Laura Ziemer
Senior Counsel and Water Policy Advisor

Statement of Laura Ziemer, Senior Counsel and Water Policy Advisor for Trout Unlimited
Senate Committee on Energy and Natural Resources Hearing on S. 2539, S. 2560, and S. 2563, and on Western Water Supply Infrastructure and Drought Resilience.

March 22, 2018

Chairman Murkowski, Ranking Member Cantwell, and Committee members:

Thank you for the invitation to testify today on behalf of Trout Unlimited (TU) and its over 300,000 members and supporters nationwide. TU's mission is to conserve, protect and restore North America's trout and salmon fisheries and the watersheds they depend on. In pursuit of this mission TU has worked with farmers and ranchers, states and federal agencies across the West to restore streams and improve agricultural operations.

Our members and staff are passionate about trout fishing, but they are equally passionate about working with partners to make watersheds healthier. There is no better partner that TU has in the West than my colleague on the panel, Pat O'Toole, and the Family Farm Alliance.

Chairman Murkowski and Ranking Member Cantwell, we deeply appreciate the Committee's focus on finding workable solutions to our pressing western drought issues. There has never been a better time than now to develop a path forward to increase watershed resilience and community sustainability.

I have had the privilege of working for many years with TU's volunteers to restore local streams and engage young people in TU's efforts to conserve, protect and restore our Nation's watersheds. I live and work in Montana and have experienced first-hand the devastation of prolonged drought in an already-arid land. For the past twenty years in my work with TU, we have found ways to make the West's great landscapes more secure for agriculture, communities, and fish in the face of drought. The key to this difficult work is to find ways to lessen the devastation of drought across all three sectors—agriculture, communities, and river health—rather than pit one sector against the other.

The future of the West is inextricably linked to its water. The early pioneers first found a spring, stream, or dug a well, and then built their homestead—not the other way around. Although the scale is different today, water security and drought resilience are still fundamental to the West's future. The American West is one of the earth's great landscapes, with no other place quite like it. Its vast working landscapes, abundant fish and wildlife, and robust communities and metropolitan areas, have produced some of the most creative ideas, most innovative approaches, and offer some of the most inspiring views of any place on earth. The subject matter of today's hearing is fundamental to the West's water security and its future, and it is vital that we get it right. TU is honored to offer its twenty years of

experience in increasing drought resilience across the West in our testimony on the suite of bills before this Committee.

TU's experience across nine western states is that the best approaches to increasing drought resilience come from the people who live and work in that particular river basin, and whose lives are connected to the water resource. Below, I first describe the work in several river basins where this approach has worked to bring new sources of water to meet increasing water demand. Common across these place-based stories is that new water storage, standing alone, was not the answer. Rather, a whole portfolio of projects and approaches to new water supply, coupled with either new, expanded, or re-operated water storage provided a better path forward.

Second, informed by this experience, TU offers comments on the suite of western water bills under consideration by this Committee. The Water Supply Infrastructure and Drought Resilience Act of 2018, S. 2563, aims to streamline National Environmental Policy Act (NEPA) review for new water storage projects built on federal lands, through coordinating federal agency review of proposed projects, prescribing deadlines for agency action, and clarifying the lines of authority over water rights between western states and federal agencies. TU is not opposed to new storage, and TU has worked to provide clarity and innovation around western water rights. In more detail below, TU offers support for specific provisions of the bill, and suggestions for aligning the bill with models of building drought resilience that have a track record of success. Building a portfolio of projects with diverse approaches for creating sustainable water supplies has worked to address drought resiliency in even water-short, contentious basins. For these reasons, TU supports S.2539, which extends the Colorado River Basin's System Conservation Pilot Program, because it creates system reliability for Upper and Lower Basin water users while keeping Northern Rockies' ranching operations whole and improving native trout habitat at the same time.

TU's work over the past 20 years—and the focus of our comments on the legislative proposals before this Committee—is to ensure that the West's great landscapes are more secure in the face of drought for agriculture, communities, and the fish.

