Congressional Research Service
Informing the legislative debate since 1914

Drought Legislation: Comparison of Selected Provisions in H.R. 2898 and S. 1894

/name redacted/
Specialist in Natural Resources Policy

/name redacted/
Specialist in Natural Resources Policy

/name redacted/
Specialist in Natural Resources Policy

/name redacted/
Specialist in Natural Resources Policy

/name redacted/
Specialist in Resources and Environmental Policy

September 4, 2015

Congressional Research Service
7-....
www.crs.gov
R44180

CRS REPORT
Prepared for Members and
Committees of Congress

Summary

Several western states are experiencing extreme, and in some cases exceptional, drought conditions. The persistence and intensity of the current drought has received considerable attention from Congress. To date, federal legislative proposals to address drought have focused on the federal role in managing water supplies, supporting drought-related projects and programs, and conserving fish species and their habitat.

A number of bills in the 114th Congress include proposals to address drought, including S. 176, S. 1837, S. 1894, H.R. 2898, and H.R. 3045, among others. Two of these bills have received significant attention as potential legislative vehicles for drought proposals and are compared in this report: H.R. 2898 and S. 1894. H.R. 2898, the Western Water and American Food Security Act, was passed by the House on July 17, 2015. The House bill has 11 titles. S. 1894, the California Emergency Drought Relief Act of 2015, was introduced in the Senate on July 29, 2015. The Senate bill includes 4 titles. Both bills address a wide range of drought issues, including those that are specific to the state of California and those that are regional or national in scope.

This report provides a high-level comparison of S. 1894 (as introduced) and H.R. 2898 (as passed by the House). It identifies comparable issue areas addressed in both bills and discusses selected commonalities and differences between those provisions. It also summarizes selected provisions in each bill that are not addressed in the other bill.

Certain issues are addressed in both pieces of legislation. For example, both bills contain multiple sections that focus on water infrastructure and water conveyance in California. These sections include provisions that would address operations of the federal Central Valley Project (CVP) and the California State Water Project (SWP) as they relate to managing water flows and conserving endangered and threatened fish populations (i.e., the Delta smelt and certain salmon species) listed under the Endangered Species Act (ESA; 16 U.S.C. §§1531-1543). Some of these provisions would be triggered by drought conditions, whereas others would be permanent changes. Other sections address common goals throughout the West, such as the facilitation of new surface water storage projects.

Although the bills address some common issue areas and include some similar provisions, their approaches often differ in important ways. For instance, S. 1894 provides broad guidance for the Secretaries of the Interior and Commerce to maximize water deliveries in accordance with applicable laws; H.R. 2898 has a similar directive but also includes a number of specific requirements that could alter the current implementation of biological opinions (BiOps) under the ESA.

Outside of common issue areas addressed in both bills, each would also authorize a number of changes that have no obvious corollary in the other bill. For example, H.R. 2898 includes provisions that would alter implementation of the Central Valley Project Improvement Act (CVPIA; P.L. 102-575), which is not addressed in S. 1894. Similarly, S. 1894 contains new authorities related to water reuse and recycling, which are not addressed in H.R. 2898.

Key issues raised by these bills include how to address the management of federal water supply projects in times of drought and how to handle the overall increasing demands for water supplies despite scarce water resources. Congress may also consider whether federal law and its implementation adequately address the balance between competing demands (e.g., fishery conservation and agricultural use) for limited supplies and whether changes are warranted during drought and/or under other circumstances.

Contents

Figures

Contacts

Introduction

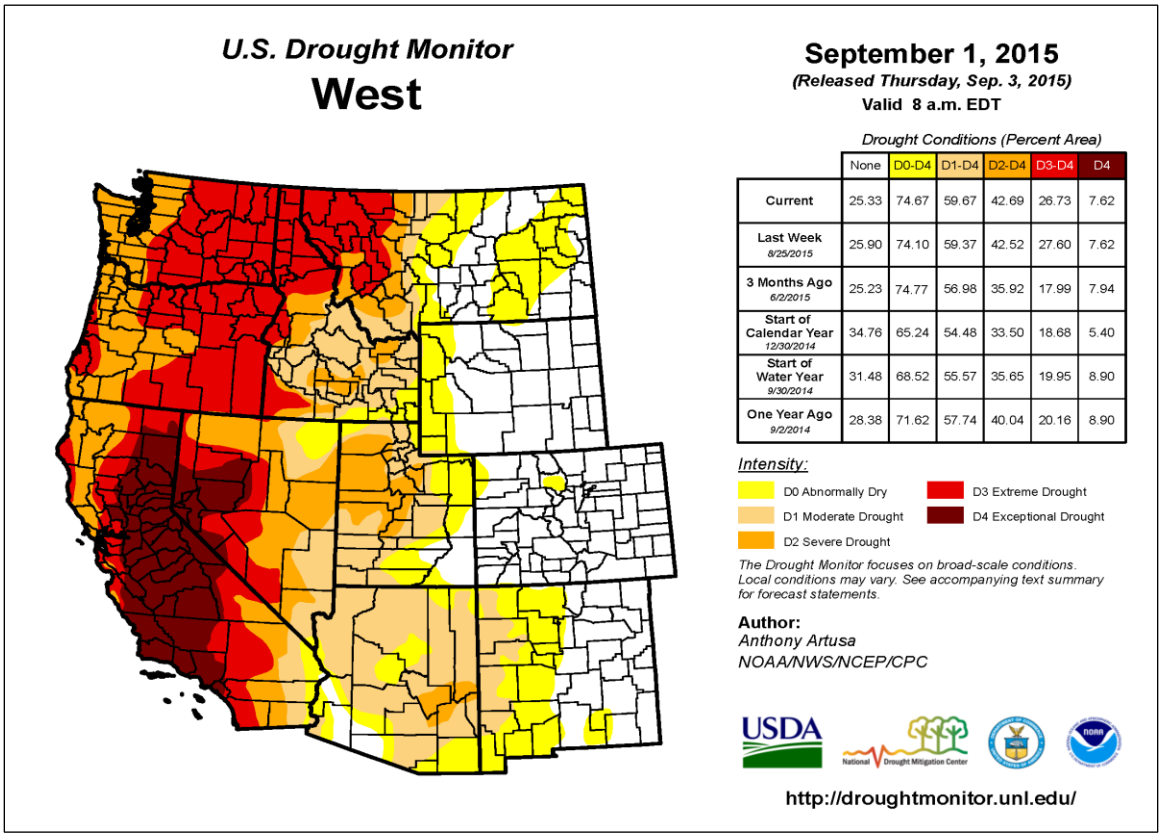
Several western states, including California, Oregon, Nevada, Washington, and portions of Montana and Idaho, are experiencing extreme—and in some cases exceptional—drought conditions. To date, federal legislative proposals to address drought have focused on the persistence and intensity of the drought in the western states and the federal role in managing water supplies, supporting drought-related projects and programs, and conserving fish species and their habitat.

