. Since 1900, however, there have been more than 500 instances of federal preemption of state law.
- d) **State Authority “Delegated” from Federal Agencies by Federal Statute** – The U.S. Congress has, by statute, provided for the delegation to states of authority over certain federal program responsibilities. Many statutory regimes – federal environmental programs, for example – contemplate establishment of federal standards, with delegated authority (permissive) available to states that wish to implement those standards.

According to the Environmental Council of the States (ECOS), states have chosen to accept responsibility for 96 percent of the primary federal environmental programs that are available for delegation to states. States currently execute the vast majority of natural resource regulatory tasks, including 96 percent of the enforcement and compliance actions and collection of more than 94 percent of the environmental quality data currently held by the U.S. Environmental Protection Agency (EPA).

- e) **Other** – Where the federal government has a statutory, historical or “moral” obligation to states.⁴

³ The federal government has authority to regulate federal property under Article IV of the Constitution. That authority, however, is limited. General regulatory authority (including regulation of wildlife and land use) is held by the states, unless Congress passes a specific law that conflicts with a state's exercise of authority. This is discussed in detail in U.S. Supreme Court case, [Kleppe v. New Mexico](#).

⁴ These historic agreements include, but are not limited to: Payments in Lieu of Taxes; shared revenues authorized by the Secure Rural Schools Act; Oregon and California Railroad Revested Lands payments; shared mineral royalties at the historic level of 50% and renewable energy leasing revenues from development on U.S. Forest Service lands, Bureau of Land Management lands and waters off the coasts of the western states; Abandoned Mine Lands grants to states consistent with 2006 Amendments to the Surface Mining Control and Reclamation Act; legally binding agreements and timetables with states to clean up radioactive waste that was generated in connection with nuclear weapons production and that remains on lands managed by the Department of Energy in the West.

2. Over time, the strength of the federal-state partnership in resource management has diminished. Federal agencies are increasingly challenging state decisions, imposing additional federal regulation or oversight and requiring documentation that can be unnecessary and duplicative. In many cases, these federal actions encroach on state legal prerogatives, especially in natural resource management. In addition, these federal actions neglect state expertise and diminish the statutorily-defined role of states in exercising their authority to manage delegated environmental protection programs.
3. The current fiscal environment exacerbates tensions between states and federal agencies. For example, states have a particular interest in improving the active management of federal forest lands. The so-called “fire borrowing” practice employed by the U.S. Forest Service and the Department of the Interior to fund wildfire suppression activities is negatively affecting restoration and wildfire mitigation work in western forests. Changes are needed, as the current funding situation has allowed severe wildfires to burn through crippling amounts of the very funds that should instead be used to prevent and reduce wildfire impacts, costs, and safety risks to firefighters and the public. This also has impacts on local fire protection districts, which often bear the brunt of costs associated with first response to wildfire, and state budgets that are also burdened by the costs of wildfire response. Fire borrowing represents an unacceptable set of outcomes for taxpayers and at-risk communities, and does not reflect responsible stewardship of federal land. In addition, states increasingly are required to expend their limited resources to operate regulatory programs over which they have less and less control. A 2015 report by the White House Office of Management and Budget on the costs of federal regulation and the impact of unfunded mandates notes that federal mandates cost states, cities and the general public between \$57 and \$85 billion every year.
4. States are willing and prepared to more effectively partner with the federal government on the management of natural resources within their borders.
5. The U.S. Advisory Commission on Intergovernmental Relations – established in 1959 and dissolved in 1996 – was the federal government's major platform for addressing broad intergovernmental issues beyond narrow considerations of individual programs and activities.
6. The current Executive Order on Federalism (E.O. 13132) was issued by then-President William Clinton in 1999. That E.O. has not been revisited since and it may be time to consider a new E.O.

C. GOVERNORS' POLICY STATEMENT

1. Review of the Federal-State-Local Relationship

- a) It is time for thoughtful federal-state-local government review of the federal Executive Order on Federalism to identify areas in the policy that can be clarified and improved to increase cooperation and efficiency.
- b) Governors support reestablishment of the U.S. Advisory Commission on Intergovernmental Relations. It is imperative that the President show his commitment to the Constitutional separation of powers by establishing a platform at the highest level to address federalism concerns.

2. Avoiding Preemption of States

- a) In the absence of Constitutional delegation of authority to the federal government, state authority should be presumed sovereign. Accordingly, federal departments and agencies should, to the extent permitted by law, construe, in regulations and otherwise, a federal statute to preempt state law only when the statute contains an express preemption provision or there is some other firm evidence compelling the conclusion that Congress intended preemption of state law, consistent with established judicial precedent.
- b) When Congress, acting under authority granted to it by the Constitution, does preempt state environmental laws, federal legislation should:
 - i. Accommodate state actions taken before its enactment;
 - ii. Permit states that have developed stricter standards to continue to enforce them;
 - iii. Permit states that have developed substantially similar standards to continue to adhere to them without change and, where applicable, without consideration to land ownership.

3. Defining Meaningful State-Federal Consultation

- a) Each Executive department and agency should be required to have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with *early, meaningful and substantive*

input in the development of regulatory policies that have federalism implications. This includes the development, prioritization and implementation of federal environmental statutes, policies, rules, programs, reviews, budgets and strategic planning.

- b) Consistent with C(2) and C(3)(a), federal agencies should consult with states in a meaningful way, and on a timely basis.
 - i. **Predicate Involvement:** Federal agencies should take into account state data and expertise in development and analysis of underlying science serving as the legal basis for federal regulatory action. States merit greater representation on all relevant committees and panels (such as the EPA Science Advisory Board and related issue panels) advising federal agencies on scientific, technological, social and economic issues that inform federal regulatory processes.
 - ii. **Pre-Publication / Federal Decision-making Stage:** Federal agencies should engage in early (pre-rulemaking) consultation with Governors and state regulators. This should include substantive consultation with states during development of rules or decisions and a review by states of the proposal before a formal rulemaking is launched (i.e., before such proposals are sent to the White House Office of Management and Budget).
 - iii. **Post-Publication / Pre-Finalization Stage:** As they receive additional information from state agencies and non-governmental entities, Governors and designated state officials should have the opportunity to engage with federal agencies on an ongoing basis to seek refinements to proposed federal regulatory actions prior to finalization.

4. State Authority “Delegated” from Federal Agencies Pursuant to Federal Statute

Where states are delegated authority by federal agencies pursuant to legislation:

- a) Federal agencies should treat states as co-regulators, taking into account state views, expertise and science in the development of any federal action impacting state authority.

- b) Federal agencies should grant states the maximum administrative discretion possible. Any federal oversight of such state should not unnecessarily intrude on state and local discretion. Where states take proactive actions, those efforts should be recognized and credited in the federal regulatory process.
- c) When a state is meeting the minimum requirements of a delegated program, the role of a federal department or agency should be limited to the provision of funding, technical assistance and research support. States should be free to develop implementation and enforcement approaches within their respective jurisdictions without intervention by the federal government.
- d) New federal rules and regulations should, to the extent possible, be consistent with existing rules and regulations. The issuing agency should identify elements and requirements common to both the proposed and existing regulations and provide states an opportunity to develop plans addressing the requirements of both in a coordinated fashion. This will achieve economies of scale, saving both time and money.
- e) When a federal department or agency proposes to take adjudicatory actions that impact authority delegated to states, notice should be provided to affected Governors' offices, and co-regulating states should have the opportunity to participate in the proceedings. Where legally permissible, that right should extend to federal agencies' settlement negotiations impacting state environmental and natural resource management prerogatives. Where their roles and responsibilities are impacted, states should be meaningfully consulted during settlement negotiations, including negotiations aimed at avoiding, rather than resolving, litigation (such as negotiations following a notice of intent to sue under the Endangered Species Act, but prior to a formal complaint being filed to initiate legal action).
- f) States' expertise should be recognized by federal agencies and robustly represented on boards and in other mechanisms upon which agencies rely for development of science to support regulatory action.

5. Other Opportunities for Positive Engagement by the Federal Government with Western States

- a) **Federalism Reviews** – Federal agencies are required by federal Executive Order 13132 to consider and quantify consequences of federal actions on states. In practice, the current process falls short of its stated goals. Governors call on the President to revisit the executive order to, among other things:

- i. Specifically involve Western Governors on issues (e.g., public lands, water and species issues) that disproportionately impact the West;
 - ii. Work with Governors to develop specific criteria and consultation processes: 1) for the initiation of federalism assessments and 2) that guide the performance of every federal Department and agency federalism assessment;
 - iii. Require federal Departments and agencies to meet the criteria developed under C(5)(a)(ii), rather than simply require the consideration of federalism implications;
 - iv. Provide states, through Governors, an opportunity to comment on federalism assessments before any covered federal action is submitted to the Office of Management and Budget for approval.
- b) **Federal and State Land-Use Planning** – Governors possess primary decision-making authority for management of state resources. Accordingly, it is essential that they have an opportunity to review new, revised and amended federal land management plans for consistency with existing state plans. Governors and their staffs have specific knowledge and experience that can help federal agencies craft effective and beneficial plans. A substantive role in federal agencies’ planning processes is vital for Western Governors:
- i. Federal landscape-level planning presents new issues for Governors to consider as they attempt to ensure consistency between state and federal requirements. Agencies should provide Governors sufficient time to ensure a full and complete state review. This is particularly true when agency plans affect multiple planning areas or resources;
 - ii. Agencies should seek to align the review of multiple plans affecting the same resource. This is particularly true for threatened or endangered species that have vast western ranges;
 - iii. When reviewing proposed federal land management plans for consistency with state plans, Governors should be afforded the discretion to determine which state plans are pertinent to the review, including state-endorsed land use plans such as State Wildlife Action Plans, conservation district plans, county plans and multi-state agreements;
 - iv. Governors must retain a right to appeal any rejection of recommendations resulting from a Governor’s consistency review.

- c) **Honoring Historic Agreements** – The federal government should honor its historic agreements with states and counties in the West to compensate them for state and local impacts associated with federal land use and nontaxable lands within their borders that are federally-owned.
- d) **Responsible Federal Land Management** – The federal government should be a responsible landowner and neighbor and should work diligently to improve the health of federally-owned lands in the West. Lack of funding and conflicting policies have resulted in large wildfires and the spread of invasive species from federally owned forests and grasslands, negatively impacting adjacent state and privately-owned lands, as well as state-managed natural resources (soils, air and water).
- e) **Recognizing State Contributions to Federal Land Management** – The U.S. Congress and appropriate federal departments and agencies should provide opportunities for expanded cooperation, particularly where states are working to help their federal partners to improve management of federal lands within their states' borders through the contribution of state expertise, manpower and financial resources.
- f) **Avoiding Unfunded Mandates** – The U.S. Congress and federal departments and agencies should avoid the imposition of unfunded federal mandates on states. The federal government increasingly requires states to carry out policy initiatives without providing the funding necessary to pay for implementation. State governments cannot function as full partners if the federal government requires them to devote their limited resources to compliance with unfunded federal mandates.
- g) **Other Considerations in Designing an Effective State-Federal Relationship** – Other important considerations in the design of a stronger state-federal relationship include:
 - i. The U.S. Congress and federal departments and agencies should respect the authority of states to determine the allocation of administrative and financial responsibilities within states in accordance with state constitutions and statutes. Federal action should not encroach on this authority.
 - ii. Federal assistance funds, including funds that will be passed through to local governments, should flow through states according to state laws and procedures.

- iii. States should be given flexibility to transfer a limited amount of funds from one grant program to another, and to administer related grants in a coordinated manner.
- iv. Federal funds should provide maximum state flexibility without specific set-asides.
- v. States should be given broad flexibility in establishing federally-mandated advisory groups, including the ability to combine advisory groups for related programs.
- vi. Governors should be given the authority to require coordination among state executive branch agencies, or between levels or units of government, as a condition of the allocation or pass-through of funds.
- vii. Federal government monitoring should be outcome-oriented.
- viii. Federal reporting requirements should be minimized.
- ix. The federal government should not dictate state or local government organization.