I. Watershed Solutions with a Portfolio of Projects and Approaches: **The Path Forward**.

The seriousness and scale of drought in the West is why I have dedicated the last twenty years of my professional life to finding collaborative solutions to water scarcity. I have pioneered collaborative approaches to creating new water supplies with Montana ranchers, created working architecture for drought response plans that operate at the basin scale, and assembled diverse coalitions of interests to come together around innovative changes to water management across multiple, large river basins. Although these approaches vary in scale and focus, the one thing they have in common is building the trust to apply creativity to difficult, long-standing problems born of too many demands and too little water in arid lands. The Trout Unlimited message is simple: on the ground throughout the West, partners are coming together to find innovative solutions with a multiplicity of approaches to develop new sources of water at a variety of scales. Here are four of their stories:

A. Yakima River, Washington.

The West is trying to advance new ways of finding more water for agriculture and people, while also meeting its other pressing need to conserve valuable and imperiled fisheries and growing recreational demand. A diverse group of stakeholders in the Yakima River basin in central Washington have found a path forward.

The Yakima Basin Integrated Plan is a balanced package of actions that will return thousands of salmon and steelhead to the basin annually, improve water quality and quantity, and support a healthy agricultural and recreation economy. The plan was agreed upon by a diverse coalition of conservation groups, irrigators, farmers, sportsmen and women, local, state, and federal governments and the Confederated Tribes and Bands of the Yakama Nation. Similarly, these partners recognize that the resources needed to cover the costs of the plan must come from a variety of sources. Significantly, the State of Washington has provided $192 million to date toward implementation and agreed to a 50% cost share with the federal government and other sources.

Some portions of the Yakima Basin Integrated Plan need new Federal authorization. Thanks to the efforts of Senators Cantwell and Murray, working in a bipartisan effort with Senator Murkowski and others, the Yakima bill passed the full Senate in 2016 as part of the broader energy bill. In the 115th Congress, the Yakima bill has been reintroduced (S.714) and has passed out of this Committee (again as part of a larger energy package) and is awaiting a Senate floor vote. The Yakima Basin Integrated Plan has had this success in large part because it is built as a mosaic of approaches to drought resilience: water infrastructure improvements, new water storage, groundwater recharge, instream flow restoration, fish passage, headwater habitat restoration and protection, and flexibility in water management across the basin, from reservoir operations to temporary water right transfers. Collaborators in the Yakima Basin Integrated Plan are achieving results for their own interests that they would not standing alone.

In the past, Reclamation has borne the cost of constructing water supply facilities in the Yakima Basin, with the Project repaying these costs back to the federal government over time. The Yakima Basin Integrated Plan includes a new financing model. Under the Yakima Basin Integrated Plan, irrigation districts are proposing to finance, build and operate one of the major water supply projects called for in the Plan, estimated to cost about $200 million. They will make this large non-federal investment to build new drought emergency water supply infrastructure as well as new water conservation improvements in coordination with Reclamation and Washington State under the Yakima Basin Integrated Plan.

The collaborative, outside-the-box thinking that formed the Yakima Basin Integrated Plan has already spurred additional creative solutions to acute challenges in the basin. For example, during the 2015 drought, partnerships built through the Yakima Basin Integrated Plan resulted in rapid action through the Kittitas Reclamation District (KRD) to provide flows in streams that would have otherwise run dry,

securing important habitat for salmon and steelhead. TU is proud to partner with KRD and a diverse group of Yakima River stakeholders to balance water user and fishery needs.

B. Yuba River, California.

The New Bullards Bar Reservoir on the North Fork of the Yuba River stores nearly a million acre-feet of water coming from the western side of the Sierra Nevada Mountains. It supplies irrigation water for rice growers and other crops, generates hydropower, and provides flood control as its releases flow downstream to the mainstem Yuba River near Marysville, California and below its confluence with the Feather River, on through the Central Valley, and ultimately to the Bay Delta. The Yuba River is one of the last Central Valley tributaries with naturally-spawning, steelhead and spring-run Chinook salmon. Despite the magnitude of water storage in the Yuba River basin, groundwater in the south Yuba basin had become severely over-drafted, and conflict over water supplies to serve agricultural and environmental needs began to boil over in 2003 when the State Water Resources Control Board issued an order conditioning the water rights of the Yuba County Water Agency (YCWA) to provide instream flows in the Yuba River. Five separate lawsuits challenged the 2003 State Water Board's order, some alleging that the instream flow requirements were excessive, and others claiming that the order failed to adequately protect the spring-run Chinook and steelhead.