A number of bills have been introduced in the 114th Congress that would address drought. These bills include S. 176, S. 1837, S. 1894, H.R. 2898, H.R. 2983, and H.R. 3045, among others.

Two of these bills in particular, H.R. 2898 and S. 1894, have received congressional and broad public attention and are the focus of this report. On July 17, 2015, H.R. 2898, the Western Water and American Food Security Act, was passed by the House. The House bill has 11 titles, which address a wide range of issues. On July 29, 2015, S. 1894, the California Emergency Drought Relief Act of 2015, was introduced in the Senate. The Senate bill includes four titles, many of which address elements that were not included in H.R. 2898.

As California experiences its fourth year of drought and the Southwest endures more than a decade of drought conditions, western water management will likely remain an issue before Congress. Elements from one or both of these bills (as well as from other bills) will likely receive continued attention from Congress.

Figure 1. U.S. Drought Monitor in Some Western States as of September 1, 2015



Source: U.S. Drought Monitor, at http://droughtmonitor.unl.edu/Home/RegionalDroughtMonitor.aspx?west.

This report summarizes the provisions of S. 1894, as introduced, and H.R. 2898, as passed by the House. It identifies comparable provisions between the two bills and discusses some of the ways in which those provisions overlap or differ.[1] It also summarizes selected other major provisions in each bill.

Overall, both bills contain provisions that focus on infrastructure and water conveyance in California. Some of these provisions would be triggered by drought conditions or declarations, and others would result in permanent changes in water management. Some provisions in the bills are associated with specified states (typically the 17 western states,[2] Hawaii, and Alaska), whereas other provisions may have national application.[3] Many provisions of H.R. 2898 have no specified authorization of appropriations; S. 1894, by contrast, contains provisions that authorize either funding subject to appropriations or mandatory funding for certain activities. Many provisions in both bills are specific to the projects and programs of the Bureau of Reclamation (Reclamation), but others are associated with other federal agencies (e.g., U.S. Army Corps of Engineers [Corps], U.S. Environmental Protection Agency [EPA]). Some provisions would amend existing programs and activities, whereas others would authorize new programs and activities.[4]

Issues Addressed in Both Bills

Several drought-related issues are addressed in both H.R. 2898 and S. 1894. For example, both bills contain multiple sections that focus on infrastructure and water conveyance in California, often specifically pertaining to management of the federal Central Valley Project (CVP). Some of the California-specific common issue areas include management of fish populations and water flows; the CALFED invasive species program; operational flexibility and drought relief; operation of the Delta Cross Channel gates; emergency environmental reviews; water transfers; water rights protections; and completion of CALFED storage studies. Other sections discuss common goals to address drought on a broader scale, the most notable of which are construction of new surface water storage projects and amendments to Bureau of Reclamation (Reclamation) authority under the SECURE Water Act (Title IV of P.L. 111-11).

Management of Fish Populations and Water Flows

Water projects and water diversions can affect fish habitat and fish populations. In California, the coordinated operations of the CVP and the State Water Project (SWP) serve millions of people and thousands of acres of farmland throughout much of the state. Both projects collect and store water in reservoirs in northern California. They also divert water from the San Joaquin and Sacramento Rivers' Delta confluence with the San Francisco Bay (Bay-Delta) and pump it south

[1] A congressional distribution memorandum providing a side-by-side comparison of legislative text in issue areas common to both bills is available from the authors upon request.

[2] These states are Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming.

[3] U.S. territories are not specifically mentioned in either bill. Evaluating the application of the bills' provisions to the U.S. territories is beyond the scope of this report.

[4] For more information on drought in general, see CRS Report R43407, *Drought in the United States: Causes and Current Understanding*, by (name redacted) and (name redacted). For background on the drought in California, see CRS Report R40979, *California Drought: Hydrological and Regulatory Water Supply Issues*, by (name redacted), (name redacted), and (name redacted)

to water users in Central and Southern California.[5] CVP and SWP pumping from the Bay-Delta has been reduced and other project operations have been altered due to drought conditions, as well as to protect threatened and endangered species and to preserve in-Delta water quality. Operational changes associated with compliance with the Endangered Species Act (ESA; 16 U.S.C. §§1531-1543) aim to protect and recover threatened and endangered species. State water quality requirements aim to stabilize salinity levels in the Bay-Delta, protect water quality for in-Delta farmers and nearby communities, and provide adequate flows for aquatic species and their habitat.

Both H.R. 2898 and S. 1894 include provisions that would address water conveyance and flows in relation to fish populations listed under ESA. Specifically, both bills would address certain operations of the CVP and SWP in relation to biological opinions (BiOps) associated with the threatened Delta smelt[6] and with threatened and endangered salmon species[7] under ESA. A BiOp is the formal response of either the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS)[8] to a federal agency stating whether or not a proposed action is likely to jeopardize the continued existence of a species listed under ESA or result in the destruction or adverse modification of the species' critical habitat. A BiOp can have an incidental take statement (an allowance of how many individuals of a listed species can be taken) and reasonable and prudent alternatives (RPAs) to proposed activities.[9]

The next few sections summarize how both bills address the management of water flows in relation to fish populations.

Definitions in H.R. 2898 and S. 1894

Both bills present a set of definitions to complement their provisions, including definitions of the salmonid BiOp and the smelt BiOp. Both bills would define the term *Salmonid Biological Opinion*[10] as the opinion issued under the federal ESA by the National Marine Fisheries Service on June 4, 2009. Both bills also would define the term *Smelt Biological Opinion*[11] as the biological opinion on the Long-Term Operational Criteria and Plan for coordination of the CVP and SWP issued by FWS on December 15, 2008. Both BiOp definitions appear to codify the specified BiOp (based on its original date) and therefore would not allow for new scientific information beyond what is directed in other provisions of the bill to be used.

In relation to identifying the condition of species, H.R. 2898 would define "negative impact on the long-term survival" as follows:

> The term "negative impact on the long-term survival" means to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

[5] Whereas the Central Valley Project (CVP) serves mostly agricultural water contractors, the State Water Project (SWP) serves largely urban or municipal and industrial contractors; however, both projects serve some contractors of both varieties.

[6] This species was listed as threatened under the Endangered Species Act (16 U.S.C. §§1531-1543) in 1993.

[7] The Salmonid Biological Opinion issued by the National Marine Fisheries Service on June 4, 2009, covers Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead.

[8] NMFS is also sometimes referred to as NOAA Fisheries.

[9] In the case of pumping in the Bay-Delta, both of these elements are important to consider.

[10] Hereinafter referred to as the salmon BiOp.

[11] Hereinafter referred to as the Delta smelt BiOp.