D. GOVERNORS' MANAGEMENT DIRECTIVE

- 1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution.
- 2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult www.westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.



Policy Resolution 2018-08

Water Resource Management in the West

A. BACKGROUND

1. Water is a crucial resource for communities, industries, habitats, farms, and western states. Clean, reliable water supplies are essential to maintain and improve quality of life. The scarce nature of water in much of the West makes it particularly important to our states.
2. States are the primary authority for allocating, administering, protecting, and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the management of their water resources and are best suited to speak to the unique nature of western water law and hydrology.
3. Many communities in the West anticipate challenges in meeting future water demands. Supplies are nearly fully allocated in many basins across the West, and increased demand from population growth, economic development, and extreme weather and fire events places added stress on those limited water resources. Sustainability of our natural resources, specifically water, is imperative to the foundations upon which the West was developed. Growth and development can only continue upon our recognition of continued state stewardship of our unique resources and corresponding responsibilities.
4. Strong state, regional and national economies require reliable deliveries of good-quality water, which in turn depend on adequate infrastructure for water and wastewater. Investments in water infrastructure also provide jobs and a foundation for long-term economic growth in communities throughout the West. Repairs to aging infrastructure are costly and often subject to postponement.
5. Western Governors recognize the essential role of partnership with federal agencies in western water management and hope to continue the tradition of collaboration between the states and federal agencies.
6. Tribal governments and western states also share common water resource management challenges. The Western Governors Association and Western States Water Council have had a long and productive partnership with tribes, working to resolve water rights claims.

B. GOVERNORS' POLICY STATEMENT

1. **State Primacy in Water Management:** As the preeminent authority on water management within their boundaries, states have the right to develop, use, control and distribute the surface water and groundwater located within their boundaries, subject to international treaties and interstate agreements and judicial decrees.
 - a. **Federal Recognition of State Authority:** The federal government has long recognized the right to use water as determined under the laws of the various states; Western

Governors value their partnerships with federal agencies as they operate under this established legal framework.

While the Western Governors acknowledge the important role of federal laws such as the Clean Water Act (CWA), the Endangered Species Act (ESA), and the Safe Drinking Water Act (SDWA), nothing in any act of Congress or Executive Branch regulatory action should be construed as affecting or intending to affect states' primacy over the allocation and administration of their water resources.

Authorization of water resources development legislation, proposed federal surplus water rulemakings, and/or storage reallocation studies should recognize natural flows and defer to the states' legal right to allocate, develop, use, control, and distribute their waters, including but not limited to state storage and use requirements.

- b. **Managing State Waters for Environmental Purposes:** States and federal agencies should coordinate efforts to avoid, to the extent possible, the listing of water-dependent species under the ESA. When ESA listings cannot be avoided, parties should promote the use of existing state tools, such as state conservation plans and in-stream flow protections, to conserve and recover species.
2. **Infrastructure Needs:** Aging infrastructure for existing water and wastewater facilities and the need for additional water projects cannot be ignored. Infrastructure investments are essential to our nation's continued economic prosperity and environmental protection, and they assist states in meeting federally-mandated standards.
- a. **Federal Support for Infrastructure Investment:** Congress should provide adequate support for the CWA and SDWA State Revolving Funds. Further, Congress should fully utilize the receipts accruing to the Reclamation Fund for their intended purpose in the continuing conservation, development and wise use of western resources to meet western water-related needs, including the construction of Congressionally-authorized Bureau of Reclamation rural water projects and facilities that are part of a Congressionally-authorized Indian water rights settlement.

Congress should authorize water resources development legislation on a regular schedule and appropriate funding so all projects and studies authorized in such legislation can be completed in a timely manner.

Congress also should consider facilitating greater investment in water infrastructure, utilizing such tools as loan guarantees, revolving funds, infrastructure banks and water trust funds.

Capital budgeting and asset management principles should be used to determine funding priorities based on long-term sustainability and not annual incremental spending choices. It should be accompanied by dedicated sources of funding with appropriate financing, cost-sharing, pricing and cost recovery policies.

- b. **Alternatives to Direct Federal Investment:** Federal and state policymakers should also consider other tools to promote investment in water infrastructure and reduce financing costs, including: public-private partnerships, bond insurance, risk pooling, and credit enhancements.

Congress should remove the state volume caps for private activity bonds used for water and wastewater projects, provide guaranteed tax-exempt status for bonds issued by state or local agencies to finance water infrastructure, provide loan guarantees, and otherwise support and encourage alternatives to direct federal investment of limited general funds.

- c. **Hydropower:** Congress and the Administration should authorize and implement appropriate hydropower projects and programs through efficient permitting processes that enhance renewable electric generation capacity and promote economic development, while ensuring protection of important environmental resources and indigenous people's rights.
 - d. **Infrastructure Planning and Permitting:** Infrastructure planning and permitting guidelines, rules and regulations should be coordinated, streamlined and sufficiently flexible to: (1) allow for timely decision-making in the design, financing and construction of needed infrastructure; (2) account for regional differences; (3) balance economic and environmental considerations; and (4) minimize the cost of compliance.
3. **Western States Require Innovative and Integrated Water Management:** Western Governors believe effective solutions to water resource challenges require an integrated approach among states and with federal, tribal and local partners. Federal investments should assist states in implementing state water plans designed to provide water for municipal, rural, agricultural, industrial and habitat needs, and should provide financial and technical support for development of watershed and river basin water management plans when requested by states.

Integrated water management planning should also account for flood control, water quality protection, and regional water supply systems. Water resource planning must preserve state authority to manage water through policies which recognize state law and financial, environmental and social values of water to citizens of western states today and in the future.

- a. **Water Transfers:** Western Governors recognize the potential benefits of market-based water transfers, meaning voluntary sales or leases of water rights. The Governors support water transfers that avoid or mitigate damages to agricultural economies and communities while preventing injury to other water rights, water quality, and the environment.
- b. **Energy Development:** Western Governors recognize that energy development and electricity generation may create new water demands. Western Governors recommend increased coordination across the energy and water management communities, and support ongoing work to assess the interconnection of energy and water through the Regional Transmission Expansion Planning Project for the Western Interconnection and similar efforts.
- c. **Conservation and Efficiency:** Because of diminished water resources and declining and inconsistent snowpack, Western Governors encourage adoption of strategies to sustain water resources and extend existing water supplies further through water conservation, water reuse and recycling, desalination and reclamation of brackish

waters, and reductions in *per capita* water use. The Governors encourage the use of and research into promising water-saving strategies.

- d. **Local Watershed Planning:** Western Governors encourage federal agencies and Congress to provide resources such as technical support to states and local watershed groups. States may empower these watershed groups to address local water issues associated with water quality, growth and land management to complement state water needs.
 - e. **Intergovernmental Collaboration and Conflict Resolution:** Western Governors support the negotiated settlement of interstate water disputes, Indian and Hawaiian water rights claims, and other federal water needs and claims, the settlement of which are in the best interest of western states.
 - f. **State-Federal Coordination:** Western Governors recognize the important role of federal agencies in water resource management in the western states. Governors appreciate the efforts of federal agencies to coordinate water-related activities, particularly through the Western States Water Council, and support the continuation of these key state-federal partnerships.
4. **Western States Need Reliable Water Resource Information:** Basic information on the status, trends and projections of water resource availability is essential to sound water management.
- a. **Basic Water Data:** Western Governors support the U.S. Geological Survey's Groundwater and Streamflow Information Program, the Natural Resources Conservation Service's Snow Survey and Water Supply Forecasting Program, the National Oceanic and Atmospheric Administration's weather and hydrology-related data collection, monitoring, and drought information programs, and the National Aeronautics and Space Administration's National Land Imaging (Landsat) Program with its thermal infrared sensor. Western Governors support federal efforts to coordinate water data gathering and information programs across multiple agencies.
 - b. **Extreme Weather Events Planning:** Western Governors recognize the significant potential impacts of extreme weather events and variability in water supplies. Western Governors urge Congress and the Administration to work closely with states and other resource managers to improve predictive and adaptive capabilities for extreme weather variability and related impacts. We specifically urge the federal government to place a priority on improving the sub-seasonal and seasonal precipitation forecasting capabilities that could support water management decision-making.
 - c. **Water Data Exchange:** The Western Governors' Association and the Western States Water Council have worked together to create the Water Data Exchange, an online portal that will enable states to share their water data with each other, federal agencies, and the public via a common platform. The Governors encourage the use of state water data in planning for both the public and private sectors.
5. **Drought Preparedness and Response:** As exceptional levels of drought persist across the West, Governors are leading on drought preparedness and response through the Western Governors' Drought Forum. The Drought Forum provides a

framework for leaders from states, businesses, non-profits, communities, research organizations and federal agencies to share best practices and identify policy options for drought management. The Governors have identified several areas in need of additional attention from Drought Forum partners, including:

- a. **Data and Analysis:** Basic data on snowpack, streamflow and soil moisture is essential to understanding drought. Though a great deal of information already exists, enhanced drought data collection and real-time analysis at a higher resolution is essential. Governors support state and federal efforts to maintain adequate collection of drought and water data, enhance data networks where appropriate, and facilitate better use of existing information.

The Governors appreciate the collaborative efforts on drought provided through NOAA's National Weather Service River Forecast Centers and Weather Forecast Offices, and the Office of Atmospheric Research's labs and programs, such as the National Integrated Drought Information System (NIDIS).

- b. **Produced, Reused, and Brackish Water:** Technology exists to use produced, reused, recycled and brackish water -sources traditionally considered to be marginal or wastewater. Adoption of this technology has been limited by inadequate data, regulatory obstacles, financial barriers, public attitudes and logistical uncertainties. Governors support regulatory streamlining and policy options to encourage use of produced, brackish, and reused water where appropriate.
- c. **Forest Health and Soil Stewardship:** Better land management practices for forests and farmland may help improve availability and soil moisture retention. Wildfires can cause sediment runoff in water systems, leading to problems for reservoir management and water quality. Governors support policies and practices that encourage healthy and resilient forests and soils in order to make the most of existing water supplies.
- d. **Water Use Efficiency and Conservation:** Public awareness of drought has directed increasing attention to water conservation strategies, both in-home and on-farm. Governors encourage municipal, industrial and agricultural water conservation strategies as drought management strategy.
- e. **Infrastructure and Investment:** Water infrastructure to store and convey water is crucial to drought management, but maintenance and expansion of that infrastructure is often difficult to fund. Governors support efforts to make the most of existing infrastructure, while seeking creative solutions to add more infrastructure with limited resources.
- f. **Working within Institutional Frameworks to Manage Drought:** Legal frameworks and regulatory regimes can sometimes limit the ability of state, local and federal agencies to respond quickly to drought conditions. Governors believe that innovative, flexible policy solutions, such as streamlined processing of temporary water transfers, should be considered when managing drought.



Policy Resolution 2018-12

Water Quality in the West

A. BACKGROUND

1. Clean water is essential to strong economies and quality of life. In most of the West, water is a scarce resource that must be managed with sensitivity to social, environmental, and economic values and needs. Because of their unique understanding of these needs, states are in the best position to manage the water within their borders.
2. States have federally-recognized authority to manage and allocate water within their boundaries. The Clean Water Act (CWA) Section 101(g) expressly says that "the authority of each state to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this Act."
3. States and the Environmental Protection Agency (EPA) work together as co-regulators under the CWA and the Safe Drinking Water Act (SDWA). Congress has delegated to states, by statute, the authority to obtain approval to implement certain federal program responsibilities. When a state has been approved to implement a program and the state is meeting minimum program requirements, the role of federal agencies like EPA should be funding, technical assistance, and research support. States should be free to develop, implement, and enforce those requirements using an approach that makes sense in their specific jurisdiction, subject to the minimum requirements of the federal acts.
4. The CWA was last reauthorized in 1987; attempts to reauthorize the Act since then have failed. Current federal regulations, guidance, and programs pertaining to the CWA do not always recognize the specific conditions and needs of most of the West, where water is scarce and even wastewater becomes a valuable resource to both humans and the environment. The West includes a variety of waters; small ephemeral washes, large perennial rivers, effluent-dependent streams, and wild and scenic rivers. In addition to natural rivers, streams and lakes, there are numerous man-made reservoirs, waterways and water conveyance structures. States need more flexibility to determine how to best manage these varying resources.