TU was among the groups attempting negotiations to end the opposing lawsuits. Detailed information on the fishery needs among state and federal agencies, flow and water use data in the basin, and centralized water management by the YCWA were important elements supporting the negotiations. Reliance on this data in over three years of negotiations provided the platform for extensive drought planning in the basin, ultimately resulting in the Yuba Accord signed by 18 different parties in 2007.

The Yuba Accord supplements the significant, existing water storage in the basin with a variety of different water management strategies and the development of alternative water supplies. Groundwater recharge from Yuba River flows in wet years brought the over-drafted south Yuba basin back, and able to provide groundwater pumping at sustainable yields. A well-planned series of seven different instream flow schedules provides water management guidance from wet years to the very driest years. The Accord also relies on revenue-generating, downstream water transfers to maintain flows and off-set costs.

Significant to the success of the Yuba Accord is that no agricultural ground is fallowed to meet instream flow targets, even in drought years. The Accord provides for switching to groundwater pumping at sustainable yield rates in exchange for storage-water releases to meet the fishery flow needs.

Testimony to the thoughtful planning and development of a variety of water management tools, the Yuba Accord provided the framework for all water needs to be met in 2013, despite the 100-year drought in the basin. Water storage, standing alone, would not have provided the drought relief of the Yuba Accord. The Accord supplements water storage with data, development of alternative water

supplies, downstream water transfers, and extensive planning to manage water through drought conditions to meet both agricultural and environmental water needs.

As with any agreement, it has not been perfect. In particular, the parties have struggled to implement the Accord's adaptive management provisions. Nevertheless, it remains a worthy model. Today, TU is working with the original parties and other stakeholders to see if the Accord can be adapted in a consensus manner to meet the needs of pending proceedings for a new hydropower license and updated water quality standards.

C. Sun River, Montana.

In Montana's upper Missouri River basin on the Sun River, TU, the Fort Shaw Irrigation District, and members of the Sun River Watershed Group worked together to create multi-sector benefits. This is an example of a public-private partnership at its best. This multi-stakeholder group recognized the need to bring new sources of water into the basin to address water shortages for irrigated agriculture as well the chronically-dewatered Sun River and its wild trout fishery. The group gave careful consideration to raising Gibson Dam, a Bureau of Reclamation project on Forest Service land, and of excavating storage lost to sedimentation behind the re-regulating Pishkun Reservoir. These alternatives were far costlier than irrigation infrastructure improvements, so the group decided to address reservoir operations and water delivery improvements first.

The Bureau of Reclamation's WaterSMART program provided significant irrigation infrastructure funding in 2012 and 2013, matched by state and local dollars, contributions from the Irrigation District, and private contributions from the Coca-Cola Company. The Natural Resources Conservation Service contributed to the success of the project with new on-ranch center pivots that required less water to be delivered, to match the more efficient delivery of water through the irrigation district. The Coca-Cola Company's contributions were essential to securing the flow restoration benefits to the chronically-dewatered Sun River from the irrigation infrastructure upgrades within Fort Shaw Irrigation District. Two-thousand feet of lined canal, 2,310 feet of PVC pipe, and a new bypass canal created the opportunity to keep more water in the Sun River's wild trout fishery. The Sun River's wild trout have responded by more than doubling their population over the last three years, even in low-water years.

D. Upper Colorado River – System Conservation Pilot Program (SCPP).

Over the past twelve years in Wyoming, TU has developed partnerships with ranchers and local and state resource agencies to find ways to benefit agricultural operations and rural communities while also improving stream health. We have found that by fixing aging irrigation infrastructure and improving water delivery for agricultural operations we can also improve trout streams that flow across private ranch lands. The quiet success of trust and friendships forged through restoration partnerships is increasing Wyoming's drought resilience, one stream at a time. The investment in private ranch land habitat is vital to reconnecting fragmented migratory corridors and allowing trout to fulfill their

migratory patterns that build healthier, more resilient populations. This work is successful because it is pragmatic, voluntary, and non-regulatory. It's designed to benefit both people and fish.