This phrase is used several times in H.R. 2898 in regard to how the effects to a species of a water project or water diversion would be measured. While similar terminology is not formally defined under ESA, federal regulations implementing ESA provide a definition for the phrase "jeopardize the continued existence of" that is comparable to that provided above (with a few notable differences):

> *Jeopardize the continued existence of* means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.[12]

S. 1894 does not define *jeopardy* or any other term that involves effects on species; thus, some may argue that it appears to defer to existing laws and regulations when conditioning changes to operations criteria. For example, Section 121 of S. 1894 generally would provide that nothing under S. 1894 authorizes any federal official to take an action that is likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of their habitat beyond the effects listed in the BiOps.

Delta Smelt

Both bills aim to increase water supplies for users by authorizing changes in how pumps and flow rates are managed in the Delta. H.R. 2898 calls for maximizing water supplies to users[13] but has several earlier provisions that would specify water flows and the conditions to keep these flows at certain levels. For example, H.R. 2898 would address water flow requirements for Delta smelt by setting fixed flow rates in the Old and Middle Rivers[14] unless the Secretary determines there is an imminent negative impact on the long-term survival of the Delta smelt. In contrast, S. 1894 would not set specific pumping rates in relation to Delta smelt populations. However, Section 101(a)(1) of S. 1894 would direct water managers to maximize water supplies while staying consistent with applicable laws and regulations. In relation to Delta smelt, this provision means that under S. 1894, pumping flows would be maximized while aiming to be consistent with the parameters of the Delta smelt BiOp.

Both bills call for greater data collection on the Delta smelt population through a Delta smelt distribution study. Both also would authorize greater real-time monitoring of Delta smelt to advise water conveyance management. However, the bills would take different approaches to monitoring and implementing changes to operations. Section 103(a) of H.R. 2898 is a broad provision that would require the director of FWS to use the best scientific and commercial data to evaluate, refine, or amend the RPAs[15] in the Delta smelt BiOp. It would direct the Secretary of the Interior, however, to make all "significant decisions" under the Delta smelt BiOp and document those decisions. S. 1894 does not have this broad directive to potentially change parts of the Delta smelt BiOp; however, under Section 101(a)(8), S. 1894 would direct the Secretaries of Commerce and the Interior (the Secretaries) to use all scientific tools to identify changes to the real-time

[12] 50 C.F.R. §402.02.

[13] §302(a) of H.R. 2898.

[14] The Old and Middle River flow rate is often expressed as a reverse flow rate. When pumps south of the Bay-Delta are turned on to provide water supplies to the CVP and SWP, the Old and Middle Rivers reverse their flow. The rate at which water flows through the pumps is expressed as a negative flow in cubic feet per second because of the reversal of the Old and Middle River.

[15] *Reasonable and prudent alternatives* are alternate ways of an implementing a project presented in a BiOp that, if implemented, would avoid jeopardizing a species and adversely modifying its habitat.

operations of Reclamation and of state and local water projects that could increase water supplies.[16] It also would require such actions to be consistent with applicable laws and regulations, including existing BiOps.

Section 103(b) and (c) in H.R. 2898 would direct the Secretaries to increase and review monitoring practices for Delta smelt throughout the year and under different conditions (e.g., during periods of high turbidity) to minimize salvage of Delta smelt[17] and maximize pumping rates. This approach is broader than the one prescribed under Section 203(b) of S. 1894, which would require additional monitoring of Delta smelt when sediment loads could cause increased turbidity.

Both bills address negative flows on the Old and Middle Rivers (OMR flows) as they pertain to listed species.[18] Under Section 103(e) of H.R. 2898, OMR flows would be set at -5,000 cubic feet per second unless information allows the Secretaries to conclude that a lower flow rate is justified. If a lower flow rate is implemented, H.R. 2898 has a series of conditions that would be required to be met to make the change. Some of these conditions would be centered on obtaining supporting data that justifies the lower rate. This analysis would be done for current as well as future BiOps addressing Delta smelt. In addition, under Section 103(g) of H.R. 2898, the reverse flows in the implementation of the BiOps would be calculated within 90 days of enactment and every 5 years. Section 101(c)(3)(B) of S. 1894 would also address flow rates in the Old and Middle River. It would direct the management of flows to be done within the parameters listed in the BiOp to minimize water supply reductions.

Salmon

Both bills would address salmon management in the Delta, but they would do so in different ways. H.R. 2898 contains specific directions for implementing new science and data into the management of salmon stocks, whereas S. 1894 would authorize the implementation of the National Oceanic and Atmospheric Association's Salmon Restoration Plan.[19]

Under Section 202 of H.R. 2898, the RPAs in the salmon BiOp would be adjusted to reflect new science and data in accordance with existing adaptive management provisions in the BiOp.[20] Section 202(b) outlines a process for examining new science and data on salmon and providing recommendations to alter the RPAs to reduce the water supply impacts of the salmon BiOp. The recommendations would be implemented if they would have a net effect that is similar to the operational parameters in the BiOp on the listed species.

By contrast, S. 1894 does not specifically direct that RPAs in the salmon BiOp be adjusted to reflect new information. However, S. 1894 would require that the Secretaries report any changes to the BiOp. These changes could occur from adaptive management processes that exist under the salmon BiOp.

[16] This provision directs the Secretaries of the Interior and Commerce to identify projects, not implement them.

[17] The salvage of fish is capturing fish and releasing them elsewhere.

[18] See footnote 14.

[19] See National Oceanic and Atmospheric Association, "West Coast Salmon Recovery Planning & Implementation," at http://www.westcoast.fisheries.noaa.gov/protected_species/salmon_steelhead/recovery_planning_and_implementation/.

[20] Adaptive management is the process of incorporating new scientific and programmatic information into the implementation of a project or plan to ensure that the goals of the activity are being reached efficiently. It promotes flexible decisionmaking to modify existing activities or to create new activities if new circumstances arise (e.g., new scientific information) or projects are not meeting their goals.

Section 202(d) and (e) of H.R. 2898 discuss the evaluation of activities related to factors that affect species (e.g., physical habitat improvement and predation control) to see how these activities could be used to offset the effects that operational changes to pumping rates have on species. A framework for identifying offsetting actions and estimating how each action would affect the survival of salmonid species is provided in Section 202(e) of H.R. 2898. After the framework is established, Section 202(g) provides that there would be an evaluation of alternative management measures based on the recommended actions and their potential effect on salmonid survival. Under the bill, the alternative management measures would be compared with existing restrictions on export pumping rates to see if the measures would offset the effects of increased pumping if the restrictions were eased. If the evaluation determines that an alternative measure would offset the existing effects of restricting water supplies—and that implementing the alternative measure is feasible—then the alternative measure would be implemented to increase pumping rates to the maximum extent possible while maintaining equivalent through-Delta survival rates for listed salmon species. Section 202(h) of H.R. 2898 discusses oversight responsibilities for adaptive management under the BiOp and would direct that operational criteria be developed to coordinate the management of smelt and salmon under the BiOps.