B. GOVERNORS' POLICY STATEMENT

Clean Water Act (CWA)

1. **State Authority and Implementation of CWA:** States have jurisdiction over water resource allocation decisions and are responsible for how to balance state water resource needs within CWA objectives. New regulations, rulemaking, and guidance should recognize this state authority.
 - a) **CWA Jurisdiction:** Western Governors urge EPA and the Corps to engage the states as co-regulators and ensure that state water managers have a robust and meaningful voice in the development of any rule regarding CWA jurisdiction, particularly in the early stages of development before irreversible momentum precludes effective state participation.

- b) **Total Maximum Daily Loads (TMDLs)/Adaptive Management:** States should have the flexibility to adopt water quality standards and set total maximum daily loads (TMDLs) that are tailored to the specific characteristics of Western water bodies, including variances for unique state and local conditions.
 - c) **Anti-degradation:** CWA Section 303 gives states the primary responsibility to establish water quality standards (WQS) subject to EPA oversight. Given the states' primary role in establishing WQS, EPA should directly involve the states in the rulemaking process for any proposed changes to its existing regulations. Before imposing new anti-degradation policies or implementation requirements, EPA should document the need for new requirements and strive to ensure that new requirements do not interfere with sound existing practices.
 - d) **Groundwater:** States have exclusive authority over the allocation and administration of rights to use groundwater located within their borders and are primarily responsible for allocating, protecting, managing, and otherwise controlling the resource. The regulatory reach of the CWA was not intended to, and should not, be applied to the management and protection of groundwater resources. The federal government should not develop a groundwater quality strategy; instead, it must recognize and respect state primacy, reflect a true state-federal partnership, and comply with current federal statutory authorities.
2. **Permitting:** Actions taken by EPA in its CWA permitting processes should not impinge upon state authority over water management or the states' responsibility to implement CWA provisions.
- a) **State Water Quality Certification:** Section 401 of the CWA requires applicants for a federal license to secure state certification that potential discharges from their activities will not violate state water quality standards. Section 401 is operating as it should, and states' mandatory conditioning authority should be retained without amendment.
 - b) **General Permits:** Reauthorization of the CWA must reconcile the continuing administrative need for general permits with their site-specific permitting requirements under the CWA. EPA should promulgate rules and guidance that better support the use of general permits where it is more effective to permit groups of dischargers rather than individual dischargers.
 - c) **Water Transfers:** Water transfers that do not involve the addition of a pollutant have not been subject to the permitting requirements of the CWA's National Pollutant Discharge Elimination System (NPDES). States already have authority to address the water quality issues associated with transfers. Western Governors believe that transporting water through constructed conveyances to supply beneficial uses should not trigger NPDES permit requirements simply because the source and receiving water contain different chemical concentrations and physical constituents. Western Governors support EPA's current Water Transfers Rule, which exempts water transfers between waters of the United States from NPDES permitting requirements.
 - d) **Pesticides:** Western Governors generally support the primary role of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) in regulating agriculture and public

health related pesticide applications to waters of the U.S. and will seek state-based solutions that complement rather than duplicate FIFRA in protecting water supplies.

3. **Nonpoint Source Pollution:** Nonpoint source pollution requires state watershed-oriented water quality management plans, and federal agencies should collaborate with states to carry out the objectives of these plans. The CWA should not supersede other ongoing federal, state, and local nonpoint source programs. Federal water policies must recognize that state programs enhanced by federal efforts could provide a firm foundation for a national nonpoint source policy that maintains the non-regulatory and voluntary nature of the program. In general, the use of point source solutions to control nonpoint source pollution is also ill-advised.
 - a) **Forest Roads:** Stormwater runoff from forest roads has been managed as a nonpoint source of pollution under EPA regulation and state law since enactment of the CWA. Western Governors support solutions that are consistent with the long-established treatment of forest roads as nonpoint sources, provided that forest roads are treated equally across ownership within each state.
 - b) **Nutrient Pollution:** Nitrogen and phosphorus (nutrient) pollution is a significant cause of water quality impairment across the nation, and continued cooperation between states and EPA is needed. However, nutrients produced by non-point sources fall outside of NPDES jurisdiction and should not be treated like other pollutants that have clear and consistent thresholds over a broad range of aquatic systems and conditions.

States should be allowed sufficient flexibility to utilize their own incentives and authorities to establish standards and control strategies to address nutrient pollution, rather than being forced to abide by one-size-fits-all federal numeric criteria. Successful tools currently in use by states include best management practices, nutrient trading, controlling other water quality parameters, and other innovative approaches.
4. **CWA Reauthorization:** The Western Governors support reauthorization of the CWA, provided that it recognizes the unique hydrology and legal framework in Western states. Further, any CWA reauthorization should include a new statement of purpose to encourage the reuse of treated wastewater to reduce water pollution and efficiently manage water resources.
5. **Good Samaritan Legislation:** Congress should enact a program to protect volunteering remediating parties who conduct authorized remediation of abandoned hardrock mines from becoming legally responsible under the CWA and/or the Comprehensive Environmental Response, Compensation, and Liability Act for any continuing discharges after completion of a remediation project, provided that the remediating party – or “Good Samaritan” – does not otherwise have liability for that abandoned mine or inactive mine site.
6. **Stormwater (Wet Weather) Pollution:** In the West, stormwater discharges to ephemeral streams in arid regions pose substantially different environmental risks than do the same discharges to perennial surface waters. The Western Governors emphasize the importance of state primacy in water management, including management of ephemeral streams. State water agencies are well-equipped to provide tailored approaches that reflect the unique management needs of ephemeral streams.

7. **State-Tribal Coordination:** Western Governors endorse government-to-government cooperation among the states, tribes and EPA in support of effective and consistent CWA implementation. While retaining the ability of the Governors to take a leadership role in coordination with the tribes, EPA should promote effective consultation, coordination, and dispute resolution among the governments, with emphasis on lands where tribes have treatment-as-state status under Section 518 of the CWA.

Safe Drinking Water Act (SDWA)

8. **Federal Assistance in Meeting SDWA Standards:** Western Governors believe that the SDWA and its standards for drinking water contaminants have been instrumental in ensuring safe drinking water supplies for the nation. It is essential that the federal government, through EPA, provide adequate support to the states and water systems to meet federal requirements. Assistance is particularly needed for small and rural systems, which often lack the resources needed to comply with federal treatment standards.
9. **Drinking Water Standards:** Contaminants such as arsenic, chromium, perchlorate, and fluoride often occur naturally in the West. Western Governors support EPA technical assistance and research to improve both the efficiency and affordability of treatment technologies for these contaminants. In any drinking water standards that the EPA may revise or propose for these and other contaminants, including disinfection byproducts, EPA should consider the disproportionate impact that such standards may have on Western states and give special consideration to feasible technology based on the resources and needs of smaller water systems.
10. **Risk Assessments:** Analysis of the costs of treatment for drinking water contaminants should carefully determine the total costs of capital improvements, operation, and maintenance when determining feasible technology that can be applied by small systems. These costs should be balanced against the anticipated human health benefits before implementing or revising drinking water standards.
11. **Emerging Contaminants/Pharmaceuticals:** The possible health and environmental impacts of emerging contaminants and pharmaceuticals are of concern to Western Governors. Although states have existing authorities to address possible risks associated with emerging contaminants and pharmaceuticals, there is a need for more reliable science showing impacts on human health as more information regarding these contaminants becomes available.
12. **Hydraulic Fracturing:** States currently employ a range of effective programmatic elements and regulations to ensure that hydraulic fracturing does not impair water quality, including but not limited to requirements pertaining to well permitting, well construction, the handling of exploration and production waste fluids, the closure of wells, and the abandonment of well sites.

Federal efforts to study the potential impacts of hydraulic fracturing on water quality should leverage state knowledge, expertise, policies, and regulations. Such efforts should also be limited in scope, based upon sound science, and driven by the states. Western Governors oppose efforts that would diminish the primary and exclusive authority of states over the allocation of water resources necessary for hydraulic fracturing.

Compliance with Federal Water Quality and Drinking Water Requirements

13. **State Revolving Funds:** Western Governors support EPA's Clean Water State Revolving Fund (SRF) and Drinking Water SRF as important tools that help states and local communities address related water infrastructure needs and comply with federal water quality and drinking water requirements. Western Governors also urge Congress and the Administration to ensure that the SRF Programs provide greater flexibility and fewer restrictions on state SRF management.
14. **Restoring and Maintaining Lakes and Healthy Watersheds:** Historically, the Section 314 Clean Lakes Program and the Section 319 Nonpoint Source Management Program provided states with critical tools to restore and maintain water quality in lakes and watersheds. Western Governors urge the Administration and Congress to support these programs. Such support should not come at the expense of other federal watershed protection programs.
15. **EPA Support and Technical Assistance:** The federal government, through EPA, should provide states and local entities with adequate support and technical assistance to help them comply with federal water quality and drinking water requirements. EPA should also collaborate with and allow states to identify and establish priority areas, timelines, and focus on programs that provide the largest public health and environmental benefits.
16. **EPA Grant Funding for Primary Service - Rural Water Programs:** Some rural communities still lack basic water and sanitary services needed to assure safe, secure sources of water for drinking and other domestic needs. Adequate federal support, including but not limited to the Rural Utilities Service programs of the Department of Agriculture and SRFs through EPA, are necessary to augment state resources.

Water Quality Monitoring and Data Collection

17. **Water Data Needs:** Western water management is highly dependent upon the availability of data regarding both the quality and quantity of surface and ground waters. EPA should provide support to the states in developing innovative monitoring and assessment methods, including making use of biological assessments, sensors and remote sensing, as well as demonstrating the value to the states of the national probabilistic aquatic resource surveys.

B. GOVERNORS' MANAGEMENT DIRECTIVE

1. The Governors direct WGA staff to work with Congressional committees of jurisdiction, the Executive Branch, and other entities, where appropriate, to achieve the objectives of this resolution.
2. Furthermore, the Governors direct WGA staff to consult with the Staff Advisory Council regarding its efforts to realize the objectives of this resolution and to keep the Governors apprised of its progress in this regard.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult www.westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.

- g. **Communication and Collaboration:** Communication among state officials, federal agency representatives, water providers, agricultural users and citizens is a crucial component of effective drought response. The Western Governors' Drought Forum will continue to provide a framework for sharing best practices through its online resource library, informational webinars, and strategy-sharing meetings for the duration of this resolution.

C. GOVERNORS' MANAGEMENT DIRECTIVE

1. The Governors direct the WGA staff, where appropriate, to work with Congressional committees of jurisdiction and the Executive Branch to achieve the objectives of this resolution including funding, subject to the appropriation process, based on a prioritization of needs.
2. Furthermore, the Governors direct WGA staff to develop, as appropriate and timely, detailed annual work plans to advance the policy positions and goals contained in this resolution. Those work plans shall be presented to, and approved by, Western Governors prior to implementation. WGA staff shall keep the Governors informed, on a regular basis, of their progress in implementing approved annual work plans.

Western Governors enact new policy resolutions and amend existing resolutions on a bi-annual basis. Please consult www.westgov.org/policies for the most current copy of a resolution and a list of all current WGA policy resolutions.



February 20, 2019

The Honorable Andrew Wheeler
Acting Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

The Honorable R.D. James
Assistant Secretary for the Army for Civil Works
U.S. Army Corps of Engineers
441 G Street, N.W.
Washington, D.C. 20314

Dear Acting Administrator Wheeler and Assistant Secretary James:

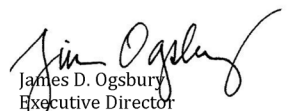
We are aware of reports of efforts within your agencies to develop rules, guidance, or policies that would modify state water certification processes under Section 401 of the federal Clean Water Act (CWA). Curtailing or reducing state authority under CWA Section 401, or the vital role of states in maintaining water quality within their boundaries, would inflict serious harm to the division of state and federal authorities established by Congress.