In 2015, the Bureau of Reclamation and four municipal water providers in the Colorado River Basin announced the System Conservation Pilot Program (SCPP) to begin developing tools for responding to long-term drought conditions. The purposes of the SCPP for the Upper Basin included testing voluntary, demand-management measures that could ultimately be used to insulate a variety of system operations including maintaining water in Lake Powell above the minimum levels needed to ensure compliance with Colorado River compacts and to maintain hydropower generation at the reservoir. In the Upper Basin, TU has worked closely with producers, state agencies and the Upper Colorado River Commission to successfully implement the SCPP. In the first round of the program, TU's work with producers over the past dozen years put us in position to develop six applications in partnership with producers, focused on split-season leasing. All six proposals were fully funded and the total volume of water conserved was 2,008.14 acre-feet. Producers were interested in the SCPP because it allowed them to make water and production management decisions without putting their water right at risk. The SCPP transactions are temporary, compensated and voluntary.

In the second round, TU worked with Wyoming ranchers to offer more than 10,000 acre-feet of water conservation during the 2016 irrigation season, and developed additional applications in partnership with landowners in Colorado and Utah. In all, 15 SCPP applications on which TU partnered with producers were approved in round two.

In 2017, TU helped advance market participation and helped with water shepherding issues by working with private landowners to design and implement a tributary model for water conservation. This model depends on SCPP participation by every water right holder in a tributary watershed – in this case, tributaries to the Upper Green River in Wyoming. The tributary model works within the confines of existing state law which allows for the conservation and delivery of water without regulation when neighboring landowners work together. While not all Wyoming applications were funded in 2017 due to a lack of federal funding, over 20 landowners wanted to participate. Additional applications were also submitted for a bevy of water users on the Price River in Utah, including significant participation from water users in the Carbon Canal Company.

For the 2018 SCPP enrollment process, TU and our partners once again expanded market demand and enrollment. Further, the tributary model in Wyoming gained additional momentum, developing four tributary-wide agreements on four different Upper Green River sub-watersheds. These producers are big believers that demand management tools like the SCPP can work for ranching and farming in a non-regulatory and voluntary way. Consistent and multi-year participation by water right holders in the SCPP demonstrates how a long-term program could scale-up and provide significant water conservation, offset shortages, and enhance system reliability in the Colorado River while also doubling up on ranch, and farm, and fishery benefits.

Trout Unlimited supports the SCPP because it is a voluntary, market-based tool that not only addresses ongoing water shortages in the Colorado River, but also offsets economic and environmental impacts of those shortages. Water leased under this program remains tied to the land and keeps operations whole, which has great benefits for both agriculture and coldwater fisheries. With the SCPP, landowners in parts of Wyoming, Utah, and Colorado have participated in and benefitted from a program that attaches a value to the non-diversion of their water rights during low-flow conditions, improving flows in Colorado River tributaries and sending water downstream for overall system reliability. The SCPP is innovative in creating drought resilience across agricultural, municipal, and fishery interests in a chronically water-short basin.

An extension of the SCPP is now warranted, but all interested parties must begin to consider how to develop more long-term solutions for the Colorado River basin, including a multi-pronged demand management strategy. TU is looking forward to working on short-term solutions, like SCPP, as well as long-term strategies to build a resilient basin-wide approach with multi-sector benefits to sustain communities and agriculture while supporting fish and wildlife.

II. Comments on S. 2563, S. 2560 and S. 2539

It is through this lens of our deeply-held experience with watershed-scale solutions that TU offers the following comments on the suite of bills before the Committee. We look forward to engaging with the Committee as it continues its work on this important and complex topic of water scarcity in the West.

S. 2563, The Water Supply Infrastructure and Drought Resilience Act of 2018.

Below, we highlight positive elements of this bill and offer constructive suggestions to help improve some areas of concern.

A. Title I, Water Supply Permitting Coordination—Adding a Portfolio Approach.

The Water Supply Permitting Coordination subtitle seeks to get surface water storage projects underway that are being held up by United States Forest Service (USFS) or Bureau of Land Management (BLM) review of projects on their BLM or National Forest lands. It does this by designating the Bureau of Reclamation as the lead, coordinating federal agency (Section 102). Reclamation serves as the point of contact for all entities involved in the project, and is responsible for coordinating preparation of a unified environmental record (Section 103). Section 103(b)(5)(B) requires all participating federal agencies to make project approval decisions within 13 months after the Draft Environmental Impact Statement's (DEIS') close of public comment, or, if only an Environmental Assessment (EA) is required, within a year of the agency determination that no EIS is required.