S. 1894 would not direct managers to create management regimes that offset the effects of pumping. However, Section 201 of S. 1894 would authorize several actions that aim to help threatened and endangered fish populations. These actions might resemble the potential offsetting actions listed under Section 202(g) of H.R. 2898. Examples would include implementing nonstructural barriers at Delta Cross Channel (DCC) gates (see "Operation of the Delta Cross Channel Gates," below), alternative hatchery salmon release strategies, and a trap and barge pilot project to increase fish survival in the Delta.

Invasive Species and Protection of Native Anadromous Fish

Both bills would authorize pilot projects to implement an invasive species control program authorized in the Water Supply, Reliability, and Environmental Improvement Act (P.L. 108-361). The program would seek to reduce and remove invasive species in the Delta and would sunset after seven years.

In addition, both bills would authorize programs to protect native anadromous fish[21] in the Stanislaus River. H.R. 2898 would establish a nonnative fish removal program under Section 203, whereas Section 202 of S. 1894 would establish a pilot program to remove nonnative fish that would sunset seven years after the final applicable permit was issued. Both bills would direct participating water districts to pay for 100% of the program.

Operational Flexibility and Drought Relief

Both H.R. 2898 (Section 302) and S. 1894 (Section 101) would direct the Secretaries to maximize water supplies to CVP users and SWP contractors by approving, consistent with applicable laws, projects and operations that provide additional water supplies. Both bills would provide broad authority to the Secretaries to approve any project or operational change to address emergency provisions, although both also contain limitations on this authority. Both H.R. 2898 and S. 1894 would streamline permit decisions and authorize expedited procedures to make final decisions on operations and projects that address their respective sections on maximizing water supplies. Both bills also would provide the Secretaries with new authority to approve projects that normally

[21] Anadromous fish migrate from saltwater to spawn in fresh water. Salmon are anadromous fish.

would not require congressional authorization. In addition, Section 302(f) of H.R. 2898 would require the Secretaries to develop a drought operations plan that is consistent with provisions under the bill. S. 1894 contains no comparable provision.

Operation of the Delta Cross Channel Gates

The DCC is a feature of the CVP. It is a controlled diversion channel downstream of Sacramento that diverts water from the Sacramento River into the Mokelumne River. The DCC is significant because of its role in maintaining water quality in the Delta, its effect on listed fish, and its redirection of flows to the Delta-Mendota and Contra Costa canals and their pumping facilities.

Both bills would direct the Secretaries to keep the DCC open to the maximum extent possible to maintain water flows to the pumping plants. Further, both bills would state that the opening of the gates should be consistent with operating and monitoring criteria developed by the State Water Resources Control Board and any Temporary Urgency Change order affecting the gates. Both bills also call for data to be collected on how opening the gates would affect listed species of fish (e.g., Delta smelt and salmon).

H.R. 2898 also contains unique provisions related to the DCC. Section 303 of H.R. 2898 contains a broader mandate for data collection near the DCC and would require that data on water quality, water supply, and listed species be collected. Further, H.R. 2898 would require an evaluation of salmonid survival when gates are open and a report to congressional committees on the extent to which the gates will remain open. Section 303(b) of H.R. 2898 also would direct the Secretary of the Interior to recommend revisions to the operations of the DCC so that water supplies can be maximized without causing a significant negative impact on the long-term survival of the listed species or water quality. S. 1894 does not address these specific considerations.

Emergency Environmental Reviews

Both bills would address compliance under the National Environmental Policy Act (NEPA; 42 U.S.C. §§4321 et seq.) by directing the Secretaries to consult with the Council on Environmental Quality to make alternative arrangements to comply with NEPA. Section 305 of H.R. 2898 would further state that the Secretaries may deem a project to be in compliance with all necessary environmental regulations and reviews. However, such a determination could only be made if the Secretaries determine that the immediate implementation of the project is necessary for addressing human health and safety or if there is an imminent loss of agricultural production that contributes to 25% (or greater) of an identifiable region's tax revenue.

Water Transfers

Both bills attempt to expand opportunities for water transfers in the CVP service area by expediting review of these actions. Section 101(c)(4)(a) of S. 1894 would require that any proposal to increase flows in the San Joaquin River through a voluntary sale, transfer, or exchange be evaluated by the Secretary of the Interior in a "timely manner" and consistent with "applicable law." Section 308 of H.R. 2898 would amend the Central Valley Project Improvement Act (CVPIA; P.L. 102-575) to require that the Secretary take "all necessary actions to facilitate and expedite transfers of Central Valley Project water" in accordance with (1) the bill, (2) NEPA, and (3) reclamation laws. It would require the appropriate entity (i.e., the contracting district from which the water is coming, the agency, or the Secretary) to determine if a transfer proposal is complete within 45 days. The House bill also provides that the Secretaries should "allow and

facilitate" water transfers through the two primary federal and state pumping plants from April 1 to November 30, provided transfers comply with state law.

In addition, both bills address San Joaquin River inflow-to-export ratios as they pertain to pumping. Section 101(c)(4)(b) of S. 1894 would require the adoption of a 1:1 inflow-to-export ratio on the San Joaquin River from April 1 through May 31 for increased flows resulting from voluntary water transfers, sales, and exchanges during the period that the bill is in effect (i.e., during the drought designation). Under the bill, this ratio would be allowed unless the Secretaries determine that implementing the requirement would impact species listed as threatened or endangered under ESA more than currently anticipated through the implementation of the current salmonid BiOp. Section 302(b)(3) of H.R. 2898 similarly provides that this inflow-to-export ratio would be allowed, but it would only allow for a more restrictive ratio if the Secretaries make a determination that such a ratio would be required "to avoid a significant negative impact on the long-term survival of a listed salmonid species" under ESA. Thus, while S. 1894 uses existing ESA documents as the standard for its determination, H.R. 2898 uses the "negative impact on long-term survival" standard that appears in other places throughout that bill. S. 1894 also includes other conditions for the new ratios to apply.

Water Rights Protections

Title V of H.R. 2898 and Title I of S. 1894 both outline protections of existing water rights but do so to different extents. A brief summary and high-level comparison of sections with similar provisions is provided below:

- Section 501 of H.R. 2898 and Section 111 of S. 1894 would stipulate that any changes required under the bills that reduce water supplies to the SWP and increase supplies to the CVP must be offset and that reduced water supplies must be made available to the state. However, the notification requirements in both bills related to environmental protections differ. Whereas H.R. 2898 would require the Secretary of the Interior to notify the state of California if implementation of the salmon and smelt BiOps under the act reduces environmental protections, S. 1894 would require notification of changes in implementation of the BiOps and confirmation that they are authorized under the respective documents.
- Section 502 of H.R. 2898 and Section 112 of S. 1894 include language that would aim to protect certain state water rights. However, H.R. 2898 also specifies that any actions by the Secretary of the Interior under the bill and under Section 7 of the ESA shall not alter water rights priorities under California state law. S. 1894 includes no such statement.
- Section 503 of H.R. 2898 and Section 113 of S. 1894 include language providing that "involuntary reductions" to contractor water supplies would not be allowed to result from the bill. However, while the water rights protections in the Senate bill appear to apply to all valid water rights holders and to bar the Secretaries from carrying out actions that would "directly" result in an involuntary reduction of water supply, H.R. 2898 would apply only to CVP and SWP contractors. H.R. 2898 further states that actions under the bill shall not "directly or indirectly" result in reductions or adverse impacts to water supply or fiscal impacts. Additionally, S. 1894 also includes language allowing for certain "substitute actions" under existing law that would not be subject to the requirements of the title.