Any regulatory change to the Section 401 permitting process must not come at the expense of state authority and – regardless of whether promulgated through Administrative Procedure Act rulemaking or otherwise – federal action should be informed by early, meaningful, substantive, and ongoing consultation with state officials.

We stand ready to be helpful in that regard. Accordingly, attached please find a list of potential process reforms that would reduce the instances of certification delays or denials, while preserving the balance of state and federal powers in the implementation of the CWA. We have also attached, for your review, prior letters to the White House, Environmental Protection Agency, and Congressional leadership addressing this important issue.

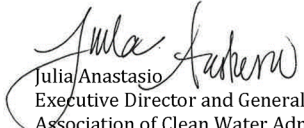
These proposed reforms represent a good starting point for discussions to improve federal permitting processes while protecting state authority. We expect that, with respect to this and other issues, Administration officials will engage states in a productive and substantive manner befitting of a genuine system of cooperative federalism. Moreover, we look forward to discussing these potential reforms with you at your earliest possible convenience.

Sincerely,


James D. Ogsbury
Executive Director
Western Governors' Association


William T. Pound
Executive Director
National Conference of State Legislatures

The Honorable Andrew Wheeler
The Honorable R.D. James
February 20, 2019
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Julia Anastasio
Executive Director and General Counsel
Association of Clean Water Administrators


Marla Stelk
Executive Director
Association of State Wetland Managers


Representative Kimberly Dudik
Montana House of Representatives
Chair, Council of State Governments – West


Tony Willardson
Executive Director
Western States Water Council

Clean Water Act Section 401: Process Improvements and the Preservation of State Authority

In response to calls for improvement of the state water quality certification program under Clean Water Act (CWA) Section 401, associations of state officials have developed the following list of potential process improvements to ensure the efficient and effective administration of this vital state authority.

These recommendations are intended to provide federal regulatory bodies positive suggestions for measures that could strengthen the efficiency and efficacy of CWA Section 401 programs by clarifying responsibilities of parties regarding consultation and better defining information required by project proponents in the application process.

These measures are intended to help promote better, more efficient permitting processes in a manner that is consistent with our clear and unambiguous position that state authority must be preserved under any federal action affecting the CWA Section 401 program. The recommendations also address several aspects of cooperative federalism and offer significant opportunities to strengthen the state-federal relationship.

Preservation of Cooperative Federalism

1. Ensure strict adherence to the stated intent of Congress to, “recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the [EPA] Administrator in the exercise of his authority,” under the CWA.¹
2. Ensure that any changes to CWA Section 401 or associated regulations, rules, policies, handbooks or guidance do not impair, diminish, or subordinate states’ well-established authority to manage and protect water resources.
3. Ensure that any changes to the regulations, rules, policies, handbooks or guidance governing the implementation of CWA Section 401 adhere to precedents of reviewing state and federal courts, particularly to the opinions of the U.S. Supreme Court in *PUD No. 1 of Jefferson County v. Washington Department of Ecology*² and *S.D. Warren Co. v. Maine Board of Environmental Protection*.³
4. Recognize the authority of states under the CWA and their role as partners with the federal government and co-regulators under the Act by consulting with state officials regarding aspects of the Section 401 program that warrant review and potential reform. Federal agencies should solicit early, meaningful, substantive, and ongoing input from states in the

¹ 33 U.S.C. § 1251(b).

² *PUD No. 1 of Jefferson County v. Washington Department of Ecology*, 511 U.S. 700 (1994).

³ *S.D. Warren Co. v. Maine Board of Environmental Protection*, 547 U.S. 370, 385 (2006), in which the Court emphasizes that, “State certifications under §401 are essential in the scheme to preserve state authority to address the broad range of pollution.”

development of regulatory policies intended to clarify states' authority under CWA Section 401 and improve processes in water quality certification.

5. In addition to engaging in early, meaningful, substantive and ongoing consultation with state officials, provide genuine avenues for the solicitation of input from stakeholders and the general public in adherence to CWA Section 101(e).⁴

Timelines for State Review / Waiver of State Authority

1. Recognize that states have up to one year to act on requests for water quality certifications under the CWA Section 401; consult and work with state officials if shorter timelines may be necessary and appropriate.
2. Ensure that any state laws and regulations relating to the processing of requests for water quality certification - including those that require certain information to be submitted with applications for water quality certification - are incorporated into, and given deference by, any federal rules, regulations, policies, guidance, etc.
3. In order to preserve state flexibility, continue to work with states to define "receipt of request for certification"⁵ to require applicants for CWA Section 401 certification to submit baseline data and information to states before the commencement of any statutory or regulatory timeline for review. Applications should include, at a minimum, the same information that is required to be submitted to the federal licensing agency to act on associated applications.
4. Adopt policies expressly stating that timelines for state action under CWA Section 401 do not begin until an applicant has submitted a substantially complete application to request the issuance of a water quality certification. Encourage states to adopt - by statute, regulation, or guidance - standards for information that must be submitted for an application to be deemed "substantially complete."
5. Define processes, timelines, and expectations of project applicants for submitting and supplementing information to states (and applicable federal agencies) in relation to any request for CWA Section 401 certification.

Increased Early Coordination and Communication Between Applicants and State/Federal Officials

1. Institute a pre-consultation process involving applicants, states, and federal licensing agencies before the commencement of any prescribed timelines required by a CWA Section 401 review. Such a process should be used to define the parameters of a proposed project and its potential effects on water quality, scope of state review, points of contact, information required to render an application complete and ready for state review (*i.e.*, the commencement of any prescribed timelines for state review), and expectations for supplementing information related to a proposed project.

⁴ 33 U.S.C. § 1251(e), "Public participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States."

⁵ 33 U.S.C. § 1341(d).

2. Ensure, where appropriate, that material information about water quality certification is included in other environmental review processes (e.g., the National Environmental Policy Act [NEPA], the Endangered Species Act [ESA], etc.).
3. Ensure consistency in the implementation of CWA Section 401 review among federal departments and agencies, and among districts and offices within federal departments and agencies.
4. Ensure that federal agencies include state-imposed certification conditions within federal licenses and permits and that such conditions are being enforced.

Scope of State Review

1. Emphasize the relationships between water quantity, water management, and water quality, and recognize that state water quality certification extends beyond the chemical composition of waters of the United States.
2. Ensure that any regulation, policy, or guidance that defines "other appropriate requirements of state law" is developed through effective consultation with states and adheres to the principles expressed in applicable state and federal case law.
3. Recognize the consistent interpretations of state and federal courts, including the U.S. Supreme Court, that state authority to review and act upon requests for water quality certification under CWA Section 401 is to be construed broadly and that the scope of states' certification authority extends to the proposed activity as a whole.⁶

Data and Staffing

1. To avoid duplicative analysis, ensure that states have access to application information relating to a proposed project's review under other federal statutes (e.g., NEPA, ESA, etc.) to use, when appropriate, in their water quality certification review under CWA Section 401.
2. Ensure extensive consultation and communication between states and the federal government in the process of developing any regulations, rules, policies, guidance or handbooks governing the implementation of CWA Section 401 and associated state authority.
3. Encourage, facilitate and support the development by states of their own best practices for implementation of CWA Section 401 state water quality certification programs, and encourage federal participation in such development.
4. Support the adequate funding and staffing of state and federal agencies charged with implementing CWA Section 401.

⁶ See, e.g., *PUD No. 1 of Jefferson County and City of Tacoma v. Washington Department of Ecology*, 511 U.S. 700 (1994).



DAVID IGE
GOVERNOR OF HAWAII
CHAIR

DOUG BURGUM
GOVERNOR OF NORTH DAKOTA
VICE CHAIR

JAMES D. OGSBURY
EXECUTIVE DIRECTOR

January 31, 2019

The Honorable Donald J. Trump
President of the United States
The White House
1600 Pennsylvania Avenue, N.W.
Washington, D.C. 20500

Dear President Trump:

Western Governors are aware of reports that the White House is considering issuance of an executive order to address energy infrastructure development and that the order may include provisions affecting the implementation of the state water quality certification program under Section 401 of the federal Clean Water Act (CWA). We urge you to direct federal agencies to reject any changes to agency rules, guidance, or policy that may diminish, impair, or subordinate states' well-established sovereign and statutory authorities to protect water quality within their boundaries. Further, any executive order (or corresponding federal action) aimed at improving or streamlining the state water quality certification program under CWA Section 401 should be informed by early, meaningful, substantive, and ongoing consultation with state officials who have vast experience and expertise in the program's implementation.

With the adoption of the CWA, Congress purposefully designated states as co-regulators under a system of cooperative federalism that recognizes the primacy of state authority over the allocation, administration, protection, and development of water resources. Section 101 of the CWA clearly expresses congressional intent to:

...recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter.

This declaration demonstrates the understanding of Congress that a one-size-fits-all approach to water management and protection does not accommodate the practical realities of geographic and hydrologic diversity among states.

State authority to certify and condition federal permits of discharges into waters of the United States under Section 401 is vital to the CWA's system of cooperative federalism. This authority helps ensure that activities associated with federally permitted discharges will not impair state water quality. The U.S. Supreme Court has addressed the issue of state authority and concluded that, "[s]tate certifications under [CWA Section] 401 are essential in the scheme to preserve state authority to address the broad range of pollution." *S.D. Warren Co. v. Maine Board of Environmental Protection*, 547 U.S. 370 (2006), citing 116 Cong. Rec. 8984 (1970).

Since the enactment of the CWA, states have exercised their authority under Section 401 efficiently, effectively and equitably. We question the need for any federal action to amend or clarify federal policy or regulations governing the implementation of Section 401, as instances of delays or denials

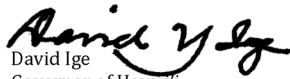
The Honorable Donald J. Trump
January 31, 2019
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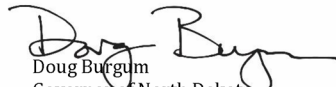
of state water quality certifications are extremely limited. Moreover, the CWA provides ample avenues for challenging state certification determinations.

Curtailling or reducing state authority under CWA Section 401, or the vital role of states in maintaining water quality within their boundaries, would inflict serious harm to the division of state and federal authorities established by Congress. Any executive order addressing the implementation of CWA Section 401 should be developed in genuine consultation with states to ensure that the CWA continues to effectively protect water quality, while maintaining the partnerships and the essential balance of authority between states and the federal government.

Western Governors are committed to establishing a framework to incorporate the early, meaningful and substantive input of states in the development of federal regulatory policies that have federalism implications. By operating as authentic collaborators in the development and execution of policy, the states and federal government can demonstrably improve their service to the public. By working cooperatively with the states, the Administration can create a legacy of renewed federalism, resulting in a nation that is stronger, more resilient and more united.

Sincerely,


David Ige
Governor of Hawai'i
Chair, WGA


Doug Burgum
Governor of North Dakota
Vice Chair, WGA



December 3, 2018

The Honorable David Ross
 Assistant Administrator
 Office of Water
 U.S. Environmental Protection Agency
 1200 Pennsylvania Avenue, N.W.
 Washington, D.C. 20460

Dear Assistant Administrator Ross:

We understand the Environmental Protection Agency's (EPA) Office of Water is considering regulatory action related to the interpretation of state statutory authority under Clean Water Act (CWA) Section 401. We urge you to reject any changes to agency rules, guidance, and/or policy that may diminish, impair, or subordinate states' well-established sovereign and statutory authorities to protect water quality within their boundaries. Any regulatory action related to states' CWA Section 401 authority raises significant federalism concerns, and therefore, we request that EPA engage in meaningful and substantive consultation with state officials before the commencement of such action.

With the adoption of the CWA, Congress purposefully designated states as co-regulators under a system of cooperative federalism that recognizes state authority over the allocation, administration, protection, and development of water resources. Section 101 of the CWA clearly expresses Congress's intent to:

...recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter.