TU's experience is that the best ideas come from the people who live and work in the river basin, and whose lives are connected with the water resource. To capitalize on this local knowledge and accomplish NEPA streamlining, TU proposes to front-load the streamlined NEPA review process with a

multi-stakeholder working group whose charge is to develop a portfolio of project elements, in addition to the proposed new surface water storage. This project portfolio would increase drought resiliency and water security in the target river basin for agricultural, fish & wildlife, and community needs.

The project portfolio could include, but would not be limited to: wetland restoration; floodplain restoration and reconnection; efficiencies and infrastructure upgrades in the delivery of irrigation water; groundwater recharge and groundwater storage; source switching between surface and groundwater for existing uses, either temporarily in response to drought conditions, seasonally, or permanently; water trading or water sharing agreements; and streamflow enhancement to address fish & wildlife needs and water-supply bottlenecks. This project portfolio developed by the multi-stakeholder working group would work in connection with the proposed water storage project to address un-met water needs and improve fish and wildlife habitat.

As a condition for qualifying for the streamlined NEPA review, one-half of the storage project cost would be allocated to fund the project portfolio. This means that a third of the total project (storage project and project portfolio) cost would be allocated to the project portfolio. In addition, funding for the project portfolio would be allocated proportional to the un-met water need by sector; in other words, if agricultural water supply had a 30% deficit, environmental flows had a 50% deficit, and municipal demand had a 20% deficit, half of the project portfolio's funding would be allocated to increasing instream flows, and the remainder would be roughly split (30:20) between agricultural and municipal water-security measures. Ideally, however, many of the project portfolio's elements would benefit more than one sector, such as irrigation infrastructure modernization that could benefit instream flows and fish passage, along with reliability of delivering irrigation water.

Another important piece of TU's project portfolio approach is that legislation would authorize funding for facilitation of the project portfolio development phase. This would include facilitation support for the multi-stakeholder working group, data collection and analysis, design work, and production of planning documents, as needed and determined by the multi-stakeholder working group. Funding for facilitation, data collection, and data analysis will add speed and efficiency to the progress and quality of the work product and be good investment in water security.

Front-loading the NEPA streamlining process with the addition of a diverse project portfolio also contributes to the goals of Subtitle A – Water Supply Permitting Coordination. Because the water storage project would be analyzed together with the project portfolio in at least one alternative reviewed under NEPA, this would allow the project portfolio to off-set many of the environmental impacts of the proposed water storage project, further simplifying the NEPA review process and making project review easier for state and federal agencies. In addition, the implementation of the project portfolio may also reduce the volume required for new storage by bringing in alternative sources of water, potentially reducing the storage project costs.

TU notes that an additional amendment would be required to facilitate a front-loaded project portfolio prior to NEPA review. Section 103(b)(5)(B) requires all participating federal agencies to make project

approval decisions within 13 months after the Draft Environmental Impact Statement's (DEIS') close of public comment. TU believes a designated time-frame for a final agency decision could work in this NEPA streamlining context with a project portfolio. However, the clock would need to start at a final EIS phase, rather than a draft EIS phase, so that any supplemental or revised EIS documents would be part of the agency's decision-making record.

B. Title III, Subtitle A, Water Rights Protection Act.

TU is familiar with Subtitle A of Title III, the Water Rights Protection, from its prior introduction as S. 982. In its current form, the language of this subtitle will jeopardize the ability of federal resource agencies to condition federal permits. TU believes this would be at odds with the ability of the federal agencies to successfully streamline and expedite NEPA review of new water storage proposals under the Act's Title I, because a key part of drought resiliency is protecting headwater flows on federal lands.

Also, federal authority to condition some water withdrawals from federal lands to protect trout fisheries and maintain watershed health is a key conservation tool that should not be jeopardized. However, TU looks forward to working with the Committee on the specific language of the Water Rights Protection subtitle so that it can clarify the lines of authority between western states and federal agencies regarding state-governed appropriative water rights, without undermining long-held federal agency authority to condition permits for projects on federal land.