- Both Section 505 of H.R. 2898 and Section 121 of S. 1894 include similar clarifying language as to the scope of the bill. Both bills note that nothing in the act modifies existing obligations to operate the CVP in conformance with state law. However, while Section 121 of S. 1894 also states that the act does not authorize adverse effects on species listed under ESA or the modification of obligations under CVPIA, H.R. 2898 includes no such language.

Completion of CALFED Water Storage Studies

Section 312 of S. 1894 and Section 401 of H.R. 2898 both would direct Reclamation to complete certain ongoing feasibility studies for new or augmented surface water storage in California that were originally authorized under P.L. 108-361.[22] Both bills would set the same deadlines for these feasibility studies to be completed. However, H.R. 2898 would impose financial penalties on Reclamation for failing to meet the deadlines. Both bills also would authorize construction of these projects pending a positive feasibility report finding, although Section 404 of H.R. 2898 only provides for such an authorization pending 100% nonfederal financing for the project.

New Water Storage Projects

Both H.R. 2898 and S. 1894 would encourage federal involvement in new water storage projects. Section 312 of S. 1894 would provide general authority for federal involvement in the construction or expansion of federal storage projects, as well as federal participation in nonfederal water storage construction, subject to certain conditions. S. 1894 would authorize $600 million in discretionary funding for new water storage projects under this section, with a maximum federal cost share of 50% for new federal projects and 25% for new nonfederal projects.[23]

Under H.R. 2898, new storage projects could potentially be authorized for construction by Congress under a new process proposed under Title VII of the bill (see below section, "H.R. 2898: Other Issues Addressed"). Both federal and nonfederal storage projects also would be authorized to receive funding from a proposed new Reclamation Surface Storage Account (authorized under Title IX); however, all funds provided through this account would have to be fully reimbursed consistent with reclamation laws. Whereas the authorization of appropriations under S. 1894 is not drawn from a specified source, the new storage account that would be established in H.R. 2898 would be funded out of the proceeds from accelerated repayment by users, of which 50% would be available for new surface water storage (see bullet below on Title IX of the House bill under "H.R. 2898: Other Issues Addressed"). The expected level of authorized funding under this title was estimated by the Congressional Budget Office at approximately $360 million over the FY2016-FY2020 period and would be available for expenditure subject to appropriations (i.e., discretionary funding).[24]

[22] These studies are commonly referred to as "CALFED studies," a reference to the authorizing legislation title.

[23] Under current reclamation laws, the construction costs of traditional storage projects are repaid by water users based on the amount of costs attributed to water supply purposes. Generally, unless users have been found to lack the ability to pay, 100% of the allocated construction costs for water supply purposes are to be repaid to the federal government and are known as reimbursable costs. Costs for flood protection and certain fish and wildlife features are typically considered non-reimbursable.

[24] Congressional Budget Office, *Estimate of* H.R. 2898, *Western Water and American Food Security Act of 2015,* July 14, 2015, at https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/costestimate/hr2898-2_0.pdf.

Both bills also include provisions that would authorize additional reservoir storage to be developed at Reclamation Safety of Dams[25] projects if this storage is paid for by local project sponsors.[26] This increased reservoir storage would be authorized under Section 314 of S. 1894 and Section 1001 of H.R. 2898.

Amendments to the SECURE Water Act

Both bills would authorize changes to the SECURE Water Act (Title IV of P.L. 111-11), one of the principal authorities for Reclamation's WaterSMART Program. Section 421 of S. 1894 would amend the SECURE Water Act by authorizing federal assistance for planning, design, and construction of a new class of nonfederal water storage and conveyance; reclamation and reuse; and other water management projects. The federal share of the projects would be limited to the lesser of 25% of total costs or $20 million (adjusted for inflation). Eligibility for this assistance is limited to the 17 western states, Alaska, and Hawaii. The bill would also authorize an additional $100 million for these and other WaterSMART activities. Section 607 of H.R. 2898 would amend a different SECURE Water Act authority, the Basin Studies Program. It would allow for the Secretary of the Interior to accept nonfederal funds and require that nonfederal funds be used to carry out the special studies.

H.R. 2898: Other Issues Addressed

H.R. 2898 includes a number of sections that are not included in S. 1894. While addressing many issues, its provisions may be grouped into two categories, those affecting California or the CVP and those addressing other Reclamation provisions and funding or financing of water projects. Each of these categories is discussed below.

California/Central Valley Project

Several sections in H.R. 2898 include provisions that focus specifically on elements of the CVP, or the related CVPIA.[27] Examples of some of these provisions are as follows:[28]

- H.R. 2898 specifies how parts of the BiOps would be implemented and in some cases would direct the agencies to implement them in a certain way that is not reflected in S. 1894. For example, Section 102 of H.R. 2898 would authorize the

[25] P.L. 95-578, (November 2, 1978), as amended by P.L. 98-404 (August 28, 1984), P.L. 106-377 (October 27, 2000), P.L. 107-117 (January 10, 2002), and P.L. 108-439 (December 3, 2004).

[26] In accordance with reclamation laws, local sponsors would not be required to contribute to the cost of those projects prior to constructing them, but some of these construction costs would be required to be paid within 50 years after the project is substantially complete.

[27] When enacted, the Central Valley Project Improvement Act (CVPIA, P.L. 102-575) made broad changes to the operations of the CVP. The act set protection, restoration, and enhancement of fish and wildlife on par with other project purposes (such as delivering water to irrigation and to municipal and industrial contractors); dedicated a certain amount of water for fish and wildlife purposes (e.g., 800,000 acre-feet of §3406(b)(2) water and certain levels for valley refuges); established fish restoration goals; and established a restoration fund (the Central Valley Project Restoration Fund) to pay for fish and wildlife restoration, enhancement, and mitigation projects and programs. It also made contracting changes and operational changes. The CVPIA was controversial when enacted and has remained so, particularly for junior water users whose water allocations were ultimately limited due to implementation of the act and other subsequent factors, such as revised BiOps protecting certain threatened and endangered species.