This declaration demonstrates Congress's understanding that a one-size-fits-all approach to water management and protection does not accommodate the practical realities of geographic and hydrologic diversity among states.

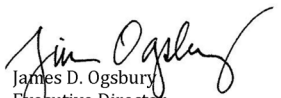
The Honorable David Ross
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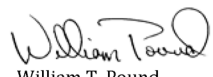
A vital component of the CWA's system of cooperative federalism is states' authority to certify and condition federal permits of discharges into waters of the United States under Section 401, an authority which has helped to ensure that activities associated with federally-permitted discharges will not impair state water quality. The U.S. Supreme Court has addressed this issue of state authority and concluded that "[s]tate certifications under [CWA Section] 401 are essential in the scheme to preserve state authority to address the broad range of pollution." *S.D. Warren Co. v. Maine Board of Environmental Protection*, 547 U.S. 370 (2006), citing 116 Cong. Rec. 8984 (1970).

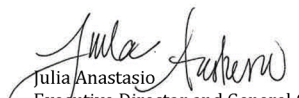
Since the enactment of the CWA, states have exercised their authority under Section 401 efficiently, effectively, and equitably. We question the need for any agency action aimed at amending or clarifying EPA's policy or regulations governing the implementation of Section 401. Instances of delays or denials of state water quality certifications are extremely limited. Where parties wish to contend that a state has exceeded its authority under Section 401, the CWA provides avenues for challenging state certification determinations.

Curtailing or reducing state authority under CWA Section 401, or the vital role of states in maintaining water quality within their boundaries, would inflict serious harm to the division of state and federal authorities established by Congress. Any regulatory change to the Section 401 permitting process must not come at the expense of state authority and should be developed through genuine consultation with states. EPA must also recognize, and defer to, states' sovereign authority over the management and allocation of their water resources. EPA should ensure the CWA continues to effectively protect water quality, while maintaining the partnerships and the essential balance of authority between states and the federal government.

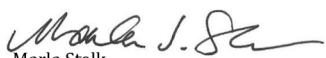
Sincerely,


James D. Ogsbury
Executive Director
Western Governors' Association


William T. Pound
Executive Director
National Conference of State Legislatures


Julia Anastasio
Executive Director and General Counsel
Association of Clean Water Administrators


Ed Carter
President
Association of Fish and Wildlife Agencies

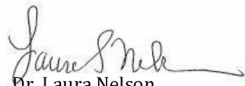

Marla Stelk
Executive Director
Association of State Wetland Managers

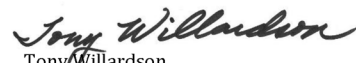

Karen White
Executive Director
Conference of Western Attorneys General

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David Adkins
Executive Director / CEO
Council of State Governments


Senator J. Stuart Adams
Utah State Senate
Chair, Council of State Governments - West


Dr. Laura Nelson
Chair
Western Interstate Energy Board


Tony Willardson
Executive Director
Western States Water Council



August 9, 2018

The Honorable Paul Ryan
Speaker of the House
U.S. House of Representatives
H-232 U.S. Capitol
Washington, D.C. 20515

The Honorable Mitch McConnell
Majority Leader
United States Senate
S-230 U.S. Capitol
Washington, D.C. 20510

The Honorable Nancy Pelosi
Minority Leader
U.S. House of Representatives
H-204 U.S. Capitol
Washington, D.C. 20515

The Honorable Charles Schumer
Minority Leader
United States Senate
419 Hart Senate Office Building
Washington, D.C. 20510

Dear Senators McConnell and Schumer, and Representatives Ryan and Pelosi:

We write to express our concerns about various proposals to alter the state certification process under Section 401 of the federal Clean Water Act (CWA). Because each state is unique, we need the flexibility and authority to address our individual water needs. We urge Congress to reject any legislative or administrative effort that would diminish, impair or subordinate states' ability to manage or protect water quality within their boundaries.

States have primary legal authority over the allocation, administration, protection and development of their water resources. Responsible growth and development, as well as proper environmental management, depend upon the recognition and preservation of state stewardship.

We recognize the importance of partnerships between states and the federal government. To implement the CWA, Congress purposefully designated states as co-regulators under a system of cooperative federalism that recognizes state interests and authority. Congress recognizes the legal position of states in the CWA; Section 101 clearly expresses Congress's intent to:

recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to

The Honorable Paul Ryan
 The Honorable Mitch McConnell
 The Honorable Nancy Pelosi
 The Honorable Charles Schumer
 August 9, 2018
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consult with the Administrator in the exercise of his authority under this chapter...Federal agencies shall co-operate with state and local agencies to develop comprehensive solutions to prevent, reduce, and eliminate pollution in concert with programs for managing water resources.

A balanced system of cooperative federalism has enabled states to implement the CWA effectively and with flexibility. The CWA correctly recognizes that a one-size-fits-all approach to water management and protection does not accommodate the practical realities of geographic and hydrologic diversity among states.

A vital component of the CWA's system of cooperative federalism is state authority to certify and condition federal permits of discharges into waters of the United States under Section 401. This authority has helped ensure that activities associated with federally permitted discharges will not impair state water quality. The U.S. Supreme Court has addressed this issue of state authority and concluded that, "[s]tate certifications under [Section] 401 are essential in the scheme to preserve state authority to address the broad range of pollution." *S.D. Warren Co. v. Maine Board of Environmental Protection*, 547 U.S. 370 (2006), citing 116 Cong. Rec. 8984 (1970).

Curtailing or reducing state authority or the vital role of states in maintaining water quality within their boundaries would inflict serious harm to the division of state and federal authorities established under the Constitution and recognized by Congress in the CWA. Any legislative or regulatory effort to streamline environmental permitting should be developed in consultation with states and must not be achieved at the expense of authority delegated to states under the CWA or any other federal law. Any such effort must also recognize, and defer to, states' sovereign authority over the management and allocation of their water resources. We implore you to ensure that the CWA continues to effectively protect water quality while maintaining the proper balance between state and federal authorities.

Sincerely,


 James D. Ogsbury
 Executive Director
 Western Governors' Association


 Julia Anastasio
 Executive Director and General Counsel
 Association of Clean Water Administrators


 Virgil Moore
 President
 Association of Fish and Wildlife Agencies


 Jeanne Christie
 Executive Director
 Association of State Wetland Managers

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The Honorable Mitch McConnell
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Karen White
Executive Director
Conference of Western Attorneys General



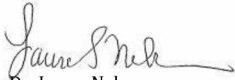
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419 Hart Senate Office Building
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 August 9, 2018
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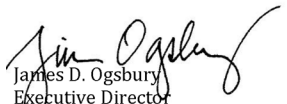
consult with the Administrator in the exercise of his authority under this chapter...Federal agencies shall co-operate with state and local agencies to develop comprehensive solutions to prevent, reduce, and eliminate pollution in concert with programs for managing water resources.

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A vital component of the CWA's system of cooperative federalism is state authority to certify and condition federal permits of discharges into waters of the United States under Section 401. This authority has helped ensure that activities associated with federally permitted discharges will not impair state water quality. The U.S. Supreme Court has addressed this issue of state authority and concluded that, "[s]tate certifications under [Section] 401 are essential in the scheme to preserve state authority to address the broad range of pollution." *S.D. Warren Co. v. Maine Board of Environmental Protection*, 547 U.S. 370 (2006), citing 116 Cong. Rec. 8984 (1970).

Curtailling or reducing state authority or the vital role of states in maintaining water quality within their boundaries would inflict serious harm to the division of state and federal authorities established under the Constitution and recognized by Congress in the CWA. Any legislative or regulatory effort to streamline environmental permitting should be developed in consultation with states and must not be achieved at the expense of authority delegated to states under the CWA or any other federal law. Any such effort must also recognize, and defer to, states' sovereign authority over the management and allocation of their water resources. We implore you to ensure that the CWA continues to effectively protect water quality while maintaining the proper balance between state and federal authorities.

Sincerely,


 James D. Ogsbury
 Executive Director
 Western Governors' Association


 Julia Anastasio
 Executive Director and General Counsel
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 Association of State Wetland Managers

The Honorable Paul Ryan
The Honorable Mitch McConnell
The Honorable Nancy Pelosi
The Honorable Charles Schumer
August 9, 2018
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Karen White
Executive Director
Conference of Western Attorneys General



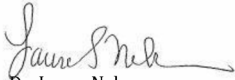
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Executive Director / CEO
Council of State Governments



Edgar Ruiz
Executive Director
Council of State Governments – West



Tommie Cline Martin
President
Western Interstate Region of NACo



Dr. Laura Nelson
Chair
Western Interstate Energy Board



Tony Willardson
Executive Director
Western States Water Council

**Written Testimony of Ward J. Scott, Policy Advisor
Western Governors' Association**

**Submitted to the United States Senate
Committee on Environment and Public Works
Subcommittee on Superfund, Waste Management, and Regulatory Oversight
June 13, 2018**

Oversight of the Army Corps' Regulation of Surplus Water and the Role of States' Rights

Chair Rounds, Ranking Member Booker, and Members of the Subcommittee, I appreciate the opportunity to testify today on behalf of the Western Governors' Association (WGA). My name is Ward Scott and I am a Policy Advisor with the Association, where my work focuses on western water policy and state-federal relations.

WGA represents the Governors of 19 western states and three U.S. territories and is an instrument of the Governors for bipartisan policy development, information-sharing, and collective action on issues of critical importance to the western United States. The elected and appointed officials of the western states have a long history of responsible land and water resource management and of working collaboratively with the administrative agencies of the federal government.

My testimony will focus on the Western Governors' concerns with the U.S. Army Corps of Engineers (Corps) proposed rule, "Use of [Corps] Reservoir Projects for Domestic Municipal & Industrial Water Supply" (Proposed Rule).¹ Western Governors have consistently expressed their opposition to the Proposed Rule and to any agency rule or policy that would – or has the potential to – interfere with, subordinate, or in any way diminish states' well-established legal authority over water resources within their boundaries.

Western Governors' concerns regarding the Proposed Rule focus on three primary elements. First, the Proposed Rule may have preemptive effects on states' sovereign authority over water resources and corresponding state laws. Second, the Corps' overly-broad proposed definition of the term "surplus waters" includes natural, historic river flows, which should remain under state jurisdiction. Third, the Corps' has not adequately consulted with potentially-affected states, nor has it properly assessed potential federalism implications as required by Executive Order 13132, in its development of the Proposed Rule.²

Water is precious everywhere but especially in the West, where consistently arid conditions, diverse landscapes and ecosystems, and growing populations present unique challenges in the allocation and management of scarce water resources. State water laws have developed over the course of decades, and vary greatly to account for local hydrology, the interplay between Tribal, state, and federal legal rights, and complicated systems of water allocation. In the West, water must generally be appropriated under state-granted water rights and is often transferred long distances from its point of diversion to its point of use. Additionally, western water users often possess vested private property rights in water, which are granted and administered by the states. Western

¹ 81 Fed. Reg. 91556 (Dec. 16, 2016).

² WGA Comments, Feb. 27, 2017. Available at:
http://westgov.org/images/editor/USACE_Surplus_Waters_Rule_-_final.pdf.

state water laws – and the regulatory frameworks within which they operate – are complex and diverse and must be accounted for in the development of any Corps rule or policy.

State Authority over Water Resource Management and Allocation

Western Governors have adopted policy (WGA Policy Resolution 2015-08, Water Resource Management in the West) that articulates a fundamental principle recognized by both Congress and the United States Supreme Court:

States are the primary authority for allocating, administering, protecting, and developing water resources, and they are primarily responsible for water supply planning within their boundaries. States have the ultimate say in the management of their water resources and are best suited to speak to the unique nature of western water law and hydrology.³

This well-established state authority is rooted in the U.S. Constitution's Tenth Amendment, which guarantees that, "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people."⁴ States, upon their admission to the Union, established their sovereign authority over water resources under the Equal Footing Doctrine⁵ and continue to maintain this broad authority, unless preempted by federal law.⁶ Federal statutes addressing western water management have consistently expressed that states possess primary authority over their water resources and that it is the intent of Congress to preserve and respect such authority and corresponding state laws.⁷

No federal laws cited by the Corps that may be applicable to Proposed Rule expressly or impliedly preempt state's authority to manage and allocate water resources. Rather, the two federal statutes relied upon by the Corps in its Notice of Proposed Rulemaking (NPRM)⁸ – the Flood Control Act of 1944 and the Water Supply Act of 1958 – clearly recognize and defer to state law.