C. Title III, Subtitle B, Section 311: No permits for water transfers.

This subtitle elevates an existing provision of the Clean Water Act from regulation to statute. This is unnecessary legislation because the regulation at issue was recently affirmed by the federal courts and is currently being implemented by the agency.

D. Title III, Subtitle C, Sections 321-322: Reauthorization of the Upper Colorado Fish Recovery Program for an additional five years.

TU supports the reauthorization of the Upper Colorado Fish Recovery Program for an additional five years. Even though there are no native trout at stake, TU recognizes the importance of working toward healthy watersheds and supporting natural riverine processes.

E. Title II, Water Management Improvement.

TU supports Title II's water management improvement subtitle A to review and adjust flood control rule curves for Reclamation and non-federal dams using better forecasting and data. TU's work over the past twenty years has been successful in creating more storage through better use of data and forecasting. Across the West, managing reservoirs based on hydrologic relationships, rather than calendar days or strict adherence to out-dated rule curves, is providing better use of existing storage projects and more management flexibility.

Similarly, TU supports the goals of Title II's aquifer recharge subtitle B. Sustainable levels of groundwater pumping are an important element of water security in the West, and TU has worked to promote sustainable practices at the state level. Equally important to long-term watershed health is to protect peak-flow events, and the language of Title II appears to recognize this important need. TU looks forward to working with the Committee to ensure that the important hydrologic work that peak-flow events perform is not impaired by adding aquifer recharge activities in a basin.

F. Title I, Subtitle B: Extending WaterSMART program to Native American Tribes.

TU recognizes WaterSMART as an important part of bringing Reclamation funding to watershed-based solutions to water scarcity, as illustrated by TU's work in the Sun River basin in Montana. Title I, Subtitle B amends a number of WaterSMART provisions to extend eligibility for WaterSMART funding opportunities to Native American Tribes. Because the WaterSMART program is already significantly over-subscribed, the funding authorization levels for WaterSMART should be similarly increased if the pool of eligible applicants is increased as proposed in Subtitle B. Likewise, in order to maximize the benefit of WaterSMART-funded projects to address both agricultural and river health concerns, non-governmental organizations with a track-record of successful, collaborative work with water users and irrigation districts should be authorized to apply directly for WaterSMART funding.

G. Title I, Subtitle C: Bureau of Reclamation Transparency.

TU supports subtitle C's asset management reports for Reclamation projects, and the inventory and reporting on major repair and rehabilitation needs.

S. 2560, Reclamation Title Transfer Act.

TU supports the approach to title transfer that S. 2560 takes, by maintaining existing environmental and operational side-boards, and limiting title transfer to projects that are not major hydro-power producers. TU looks forward to working with the Committee to clarify how a private entity acquiring title to a Reclamation project would stand in the shoes of the federal agency in terms of compliance with federal environmental laws, since federal entities often have different obligations under federal environmental laws than private entities.

S. 2539, SCPP reauthorization.

TU supports an extension of the SCPP, for all the reasons TU highlighted above. In addition to the extension of SCPP, all interested parties must begin to consider how to develop more long-term solutions for the Colorado River basin, including a multi-pronged demand management strategy. TU is looking forward to working on short-term solutions, like SCPP, as well as long-term strategies to build a resilient basin-wide approach with multi-sector benefits to sustain communities and agriculture while supporting fish and wildlife.

III. Conclusion.

TU's experience in grappling with water security in the West over the last twenty years involves key federal elements to support successful efforts: support for collaborative, watershed-scale solutions; bringing financing to these solutions based on streamlined federal funding and public-private partnerships; using and advancing the best science, technology, and tools applied to water management; and recognizing that these watershed-scale, locally-driven solutions require the development of a portfolio of projects addressing watershed and flow restoration, reliability of irrigation water supply, and security of municipal water supply. As these concepts continue to evolve and are eventually expressed through legislation, TU looks forward to supporting them with our consistent, pragmatic, and collaborative track-record. In doing so, we look forward to helping develop local and sustainable solutions and working with partners to design, fund, and implement a path forward through difficult and controversial water scarcity conflicts.

TU appreciates the attention given by this Committee to this critical topic and I thank you again for the opportunity to testify today.