[28] This list of other issues addressed in H.R. 2898 is not exhaustive.

director of FWS to revise the incidental take level[29] for Delta smelt in the BiOp. It would require updated salvage information and new scientific and commercial data to be used in a new simulation model to create a modified incidental take level for Delta smelt. Further, Section 103(g) of H.R. 2898 would direct the Secretary of the Interior to revise the method to calculate the reverse flow in the Old and Middle River in the BiOps at least every five years to achieve maximum pumping levels.[30]

- H.R. 2898 would require that "alternative" measures for salmon management be determined, implemented, and monitored. This issue is not specifically addressed in S. 1894.
- Section 304 of H.R. 2898 would require Reclamation to operate facilities to achieve a 35% Delta export-to-inflow ratio (i.e., diversions for Delta exports would be limited to 35% of Delta inflow). Under the bill, these limits would be in place "in any year that the Sacramento Valley index[31] is 6.5 or lower, or at the request of the State of California and until two succeeding years following either of those events has been completed where the final Sacramento Valley Index is 7.8 or greater." Currently, these exports are limited to a maximum of 35% under most circumstances.
- Section 310 of H.R. 2898 would direct the Secretary of the Interior to determine the amount of new water storage that would be made available through the Draft Plan of Operations for New Melones Reservoir (DRPO)[32] and would direct that the plan's activities be implemented. It also would direct the commissioner of Reclamation to report to Congress on the amount of storage projected to be made available under the DRPO within 18 months of enactment.
- Section 313 would declare that the terms of the San Joaquin River Restoration Settlement Act (Title X of P.L. 111-11), enacted in 2009, and a related settlement agreement[33] would be satisfied by a "warm water fishery" at certain points below Friant Dam and upstream of Gravelly Ford. (Such a fishery is defined in the bill as being suitable for species other than salmon and trout.) It would also direct the Secretary of the Interior to "cease any action" to implement the settlement as authorized. Thus, it would effectively repeal that act.
- Section 504 of H.R. 2898 includes specific water supply allocations for Sacramento Valley contractors under certain water year types.

[29] The *incidental take level* in the BiOp is the number of individual fish likely to be taken or the extent of critical habitat likely to be adversely modified. *Take* under ESA is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." The term is used in conjunction with listed species (e.g., to take an elephant).

[30] As noted above, S. 1894 would direct that water supplies be maximized under the BiOps by approving projects and activities in a manner consistent with current laws and regulations.

[31] The Sacramento Valley Index is a calculation of current year unimpaired runoff and the previous year's index used to determine the type of water year for actions under the State Water Resources Control Board Water Rights Decision 1641. A classification of 6.5 or lower is considered a dry year, and 5.4 or lower is considered a critically dry year.

[32] The Revised Plan of Operations for New Melones Dam is an ongoing project to develop a "Flow Prescription" for fisheries in the lower Stanislaus River that reduces the dependency on New Melones Project water for water quality and fisheries objectives.

[33] *Natural Resources Defense Council, et al.* v. *Kirk Rodgers, et al.*, Eastern District of California, No. Civ. S–88–1658– LKK/GGH.

- Section 601 would expand the authorized service area of the CVP to include Kettleman City, CA. It would direct the Secretary of the Interior to enter into a long-term contract with the Kettleman City Community Services District for up to 900 acre-feet of CVP water; however, similar to other areas, actual deliveries would depend on annual allocations by Reclamation.
- Section 602 would establish an oversight board to evaluate annually the planned expenditures of the Central Valley Project Restoration Fund. The board would be composed of 11 members appointed by the Secretary of the Interior, including 4 representatives of CVP agricultural contractors, 2 CVP municipal and industrial contractors, 2 CVP power contractors, 1 representative of a federal wildlife refuge receiving CVP water, 1 expert on the economic impacts of the changes of water operations, and 1 member of a waterfowl-related "wildlife entity."
- Section 603 would alter water supply accounting under CVPIA so that any restrictions on CVP water (except for certain releases to the Trinity River) to benefit fisheries imposed since enactment of CVPIA would count toward the quantity of water that CVPIA requires the Secretary of the Interior to dedicate to environmental purposes (known as b(2) water).[34] Current law requires that only water for salmon "doubling" is counted toward these purposes.
- Section 604 would require that the Secretary of the Interior implement a "water replacement plan" that was originally required under CVPIA. It would also require a least-cost plan by the end of FY2015 to increase CVP water supplies by the amount of water dedicated and managed for fish and wildlife purposes under CVPIA, as well as to otherwise meet all purposes of the CVP, including contractual obligations.[35] If changes under the water replacement plan have not increased CVP yield by 800,000 acre-feet within five years of the bill's enactment, then in any year in which water service and repayment contractor allocations are less than 50% of the contract amount the provision of b(2) water made available for fish and wildlife purposes is to be reduced by 25%.
- Section 605 would mandate that hatchery fish be included in making determinations regarding anadromous fish in the Sacramento-San Joaquin Delta that are covered by ESA. Currently, hatchery fish are not included in population estimates of protected species, due largely to their different genetic makeup from wild fish. The inclusion of these fish could increase the population size and potentially decrease some pumping restrictions, thus allowing for increased pumping compared with current levels.
- Section 606 would direct the Secretary of the Interior to enter into negotiations for the transfer of the New Melones Unit of the CVP to water users. This provision could potentially result in the removal of the New Melones Unit from the federal CVP.
- Section 608 would limit releases from Lewiston Dam during operation of the Trinity River Division of the CVP to those amounts allowed for in a December

[34] Section 3406(b)(2) of the CVPIA directs the Secretary of the Interior to dedicate and manage annually 800,000 acre-feet of CVP water for fish and habitat restoration. This amount of water is referred to as b(2) water because of the subsection number under CVPIA.

[35] Contractual obligations are currently approximately 9.3 million acre-feet (maf). Actual deliveries ranged from 4.9 maf in 2009 (a drought year) to 6.2 maf over the last five years. They are closer to 7 maf in normal hydrologic years. Thus, a gap exists between CVP contractual obligations and average or normal deliveries.

2000 environmental impact statement for the Trinity River Restoration Program. This limit would effectively bar additional releases for Trinity River fisheries. Such additional releases have been allowed in recent years to prevent fish kills, among other things.

- Sections 609-611 would make other changes to CVPIA, including amending the act's purposes to include replacement water and expedited water transfers. Section 610 would amend the act's definition of anadromous fish to limit coverage to those found in the Sacramento and San Joaquin Rivers as of October 30, 1992.[36] This amendment would effectively change the baseline for fish protection and restoration to set restoration goals at population levels after some species were already listed as endangered. Section 611 would require an annual report on the purpose, authority, and environmental benefit of instream flow releases from the CVP and the SWP.