Section 1 of the Flood Control Act of 1944 begins with the following: "[I]t is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control..."⁹ Similarly, in the Water Supply Act of 1958, Congress declared its intent "to recognize the primary responsibilities of the States and local interests in developing water supplies for domestic, municipal, industrial, and other purposes and that the Federal Government should participate and cooperate with States and local interests in developing such water supplies

³ WGA Policy Resolution 2015-08, Water Resource Management in the West. Available at: http://westgov.org/images/editor/RESO_Water_Resources_Final_Version_08.pdf

⁴ U.S. Const. amend. X.

⁵ *Pollard v. Hagan*, 44 U.S. 212 (1845).

⁶ *Martin v. Lessee of Waddell*, 41 U.S. 367, at 410 (1842) ("[T]he people of each state became themselves sovereign; and in that character hold the absolute right to all of their navigable waters and the soils under them for their own common use, subject only to the rights since surrendered by the Constitution to the general government."); see also, *Kansas v. Colorado*, 206 U.S. 46 (1907); *California Oregon Power v. Beaver Portland Cement Co.*, 295 U.S. 142 (1935); *PPL Montana v. Montana*, 565 U.S. 576 (2012).

⁷ See, e.g., the 1866 Mining Act (43 U.S.C. § 661); the 1877 Desert Land Act (43 U.S.C. § 321); the 1920 Federal Power Act (16 U.S.C. §§ 802, 821); the Clean Water Act (33 U.S.C. § 1251(b) and (g)); the 1902 Reclamation Act (43 U.S.C. § 383); *Pollard v. Hagan*, 44 U.S. 212 (1845); *California v. United States*, 438 U.S. 645 (1978).

⁸ 81 Fed. Reg. 91556 (Dec. 16, 2016).

⁹ 43 U.S.C. § 701-1.

in connection with the construction, maintenance, and operations of Federal navigation, flood control, irrigation, or municipal purpose projects.”¹⁰ Although the Corps cites various statements of Congressional intent to justify certain provisions of the Proposed Rule in its NPRM, no intent of Congress is more repeatedly and clearly expressed throughout the controlling statutes than the preservation of, and respect for, states’ authority over their water resources.

The Corps’ Proposed Rule

Through its Proposed Rule, the Corps seeks to establish policies governing the use of its reservoir projects within the Upper Missouri River Basin and the treatment of “surplus water” within that system.¹¹ Although the Proposed Rule attempts to address “specific issues that have arisen most notably in the Corps’ Northwestern and South Atlantic Divisions,” the Corps has stated that it “is also intended to provide greater clarity, consistency, and efficiency in implementing [the Flood Control Act of 1944 and the Water Supply Act of 1958] nationwide.”¹²

Western Governors have expressed their concerns regarding both the substance of the Proposed Rule and the process by which it was developed, both through WGA and individually¹³ and remain concerned that the procedural, legal, and technical issues cited in comments and letters, as well as the views and concerns expressed by individual states, have still not been addressed by the Corps or incorporated into its decisionmaking processes. These concerns were heightened by the Corps’ listing of the Proposed Rule in the Spring 2018 Unified Agenda of Regulatory and Deregulatory Actions’ as currently in its “Final Rule Stage” with a “Final Action” date estimated as January 2019.

Definition and Treatment of “Surplus Waters”

Through the Proposed Rule, the Corps seeks to address the use of its reservoir projects for domestic, municipal, and industrial water supply, and clarify its use of water supply contracts to authorize the withdrawal of “surplus waters” from Corps reservoirs. The Corps’ administration of water supply contracts at its reservoirs should not have any negative effect on states’ primary authority over the management and allocation of their water resources or state laws enacted for such purposes. The Proposed Rule, however, fails to distinguish between “surplus water,” which is defined in relation to storage and authorized purposes, and “natural flows,” which is defined as waters that would have been available for use in the absence of federal dams and reservoirs.

Section 6 of the Flood Control Act of 1944 authorizes the Corps to enter into agreements “for domestic and industrial uses of surplus water that may be available at any [Corps] reservoir,” provided such uses do not “adversely affect then-existing lawful uses of such water.” The statute does not provide a definition for “surplus waters.” Under the Proposed Rule, the Corps would define “surplus water” to mean any water available at a Corps reservoir that is not required during a specified time period to accomplish an authorized purpose or purposes of that reservoir.

¹⁰ 43 U.S.C. § 390b.

¹¹ 81 Fed. Reg. 91556 (Dec. 16, 2016).

¹² 81 Fed. Reg. 91558-59.

¹³ Western states submitting individual comments to the Corps include: The [State of Idaho](#); the [State of Nebraska](#); the [State of North Dakota](#); the [State of Oklahoma](#); and the [State of South Dakota](#). Comments were also submitted by the [Western States Water Council](#); [North Dakota Water Commission](#); [North Dakota Water Users Association](#); [Association of California Water Agencies](#); and the [Texas Commission on Environmental Quality](#).

The Corps does not claim that federal law preempts state authority over natural flows through the Flood Control Act of 1944, the Water Supply Act of 1958, or any other relevant statute. Nor have states transferred or ceded any rights to, or authority over, the allocation and management of natural flows to the Corps. In its NPRM, the Corps acknowledges that some portion of waters to be defined as “surplus” would exist without Corps’ water storage: “The Corps also recognizes that some withdrawals that it may authorize from a Corps reservoir pursuant to Section 6 could have been made from the river in the absence of the Corps reservoir project, and in that sense may not be dependent on reservoir storage.”¹⁴

The proposed definition of “surplus waters” is beyond the scope of the Corps’ statutory authority and would usurp states’ well-established sovereign authority over the natural flows of water through Corps reservoirs. As a result, the Proposed Rule would conflict with Congress’s clear intent to preserve state water law. Western Governors believe that any definition of “surplus waters” must plainly exclude natural historic flows from any quantification of waters subject to the Proposed Rule. Additionally, natural flows should be exempt from any monetary charges imposed by the Corps for water storage, as such waters would exist within the streambed in the absence of Corps reservoirs and would not be subject to federal management or the imposition of federal fees.

Rulemaking Process

In addition to the substance of the Proposed Rule, Western Governors are concerned about the process by which it was developed. States should be afforded the opportunity to consult with federal agencies as part of the development of any federal rule, policy or decision which may have significant impacts on states’ authority – both inherent and delegated. Nowhere is state consultation more important than in the context of water resource management.

Western Governors emphasize in WGA Policy Resolution 2017-01, Building a Stronger State-Federal Relationship, that federal agencies should, “have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with early, meaningful, and substantive input in the development of regulatory policies that have federalism implications.”¹⁵ State consultation should be an ongoing process and should continue from the development stage of any proposed rule throughout its promulgation. As the agencies receive additional information, Governors and the state officials they designate should have the opportunity for ongoing engagement with the agencies to develop refinements to any rule.

Consistent with this policy, Executive Order 13132, Federalism, requires federal agencies to “have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications.”¹⁶ These policies include “regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”¹⁷ In its NPRM, the Corps declares that it “do[es] not believe that the

¹⁴ 81 Fed. Reg. 91556 (Dec. 16, 2016).

¹⁵ WGA Policy Resolution 2017-01, Building a Stronger State-Federal Relationship. Available at: http://westgov.org/images/editor/PR_2017-01_State_Federal_Relationship.pdf.

¹⁶ 64 Fed. Reg. 43255 (Aug. 10, 1999).

¹⁷ *Id.*

proposed rule has Federalism implications.”¹⁸ WGA disagrees with this assertion. The Proposed Rule clearly qualifies for further review under Executive Order 13132, as its provisions would have substantial direct effects on the states and their authority over the management and allocation of their waters. The Proposed Rule would also have a preemptive effect on state water laws (*i.e.*, a substantial effect “on the distribution of power and responsibilities among the various levels of government”).

Proper state consultation in an agency’s decisionmaking process produces more durable, informed, and effective policy and allows for genuine partnerships to develop between federal and state officials. Providing states with an opportunity to submit written comments – which is already required under the Administrative Procedures Act – is not the same process as “consultation.”¹⁹ Federal courts have relied on an ordinary definition of “consultation” and have concluded that state consultation requires a meaningful opportunity for dialogue between state and federal officials, where federal decisionmakers “seek information or advice from” states or “have discussions or confer with [states], typically *before* undertaking a course of action.”²⁰

While WGA has submitted written comments under the normal procedures for public input, Western Governors have asserted that states should have been consulted throughout this rulemaking process. In addition to written comments submitted in response to the Corps’ Notice of the Proposed Rule, WGA issued letters in August 2013 and again in October 2017 regarding the Corps’ failure to adequately engage with states in the development of the Proposed Rule. It is our understanding that Corps officials have conducted little to no outreach to Governors’ offices in response to their expressed concerns regarding the Proposed Rule. This failure to consult with states has resulted in a rule that largely ignores state concerns that have been consistently communicated to the Corps.

The Corps should develop rules and policies establishing comprehensive procedures for state consultation, requiring its officials to conduct pre-decisional – as well as ongoing – government-to-government engagement with states through their Governors’ offices. Such measures should be implemented prior to any decision in which the Corps asserts jurisdiction over matters traditionally under state authority.

Conclusion

Western Governors have a history of responsible and comprehensive water management within their states and of working with federal agencies on water-related matters. The Proposed Rule has a substantial likelihood of interfering with, impairing, and/or subordinating states’ well-established authority to manage and allocate the natural flows of rivers within their boundaries and to implement state water laws.

Any definition of “surplus water” must account for, and exclude, natural flows of the river from waters that would be subject to Corps control. The Corps should not deny access to divert and appropriate such natural flows, nor should the Corps charge storage or access fees where users are making withdrawals of natural flows from Corps reservoirs. No federal statute purports to assert federal jurisdiction over these waters or to preempt state law.

¹⁸ 81 Fed. Reg. 91556 (Dec. 16, 2016).

¹⁹ *California Wilderness Coalition v. U.S. Dept. of Energy*, 631 F.3d 1072, 1087 (9th Cir. 2011).

²⁰ *The New Oxford Dictionary* 369 (2001).

The Corps should consult with states, on a government-to-government level, to better understand the impacts the Proposed Rule may have on states' authority over water resources and ways in which the Corps can partner with states to effectively manage its projects and resources.

This concludes my testimony. Thank you again for providing the opportunity to testify and for bringing attention to these important issues of states' rights and federal responsibilities. I will be happy to answer any questions you have.



DENNIS DAUGAARD
GOVERNOR OF SOUTH DAKOTA
CHAIR

DAVID IGE
GOVERNOR OF HAWAII
VICE CHAIR

JAMES D. OGSBURY
EXECUTIVE DIRECTOR

June 6, 2018

The Honorable R.D. James
Assistant Secretary for the Army for Civil Works
U.S. Army Corps of Engineers
441 G Street, N.W.
Washington, D.C. 20314

Dear Assistant Secretary James:

We are writing to express the continued concerns of Western Governors regarding the U.S. Army Corps of Engineers' proposed rulemaking, Policy for Domestic, Municipal, and Industrial Water Supply Uses of Reservoir Projects Operated by the Department of the Army, U.S. Army Corps of Engineers ([RIN 0710-AA72](#), [Docket ID: COE-2016-0016](#)). The proposed rule, which would affect Corps water reservoir projects located in western states, threatens to interfere with those states' primary authority to manage and allocate water resources within their boundaries. [The Spring 2018 Unified Agenda of Regulatory and Deregulatory Actions](#) schedules "Final Action" on the proposed rule for January 2019 and "Final Action Effective" for March 2019. It remains unclear to Western Governors how the Corps plans to engage with, and respond to, states as it moves forward in its rulemaking process.