Financing and Reclamation-Wide Provisions

Several other titles of H.R. 2898 do not focus on the specific geographic areas of the CVP and/or California and, similar to the above sections, are not covered in S. 1894. Most of these provisions relate to Bureau of Reclamation policies and project management, including alterations to bureau and other agency processes for reporting on new projects and efforts to expedite environmental studies and recommendations to Congress. One of these provisions would direct new budget authority to surface storage projects. Some of them are similar to provisions in other proposed legislation in the 114th Congress. Examples of these titles include the following:

- Title VII, Sections 701-706, the Water Supply Permitting Coordination Act, would establish a one-stop permitting office within Reclamation for nonfederal storage projects on lands administered by the Department of the Interior and the Department of Agriculture. The bill would establish Reclamation as the lead agency for all reviews, analyses, permits, and other requirements necessary for construction. This title is similar to S. 1533 and to legislation introduced in the 113th Congress (H.R. 3980).
- Title VIII, Sections 801-806, the Bureau of Reclamation Project Streamlining Act, would set up an annual reporting process to authorize Reclamation projects (including storage, recycling, desalination, and rural water supply projects) similar to that authorized for the Corps of Engineers in the Water Resources Reform and Development Act of 2014 (P.L. 113-121). Under this process, Reclamation would report annually to Congress on requested and recommended water resource projects for potential congressional approval.[37]
- Title IX, Sections 901-902 would authorize accelerated repayment (or prepayment) by nonfederal Reclamation project users for certain project construction costs that are currently paid over 40-year or 50-year terms. It would allow for the conversion of water service contracts to repayment contracts and for subsequent accelerated repayment (in the form of a lump-sum payment or annual

[36] Some stocks were already absent or in severe decline by 1992, including winter run Chinook salmon, which were listed as endangered under ESA in 1990. Some (such as San Joaquin River salmon runs) had become extinct by the 1950s.

[37] For more information on the Army Corps of Engineers reporting system, see CRS Report R43298, *Water Resources Reform and Development Act of 2014: Comparison of Select Provisions*, by (name redacted) et al.

installments) of allocable construction costs for any repayment contract. This provision would allow contractors to forgo certain requirements (e.g., acreage and full-cost pricing limitations) under reclamation laws (including the Reclamation Reform Act of 1982, or RRA; P.L. 97-293) sooner than would otherwise be the case.[38]

S. 1894: Other Issues Addressed

S. 1894 contains several titles and individual provisions that are not in H.R. 2898. Among these are modification of and/or explicit authority for existing programs and authorities and creation of new programs that were not previously authorized. Selected examples of these changes are highlighted below.[39]

Alternative Water Supplies

Many of the provisions in S. 1894 would strengthen or add to authorities for "alternative" water supplies; that is, efforts to make available additional water supplies outside of traditional federal support for new or augmented surface water storage. Examples include the following:

- Section 301 would authorize the Secretary of the Interior to competitively award federal funds for qualifying water recycling projects (§301(b)), desalination projects (§301(c)), and innovative water supply projects (§301(d)). The innovative water supply projects would include groundwater recharge, stormwater capture, agricultural and urban water conservation and efficiency, and other projects to reduce reliance on surface and groundwater supplies. The authority appears to be limited to the 17 western states, Alaska, and Hawaii. Section 301 would authorize the Secretary of the Interior to review requests for projects that are eligible and compliant with Reclamation standards, but the section also explicitly mentions review of recycling requests by 105 specified water authorities, districts, and communities in California and review of 26 specific desalination projects in California. No specific authorization of appropriations amount or federal contribution limitation is specified in Section 301. The Section 301(b) recycling projects may be eligible for assistance under Section 431 (see bullet below under "Financing and Other Provisions") as part of the expansion of the long-standing Reclamation Title XVI recycling program and the funds provided for that program in Section 432, which would start in FY2026. The desalination projects under Section 301(c) also would be eligible for the funds made available through Title IV, at a maximum federal cost share of 25%. No per project amount is specified; establishment of an account to fund these projects and provision of funds starting in FY2026 appears in Section 442 and Section 443 of the bill, respectively. No new account would be created for recycling activities under Section 301(b). No new account and no funds would be created specifically for the innovative water supply activities in Section 301(d); some of the Section 301(d) activities may be eligible for federal assistance under

[38] Under current law, once a repayment contract is paid out, the contractor is no longer subject to the 960-acre limit or other provisions of the Reclamation Reform Act of 1982 (P.L. 97-293) (e.g., full-cost pricing for water).

[39] Similar to the above list for H.R. 2898, the list of issues addressed in S. 1894 but not in H.R. 2898 is not exhaustive.

the innovative supply and conservation technologies authority that would be provided to EPA by Section 327.

- Section 302 would create a new desalination grant program at EPA. It would support federal grants covering up to 50% of the cost of a feasibility study for a nonfederal desalination facility and 25% of the project design costs. The program would be authorized at $10 million annually through 2020. Section 302 also would amend the Water Desalination Act of 1996 (P.L. 104-298) to extend and augment the authorization of appropriations and to establish priorities for both research ($5 million annually through 2020) and demonstration activities ($3 million annually through 2020).
- Section 322 would authorize the Secretary of the Interior to enter into voluntary agreements with public water agencies that receive water from Reclamation projects to implement water conservation programs. It also would direct the portions of water conserved from these activities to individual entities (e.g., 25% to the water agency, 75% retained by the Secretary for marketing and allocation to wildlife refuges). In addition, Section 322 would give Reclamation contractors the authority to contribute funding to these efforts. If a contractor contributed more than 50% of funding, Section 322 would allow the Secretary to provide water to that contractor for groundwater recharge and conservation.
- Section 323 would establish a program within the U.S. Department of Agriculture's Rural Water and Waste Disposal Program to provide up to 100% grants for projects such as point-of-use treatment and point-of-entry systems in homes and the construction of wells or other new water-source facilities in drought-stricken communities. Eligible communities would generally be those with a population of less than 10,000 but could include larger communities in some circumstances. Section 323 would authorize $15 million for up to 15 pilot projects.
- Section 431 would amend an existing federal grant funding for water recycling and reuse projects (i.e., Reclamation's Title XVI program)[40] to authorize these projects for construction if they have a completed feasibility study and meet certain other guidelines.[41] The new "programmatic" authority would be available to projects in the western states, Alaska, and Hawaii. The bill would afford priority to projects in areas that have experienced severe, extreme, or exceptional drought within the past 10 years or have been designated as disaster areas by a state, and it would authorize $200 million in competitive grant funding for these projects through FY2020.[42] The programmatic authority for Reclamation's Title XVI program contained under this section of the bill is similar to that proposed in H.R. 2993.

Financing and Other Provisions

S. 1894 would also authorize a number of new financing provisions, as well as amendments to existing authorities in various areas and pilot programs that would attempt to address drought.

[40] 43 U.S.C. §390(h).

[41] Under current law, these projects are individually authorized.

[42] Title IV, Subtitle D of S. 1894 would also authorize $40 million per year in mandatory funding for these projects, beginning in FY2026.