On December 16, 2016, the Corps issued a [Notice of Proposed Rulemaking](#) (NPRM) to address its policies governing the use of Corps reservoir projects within the Upper Missouri River Basin and the treatment of "surplus water" within that system. In response to the NPRM, the Western Governors' Association (WGA) submitted [comments](#) expressing concerns about both the substance of the proposed rule and the process by which it had been developed.

Specifically, the Governors' comments cited: (i) the Corps' failure to conduct adequate consultation with potentially-affected states, or to include a proper assessment of the proposed rule's potential federalism implications as required by Executive Order 13132, Federalism; (ii) the various potential preemptive effects of the proposed rule on state authority over water resources; (iii) the Corps' overly-broad definition of the term "surplus waters" to include natural, historic river flows over which states possess primary legal authority; and (iv) the denial of, or interference with, access to Corps projects for the lawful diversion and appropriation of water under state law. Several other western states also submitted [comments](#) to the Corps in response to its NPRM, largely reiterating and expanding upon the concerns expressed by WGA.¹

¹ Western States that submitted comments to the Corps in response to the NPRM include: The [State of Idaho](#); the [State of Nebraska](#); the [State of North Dakota](#); the [State of Oklahoma](#); and the [State of South Dakota](#). Comments were also submitted by the [Western States Water Council](#); [North Dakota Water Commission](#); [North Dakota Water Users Association](#); [Association of California Water Agencies](#); and the [Texas Commission on Environmental Quality](#).

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Western Governors' concerns regarding this issue were initially raised in an August 21, 2013 letter to then-Assistant Secretary of the Army (Civil Works) Jo-Ellen Darcy. We cited the Corps' failure to adequately engage with states in its then-pending rulemaking relating to surplus waters. Similarly, on August 6, 2013, the Western States Water Council (WSWC) sent a letter to Assistant Secretary Darcy citing shortcomings in the rulemaking process and a lack of regulatory clarity on several critical implementation issues. Western Governors are concerned that the procedural, legal, and technical issues cited in comments and letters, as well as the views and concerns expressed by individual states, have still not been addressed by, or incorporated in, the Corps' decision-making processes in the development of the proposed rule.

States have an historic and unique relationship with the Corps and a vital role in the implementation of several Corps programs, due to states' inherent and sovereign authority over water resources, as well as their statutory role as co-regulators under the federal Clean Water Act. As stated in WGA Policy Resolution [2017-01](#), *Building a Stronger State-Federal Relationship*, federal agencies "should be required to have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with early, meaningful, and substantive input in the development of regulatory policies that have federalism implications."

In its 2016 NPRM, the Corps states that the proposed rule is "intended to enhance the Corps' ability to cooperate with state and local interests in the development of water supplies in connection with the operation of its reservoirs," and that it "endeavors to operate its projects for their authorized purposes in a manner that does not interfere with the States' abilities to allocate consumptive water rights, or with lawful uses pursuant to State, Federal, or Tribal authorities." As of this date, the Western Governors are unaware of any meaningful outreach on the part of the Corps to engage with states – or respond to their expressed concerns – as part of this rulemaking effort.

Western Governors have a history of responsibly exercising their authority for comprehensive water management within their states and of working cooperatively with various federal agencies in connection with that responsibility. We reiterate our concerns about the Corps' proposed rule, as described in its NPRM, for the following reasons:

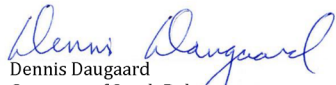
- Western Governors continue to believe that the proposed rule does, in fact, have federalism implications which trigger the expanded state consultation requirements of Executive Order 13132.
- As the primary authority over water management and allocation within their borders, states must not be required to relinquish or subordinate their sovereign authority over the natural flows of rivers impounded by the Corps or any other federal agencies.
- Legally, the Corps must define "surplus water" to expressly exclude natural flows (and any quantification of such flows) which would have occurred without the development of federal water projects. Natural flows must remain subject to states' authority to allocate water resources for beneficial uses.

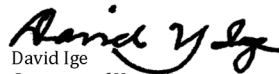
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- The Corps should not deny, or interfere with, access to divert and appropriate natural flows (*i.e.*, water which would have been available without the construction of Corps impoundments) in its reservoir projects. Similarly, the Corps should not charge storage fees to water users where such users are making withdrawals of natural flows within Corps reservoirs.

Western Governors strongly urge you to engage in meaningful, substantive, and ongoing consultation with states before moving forward with any efforts to develop the proposed rule and to respond to our consistently expressed concerns regarding this matter.

Sincerely,


Dennis Daugaard
Governor of South Dakota
Chair, WGA


David Ige
Governor of Hawai'i
Vice Chair, WGA



DENNIS DAUGAARD
GOVERNOR OF SOUTH DAKOTA
CHAIR

DAVID IGE
GOVERNOR OF HAWAII
VICE CHAIR

JAMES D. OGSBURY
EXECUTIVE DIRECTOR

October 17, 2017

U.S. Army Corps of Engineers
ATTN: CECW-CO-N
441 G Street, N.W.
Washington, D.C. 20314

Re: COE-2017-0004 – Review of Existing Rules

Dear Sir or Madam:

The U.S. Army Corps of Engineers has issued a Request for Comment as part of its Regulatory Reform Task Force, Review of Existing Rules in accordance with Executive Order 13777, Enforcing the Regulatory Reform Agenda.¹ Section 3(e) of Executive Order 13777 requires each agency's Regulatory Reform Task Force, in evaluating an agency's regulations, to "seek input and other assistance, as permitted by law, from entities significantly affected by federal regulations, including state, local, and tribal governments, small businesses, consumers, non-governmental organizations, and trade associations."²

Statement of Interest

The Western Governors' Association (WGA) represents the governors of 19 western states and three Pacific territories, and is an instrument of the governors for bipartisan policy development, information exchange, and collective action on issues of critical importance to the western United States. The elected and appointed officials of the western states have a long history of responsible land and resource management and of working collaboratively with federal administrative agencies. States have an historic and unique relationship with the Corps, largely due to states' inherent authority over water resources, as well as their statutorily-delegated authorities under the federal Clean Water Act (CWA).

WGA Policy Resolution 2017-01, *Building a Stronger State-Federal Relationship*, observes that the strength of the federal-state partnership in resource management has diminished in recent years.³ In many cases, agency rules and regulations have encroached on state legal prerogatives, neglected state expertise, and diminished the statutorily-defined role of states in managing federal environmental protection programs. Western Governors appreciate the Corps' recognition of the need for a comprehensive review of agency policies and regulations and welcome the opportunity to provide the Corps with their insights and perspective.

¹ Request for Comment, 82 Fed. Reg. 33470 (Jul. 20, 2017); Extension of Comment Period, 82 FR 43314 (Sep. 15, 2017).

² Exec. Order No. 13777 (Feb. 24, 2017), *published in* 82 Fed. Reg. 12285 (Mar. 1, 2017).

³ Western Governors' Association Policy Resolution 2017-01, *Building a Stronger State-Federal Relationship*. Available at: http://westgov.org/images/editor/PR_2017-01_State_Federal_Relationship.pdf.

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Proper Consultation with State Officials in the Rulemaking Process

As stated in WGA Policy Resolution 2017-01, federal agencies, “should be required to have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with early, meaningful, and substantive input in the development of regulatory policies that have federalism implications.”⁴ Similarly, in WGA Policy Resolution 2017-04, *Water Quality in the West*, Western Governors urge the Corps “to engage the states as co-regulators and ensure that state water managers have a robust and meaningful voice in the development of any rule regarding CWA jurisdiction, particularly in the early stages of development before irreversible momentum precludes effective state participation.”⁵

The Corps has contemplated the concept of consultation in the context of its engagement with federally-recognized Indian tribes. In this particular context, the Corps has defined “consultation” as an:

Open, timely, meaningful, collaborative and effective deliberative communication process that emphasizes trust, respect and shared responsibility. To the extent practicable and permitted by law, consultation works toward mutual consensus and begins at the earliest planning stages, before decisions are made and actions are taken; an active and respectful dialogue concerning actions taken by the USACE that may significantly affect tribal resources, tribal rights (including treaty rights) or Indian lands.⁶

This consultation policy is based upon the principle that federally-recognized Indian tribes possess sovereign status and are to be afforded government-to-government, pre-decisional consultation in the development of any Corps’ rule which may significantly affect tribal resources, rights, or lands. The Corps’ tribal consultation policy also recognizes that “each of the 565 federally recognized American Indian and Alaska Native Tribes are distinct and separate governments, requiring a consultation process that may be completely unique to them.”

States – possessing sovereign authorities under the U.S. Constitution, as well as delegated authorities under federal statute – should be afforded a similar opportunity for robust and complete consultation as part of any agency rulemaking which may have significant impacts on states’ resources, rights, or lands. The Corps should develop rules and policies to establish comprehensive procedures for consultation with states, recognizing states’ sovereignty and requiring agency officials to conduct pre-decisional government-to-government state consultation.

Respecting States’ Primary Authority over Water Resources

Nowhere is effective state consultation more important than in the context of water resources. States possess primary authority for managing, allocating, administering, protecting, and developing their water resources and are primarily responsible for water supply planning within

⁴ *Id.*

⁵ Western Governors’ Assoc., Policy Resolution 2017-04, *Water Quality in the West*. Available at: http://westgov.org/images/editor/PR_2017-04_Water_Quality.pdf

⁶ http://www.usace.army.mil/Portals/2/docs/civilworks/tribal/CoP/2013_nap_brochure.pdf

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their boundaries. State water laws have developed over the course of decades to reflect local customs and necessities. Accordingly, these state laws – and the regulatory frameworks within which they operate – are complex and diverse. Deference to states’ primacy in water management and allocation decisions is a well-established principle of federal case law and is unambiguously repeated throughout federal statutory authority. The U.S. Supreme Court has consistently held that states established their sovereign authority over water resources upon their admission to the Union under the Equal Footing Doctrine of the Constitution and continue to rightfully exercise such authority under their own laws.⁷ States’ authority over water resources, and the legal structures under which such authority is executed, must receive effective and express deference where any Corps action threatens any type of federal preemption.

Two rules currently being developed by the Corps exemplify the need to clearly recognize and respect this important balance of powers:

- **Defining “Waters of the United States”**

States should be consulted and engaged in any Corps rulemaking which defines “waters of the United States” or affects states’ authority under the CWA, which expressly provides that “the authority of each state to allocate quantities of water within its jurisdiction shall not be superseded, abrogated, or otherwise impaired by this Act.”⁸ Western Governors’ previously expressed their concerns to the Corps regarding the lack of substantive state consultation during the promulgation of the 2015 Clean Water Rule.⁹ Renewed rulemaking efforts addressing this critical subject have been encouraging, as the Corps and EPA have conducted early outreach with states. Importantly, these efforts have involved direct communications with individual states through their Governors. WGA strongly urges the Corps to pursue ongoing consultation with Governors throughout the substantive development of any new rule affecting the scope of the CWA.

- **“Surplus Water” Rule**

On December 16, 2016, the Corps issued a Notice of Proposed Rulemaking (NPRM) to address its policies governing the use of Corps reservoir projects within the Upper Missouri River Basin and the treatment of purported “surplus water” within that system.¹⁰ In response to the NPRM, Western Governors submitted comments expressing their concerns regarding both the substance of the proposed rule and the process by which it had been developed. Specifically, the governors’ cited: (i) the Corps’ failure to conduct adequate consultation with potentially-affected states, or to include a proper assessment of the proposed rule’s potential federalism implications as required by Executive Order 13132; (ii) the various potential preemptive effects of the proposed rule on states’ primary and federally-delegated authorities over their water resources; and (iii) the Corps’ overly-

⁷ See, *California Oregon Power Co. v. Beaver Portland Cement Co.*, 295 U.S. 142 (1935); *California v. United States*, 438 U.S. 645 (1978); *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001); *Rapanos v. United States*, 547 U.S. 715 (2006).