Some of the new financing mechanisms could fund "alternative" water supply programs noted above, among others. Selected examples include the following:

- Section 103 would address the use of State Revolving Fund (SRF) programs that assist wastewater and drinking water infrastructure projects, pursuant to the Clean Water Act (P.L. 92-500) and the Safe Drinking Water Act (P.L. 93-523), respectively. SRF programs provide loans and other financial assistance for local water infrastructure projects. Section 103 would direct EPA, when allocating funds under these programs in a state with a declared emergency drought, to require the state to review and give priority to projects that would assist communities at risk of inadequate water supply for public health or safety or that would improve resiliency to drought.
- Section 315 would authorize the Corps to study and implement a pilot program for "forecast-based" operations to enhance water supply benefits and flood control operations. The operational changes would be based on weather and climate science, watershed data (e.g., watershed-specific runoff data), and other factors. Potential projects would be limited to states with a gubernatorial drought declaration during 2015; however, eligibility would not be limited to the western states. For qualifying states, the Corps would report on the status of water control manuals, water supply storage allocation requests, and opportunities for forecast-based operations at existing Corps reservoirs and select nonfederal reservoirs at which the Corps is responsible for flood control operations; the Corps has authority for these projects under Section 7 of the Flood Control Act of 1944. Section 315 also would authorize a pilot program for five projects to implement forecast-based revisions to water operations manuals.[43] No authorization of appropriations and no cost-sharing requirements are specified. In addition, Section 315 would require the Secretary of the Army to report to Congress within 180 days on the forecast-based reservoir operations components of modifications to all Corps reservoir operations manuals and flood control curves.
- Section 321 would authorize WaterSense, which EPA established administratively in 2006. WaterSense is a voluntary labeling and recognition program that seeks to help consumers and businesses easily identify products, homes, and buildings that are highly water efficient. Section 321 would authorize $5.0 million per year for the program through FY2019, plus additional increases in subsequent years based on inflation.
- Section 328 would explicitly authorize an existing program within the U.S. Geological Survey, the Open Water Data Initiative, to advance the availability of water data and information and to promote use of this information. It would authorize $4 million to carry out these efforts through FY2020.
- Title IV, Subtitle A (§§401-412), the Reclamation Infrastructure Finance and Innovation Act (RIFIA), would authorize a new financing mechanism for certain water supply projects. It would authorize $200 million for secured loans or loan guarantees under RIFIA for up to half of the costs of certain Reclamation projects (with a minimum cost of $20 million). Projects would be limited to the 17 western states, Alaska, Hawaii, and other states where Reclamation is authorized to provide assistance. Priority would be given to areas facing water resource

[43] According to §315 of S. 1894, a revision of a manual shall not interfere with the authorized purposes of a project.

challenges. The RIFIA provisions of S. 1894 are similar, but not identical, to the Water Infrastructure Finance and Innovation Act (WIFIA) enacted in Title V of P.L. 113-121, which created a five-year pilot program for EPA and the Corps.[44] Similar authority for Reclamation has been proposed in other legislation in the 114th Congress (e.g., S. 176, H.R. 291, S. 1837, and H.R. 2983).

- Title IV, Subtitle D (§§441-447) would create a new fund that is not subject to annual appropriations, the Federal Support for State and Local Drought Solutions Fund. The new fund would receive surplus receipts in the Reclamation Fund beginning in FY2026 and would be authorized at a level of $150 million per year for 25 years, without further appropriation (i.e., mandatory funding). It would fund authorizations under other parts of the bill, including $75 million per year for desalination projects under Section 301(c); $40 million per year for Title XVI projects (which are proposed to receive programmatic authority under Section 431); and $35 million per year for innovative finance projects under the new RIFIA authority (Title IV, subtitle A).

Issues for Congress

Among the key issues for Congress is how to address water supply shortages in general and management of federal water supply projects in particular during times of drought and increasing demand. Myriad laws, regulations, contracts, and other obligations affect federal water project management. Balancing these obligations while meeting growing demands for water for multiple purposes poses challenges for western water managers at all levels: federal, state, tribal, and local.

H.R. 2898 and S. 1894 propose to address some of these challenges by providing guidance for Reclamation's management of the CVP, which would result in changes to CVP operations under certain circumstances. Both bills call for maximizing water supplies to users, with certain limitations. H.R. 2898 also contains specific guidance on the implementation of BiOps. These conditions under both bills raise questions of how much discretion federal agencies would have in implementing the CVP's operations and how the management provisions in each bill would be implemented. Some may also question whether aspects of one or both bills contain conflicting operational directives within the bill or among other regulations. For example, how would CVP directives in either bill be implemented in relation to state water quality regulations?

Both bills call for measuring the effects of water operations on listed species under ESA. S. 1894 states that operations are to be consistent with applicable laws and regulations (including ESA); H.R. 2898 conditions several actions on the "negative effect on the long term survival of the species." Some might question if H.R. 2898 would set a new standard for measuring effects on species under ESA or if maximizing water supplies in the short term could have long-term effects on the viability of species populations.

Each bill contains certain provisions that would direct greater data collection and monitoring. H.R. 2898 includes provisions that would specify how certain aspects of the Delta smelt and salmon BiOps would be implemented. These provisions may raise questions about how better data collection and more accurate accounting of species populations could result in higher pumping rates and water exports. Further, these proposed changes might raise the question of

[44] For information on the Water Infrastructure Finance and Innovation Act, see CRS Report R43315, *Water Infrastructure Financing: The Water Infrastructure Finance and Innovation Act (WIFIA) Program*, by (name re dacted) .

whether the effects of operational changes could be better detected and acted upon in a manner that will protect the species. In a broader sense, some might also question how each bill would address ESA implementation and whether the legislation might set precedents for other BiOps addressing federal activities involving listed species.

Limited commonalities exist in other areas of the bills. Both bills would attempt to encourage new water storage in the form of expedited completion of CALFED and storage studies, as well as by facilitating the potential authorization of new or augmented surface water storage projects. Both bills would also attempt to facilitate nonfederal completion of water storage projects, to various extents. However, although H.R. 2898 would focus on streamlining or reforming current Reclamation processes to facilitate water storage activities (e.g., alterations to bureau and other agency processes for reporting on new projects, including environmental studies and recommendations to Congress), S. 1894 would expand the scope of Reclamation's authorized activities. For instance, under the Senate bill, Reclamation would gain new authorities for desalination, water reuse and recycling projects, groundwater recharge, and stormwater capture, as well as authority for a credit financing mechanism (i.e., RIFIA) that differs from traditional Reclamation project financing.

Some of the questions related to both bills may include what quantity of water supplies would be generated by new authorities and programs and at what federal and nonfederal cost. In addition, some may ask how new authorities and processes that would be established in the bills would be prioritized relative to ongoing agency activities and how (or whether) spending provisions might be offset.

Author Contact Information

(name redacted)
Specialist in Natural Resources Policy
[redacted]@crs.loc.gov, 7-....

(name redacted)
Specialist in Natural Resources Policy
[redacted]@crs.loc.gov, 7-....

(name redacted)
Specialist in Natural Resources Policy
[redacted]@crs.loc.gov, 7-....

(name redacted)
Specialist in Natural Resources Policy
[redacted]@crs.loc.gov, 7-....

(name redacted)
Specialist in Resources and Environmental Policy
[redacted]@crs.loc.gov , 7-....