⁸ 33 U.S.C. § 1251(g).

⁹ Western Governors’ Assoc. Letter, Nov. 14, 2015. Available at: http://westgov.org/images/editor/LTR_Waters_of_the_US_Comments_Final_1.pdf

¹⁰ 81 Fed. Reg. 91556 (Dec. 16, 2016).

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broad definition of the term “surplus waters” to include natural, historic river flows over which states possess primary legal authority.¹¹ Western Governors are concerned that the procedural, legal, and technical issues which arose under this rulemaking process remain unaddressed in Corps’ rulemaking policies.

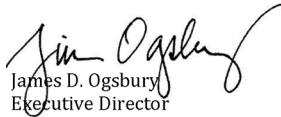
Conclusion

WGA appreciates the opportunity to provide this assessment of areas in which the communication and collaboration between the Corps and state governments can be reinforced and strengthened.

Western Governors are excited to work in true partnership with federal administrative agencies toward positive and productive outcomes. By operating as authentic collaborators on the development and execution of agency rules and policy, states and federal agencies can demonstrably improve their service to the public.

We look forward to working with the Corps in this effort and appreciate your attention to these important matters.

Sincerely,


James D. Ogsbury
Executive Director

¹¹Western Governors’ Assoc. Letter, Feb. 27, 2017. Available at:
[http://westgov.org/images/editor/USACE Surplus Waters Rule - final.pdf](http://westgov.org/images/editor/USACE_Surplus_Waters_Rule_-_final.pdf).



Steve Bullock
Governor of Montana
Chair

Dennis Daugaard
Governor of South Dakota
Vice Chair

James D. Ogsbury
Executive Director

Headquarters

1600 Broadway
Suite 1700
Denver, CO 80202

303-623-9378
Fax 303-534-7309

Washington, D.C.

400 N. Capitol Street, N.W.
Suite 376
Washington, D.C. 20001

202-624-5402
Fax 202-624-7707

www.westgov.org

February 27, 2017

U.S. Army Corps of Engineers
ATTN: CECC-L
441 G Street, N.W.
Washington, D.C. 20314

Re: COE-2016-0016 – Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply

Dear Sir or Madam:

The U.S. Army Corps of Engineers (USACE) has issued a Notice of Proposed Rulemaking concerning policies governing the use of its reservoir projects within the Missouri River Basin, pursuant to Section 6 of the Flood Control Act of 1944, 33 U.S.C. § 708, and the Water Supply Act of 1958, 43 U.S.C. § 390b, (hereafter the “NPRM”). Specifically, USACE invites interested parties to comment on, “the proposed definition of ‘surplus water,’ for purposes of Section 6.”¹

Statement of Interest

WGA represents the governors of 19 western states, as well as three U.S.-flag islands, and is an instrument of the governors for bipartisan policy development, information exchange, and collective action on issues of critical importance to the western United States.

States are the primary legal authority for the allocation, management, protection, and development of water resources, and are responsible for water supply planning within their respective borders. The NPRM suggests regulations that would affect USACE water reservoir projects located within the boundaries of upper Missouri River Basin states, the Governors of which are members of WGA.

Western Governors’ Analysis and Recommendations

WGA has previously expressed its concerns to USACE regarding any administrative actions intended to regulate so-called “surplus waters.” On August 21, 2013, WGA issued a letter to the Honorable Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), regarding USACE’s failure to adequately engage with states in its pending rulemaking relating to surplus waters.² Similarly, on August 6, 2013, the Western States Water Council (WSWC) sent a

¹ 81 FR 91556, Dec. 16, 2016.

² Available at: <http://westgov.org/letters-testimony/342-water/503-letter-army-corps-of-engineers-surplus-water-rulemaking>.

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letter to Assistant Secretary Darcy citing shortcomings in the rulemaking process and a lack of regulatory clarity on several critical implementation issues.³ Western Governors are concerned that the procedural, legal, and technical issues cited in both letters were not addressed by USACE in advance of the development and announcement of the NPRM.

Consultation Deficiencies

Western Governors have been explicit regarding what, in their estimation, constitutes proper “consultation” between federal agencies and states. As stated in WGA Policy Resolution 2017-01, *Building a Stronger State-Federal Relationship*, federal agencies should, “have a clear and accountable process to provide each state – through its Governor as the top elected official of the state and other representatives of state and local governments as he or she may designate – with *early, meaningful, and substantive* input in the development of regulatory policies that have federalism implications.” Consistent with gubernatorial policy, Executive Order 13132, “Federalism,” requires federal agencies, including USACE, to “have an accountable process to ensure meaningful and timely input by State and local officials in the development of regulatory policies that have Federalism implications.”⁴

In the NPRM, USACE declares that it, “do[es] not believe that the proposed rule has Federalism implications.”⁵ For reasons described below, WGA disagrees with this assertion. The NPRM clearly qualifies for further review under Executive Order 13132, as its provisions would have “substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.”⁶

States’ Legal Authority Over Water Resources

Having developed over the course of decades to reflect local customs and necessities, state water laws – and the regulatory frameworks within which they operate – are significantly diverse.⁷ Federal case law and statutory authority provide a clear history of deference to state primacy in water management and allocation decisions. The U.S. Supreme Court has

³ Available at: http://www.westernstateswater.org/wp-content/uploads/2017/01/Darcy_USACE-Storage-Water-Letter_2013July.pdf

⁴ 64 FR 43255, Aug. 10, 1999.

⁵ 81 FR 91556, at 123, Dec. 16, 2016.

⁶ 64 FR 43255, Aug. 10, 1999.

⁷ *California v. United States*, 438 U.S. 645, 653 (1978).

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consistently expressed that states established their sovereign authority over water resources upon their admission to the Union under the Equal Footing Doctrine⁸ and continue to maintain such authority under their own legal structures.⁹

The Tenth Amendment of the U.S. Constitution ensures that: “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.”¹⁰ States, subsequent to their admission into the Union under equal footing, have not relinquished their sovereign powers to allocate and manage water resources. Rather, states – particularly in the western U.S. – have a rich history of comprehensive water regulation devised under their respective laws.

Unlike states’ plenary authority to regulate water and land-use generally, federal powers are limited to those which have been enumerated in the U.S. Constitution. No applicable federal laws purport to preempt, expressly or by implication, state water-management authority. Numerous federal statutes reiterate that states possess primary authority over water resources within their respective borders and that it is the intent of Congress to preserve and respect such authority.¹¹ The two federal statutes USACE intends to “clarify” through these rulemaking efforts expressly and unambiguously recognize state primacy. Section 1 of the Flood Control Act of 1944 begins with the following:

“[I]t is hereby declared to be the policy of the Congress to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control...”¹²

⁸ *Pollard v. Hagan*, 44 U.S. 212 (1845).

⁹ *Martin v. Lessee of Waddell*, 41 U.S. 367, at 410 (“[T]he people of each state became themselves sovereign; and in that character hold the absolute right to all of their navigable waters and the soils under them for their own common use, subject only to the rights since surrendered by the Constitution to the general government.”); see also, *Kansas v. Colorado*, 206 U.S. 46 (1907); *California Oregon Power v. Beaver Portland Cement Co.*, 295 U.S. 142 (1935); *PPL Montana v. Montana*, 565 U.S. 576 (2012).

¹⁰ U.S. Const. amend. X.

¹¹ See Mining Act of 1866, 43 U.S.C. § 661; Desert Land Act of 1877, 43 U.S.C. § 321; Clean Water Act, 33 U.S.C. § 1251(b); Reclamation Act of 1902, 43 U.S.C. § 383-8 (“Nothing in this Act shall be construed as affecting or intending to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder...”).

¹² 43 U.S.C. § 701-1.

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Similarly, in the Water Supply Act of 1958, Congress declared its intent, “to recognize the interests and rights of the States in determining the development of the watersheds within their borders and likewise their interests and rights in water utilization and control, as herein authorized to preserve and protect to the fullest possible extent established and potential uses, for all purposes, of the waters of the Nation’s rivers....”¹³ Although USACE cites congressional intent to justify certain provisions in the NPRM, no intent of Congress is more repeatedly and clearly expressed throughout the controlling statutes than the preservation of, and respect for, states’ authority to manage and allocate their water resources.

The NPRM pronounces that, “the Corps endeavors to operate its projects for their authorized purposes in a manner that does not interfere with the States’ abilities to allocate consumptive water rights, or with lawful uses pursuant to State, Federal, or Tribal authorities.”¹⁴ The text of the NPRM is rife with references to the importance of state authority over water resource management and USACE’s intention to respect the same.¹⁵ Western Governors, however, are concerned that certain provisions, as described within the NPRM, would substantially interfere with states’ sovereign authority to manage and allocate water resources and that the proposal exceeds USACE’s legal authority over state-managed water resources.

Definition of “Surplus Waters”

While the NPRM asks for comments on the proposed definition of “surplus waters,” Western Governors assert that there is only one legally legitimate definition: any attempt to define “surplus water” must exclude natural, historic flows from any quantification of waters subject to any USACE regulation.

For reasons stated above, states have primary authority to manage and allocate water resources within their respective borders. USACE does not claim, nor do the facts reflect, that any state has relinquished such authority under the Flood Control Act of 1944, the Water Supply Act of 1958, or any other federal statute. While USACE may have viable claims to some level of discretion over waters that are impounded in USACE reservoirs which would not have existed but for the construction of USACE projects (*i.e.*, truly “surplus waters”), Missouri River Basin states have never ceded any rights to the natural flows that existed prior to USACE projects.

¹³ 43 U.S.C. § 701-1

¹⁴ 81 FR 91556, Dec. 16, 2016.

¹⁵ See 81 FR 91556, *supra* note 1 (e.g., “The proposed rule is not intended to upset the balance between federal purposes and State prerogatives, or to assert greater federal control over water...”; “The operations of Corps projects for those purposes are not expected to interfere with the prerogatives of the States to allocate waters within their borders for consumptive use.”).

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States' rights to these natural flows, as well as access to the waters within their borders, should not be denied through any agency rule or actions. Additionally, natural flows should be exempt from any monetary charges imposed for water storage within USACE reservoirs. Such waters would exist within the streambed in the absence of USACE reservoirs and, therefore, should not be subject to federal management or the imposition of fees.

USACE concedes that some portion of waters which have been defined as "surplus" in the NPRM would, in fact, exist without USACE water storage: "The Corps also recognizes that some withdrawals that it may authorize from a Corps reservoir pursuant to Section 6 could have been made from the river in the absence of the Corps reservoir project, and in that sense may not be dependent on reservoir storage."¹⁶ It is, therefore, WGA's position that natural flows should be expressly and clearly exempted from any USACE rule which claims any degree of authority to manage and/or allocate "surplus water."

Conclusion

Western Governors have a history of responsible and comprehensive water management within their states and of working with various federal agencies in furtherance of that duty. Through this letter, the WGA expresses its concerns to USACE regarding the NPRM, in its current form, for the following reasons:

- Western Governors believe that the NPRM does, in fact, have "Federalism" implications which trigger the expanded procedural rulemaking requirements of Executive Order 13132.
- As the primary authority over water management and allocation within their borders, states must not be required to relinquish any of their rights to natural flows of rivers which have been impounded by USACE or any other federal agencies.
- Legally, USACE must define "surplus water" to expressly exclude natural flows (and any quantification of such flows) which would have occurred without the development of federal water projects. Natural flows must remain subject to states' authority to allocate water resources for beneficial uses.
- USACE should not deny access to divert and appropriate natural flows (*i.e.*, water which would have been available without the construction of USACE impoundments) in its

¹⁶ *Id.*

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reservoir projects. Similarly, USACE should not charge storage fees to appropriators where such users are making withdrawals of natural flows within USACE reservoirs.

WGA strongly urges USACE to engage in meaningful and substantive consultation with Governors before moving forward with any rulemaking as described in the NPRM.

Sincerely,



Steve Bullock
Governor of Montana
Chair, WGA



Dennis Daugaard
Governor of South Dakota
Vice Chair, WGA

