

## Water News Daily

Wednesday, May 22, 2013

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## PRESS RELEASE

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## Farm bill beats back foes

David Rogers, Politico

Farm bill advocates in the Senate beat off attacks from the left and right Tuesday, challenging the level of savings from nutrition programs — chiefly food stamps for low-income Americans.

Both floor amendments came from members of the Senate Agriculture Committee itself. Among Democrats, the debate triggered what appeared to be a tense confrontation on the floor between Sen. Kirsten Gillibrand (D-N.Y.) and Chairwoman Debbie Stabenow (D-Mich.).

Gillibrand had sought to replace an estimated \$4.1 billion in food-stamp savings in the bill with equal cuts from the crop insurance program. But she failed 70-26, a lopsided defeat aggravated by the fact that she lost the votes of two senior Democratic women — Sens. Dianne Feinstein of California and Barbara Mikulski of Maryland — who chose to stand with their fellow chairwoman,

#### Stabenow.

The second amendment came from Sen. Pat Roberts (R-Kan.), who was Stabenow's fellow farm bill manager just a year ago.

Having lost his position as the ranking member on Agriculture and up for re-election next year, Roberts appears to feel the right to cause more mischief. And he pressed his case Tuesday for an additional \$31 billion in food-stamp savings — significantly more than what's been proposed by even the Republican-controlled House Agriculture Committee.

Roberts lost as well, 58-40, with three Republicans joining a solid phalanx of Democrats against him. Among those Republicans was Sen. Thad Cochran (R-Miss.), who took the ranking position from Roberts when this Congress organized in January.

## House proposes 'devastating' cuts to Interior, EPA accounts in fiscal 2014

Phil Taylor and Jason Plautz, E&E Daily

House appropriators yesterday proposed allocating \$24.3 billion to the subcommittee that funds the Interior Department, Forest Service and U.S. EPA for next fiscal year, a level that would likely require significant cuts to a host of conservation programs, clean water grants, and climate change and habitat restoration work, environmentalists warned.

The proposed top-line figure for the Interior, Environment and Related Agencies Subcommittee's annual spending bill is about 18 percent below what Congress provided the agencies in fiscal 2013 before the sequester set in.

The allocation, known as 302(b), is also about 20 percent below President Obama's budget request and about 14 percent below current sequestered funding levels, according to Alan Rowsome, director of conservation funding at the Wilderness Society.

"It's an allocation that would have devastating impacts for our lands, water and wildlife," he said. "At these funding levels, we would see massive and devastating park and wildlife refuge closures, less and less law enforcement officers protecting the public, and almost no resources to fight wildfires across the country."

The funding for Interior and EPA would come from the House's overall \$967 billion pot of discretionary appropriations for fiscal 2014, which is down significantly from the \$1.043 trillion appropriated in fiscal 2013.

In contrast, the Senate plans to distribute \$1.053 trillion among its 12 appropriations subcommittees in fiscal 2014, though it will not decide allocations for Interior-EPA until next month, a Democratic aide said.

The House's Interior-EPA allocation could change, especially if the chamber receives a new top-line funding level as a result of a budget agreement with the Senate, a House aide said. But it is unclear whether the two chambers will be able to reach such an accord.

The current allocation would put significant pressure on subcommittee Chairman Mike Simpson (R-Idaho) over how to fund programs important to constituents including conservationists, park and wildlife advocates, clean water groups, states, and Indian tribes.

The allocation would essentially force him to cut an additional \$4 billion from the \$28 billion his subcommittee appropriated the agencies in fiscal 2013.

That 2013 budget cut EPA funding 17 percent -- dropping it to spending levels last seen in 1998 -- while significantly reducing Interior wildlife, climate change and land acquisition funding..

"No pun intended, these funding levels would make the sequester seem like a walk in the park," said John Garder, a budget expert for the National Parks Conservation Association. "It's difficult to summarize or estimate how challenging, how alarming these funding levels would be for our national parks and the people who visit them."

Simpson will be hard-pressed to come close to meeting Obama's request for roughly \$650 million for the Land and Water Conservation Fund, the federal government's main vehicle for purchasing new lands and securing conservation easements on private lands. The fund is a top priority for groups ranging from the Wilderness Society to the National Rifle Association.

Also on the chopping block could be wetlands preservation, state and tribal wildlife grants or cooperative endangered species conservation, which helps states protect wildlife on nonfederal lands. Construction funding for agencies including the National Park Service, Bureau of Land Management, and Fish and Wildlife Service could also be deferred.

Simpson last month warned that if Congress continues to tackle the deficit through discretionary spending -- which accounts for about one-third of overall spending -- he may soon be forced to zero out funding to some Interior programs.

"Do we come to the point where we say there are just some things we're not going to do, and eliminate them and at least concentrate on the parts that we do well?" he asked at an April budget hearing for Interior. "That's a tough choice."

Cutting funding for Simpson's agencies is particularly difficult given the high fixed costs of programs like wildfire funding -- which consumes roughly half of the Forest Service budget -- and the Indian Health Service, according to one former House appropriations aide.

"They're going to have to figure out sizable things to just stop doing," the former aide said.

Then-Interior Secretary Ken Salazar in April told Simpson his agency was "limping along" under sequestration cuts, which have resulted in fewer park police, reduced services at parks, more than \$110 million in cuts in payments to states, reduced youth hiring and furloughs.

#### At EPA, 'death by a thousand cuts'

The allocation may also result in heavy cuts to EPA programs aimed at combating climate change and curbing emissions from sources like power plants or light-duty vehicles, areas the House has targeted in the past.

In its fiscal 2013 appropriations bill, for example, the House cut \$101 million, or nearly a third, from climate change programs. The bill -- which never took effect because Congress passed a continuing

resolution keeping funding at fiscal 2012 levels -- also included language prohibiting the agency from setting air emissions standards for several pollutants, including carbon dioxide, nitrous oxide and methane, that come from the "biological processes associated with livestock production."

The cuts, said Frank O'Donnell of Clean Air Watch, are ways for the House to scale back EPA regulations that it doesn't agree with.

"Since the anti-EPA forces in the House can't actually repeal the Clean Air Act or major rules to carry it out, they'll slash away at the budget. It's called death by a thousand cuts."

It's possible the bill could further target enforcement of emissions from power plants -- a late amendment last year blocked regulation of carbon from power plants -- and other controversial regulations.

Last year's bill also made heavy cuts to popular state water revolving funds, with the clean water fund getting \$780 million less than previously enacted levels and the drinking water fund facing \$89 million in cuts. The Obama administration's proposed fiscal 2014 budget also would cut a combined \$472 million from those grants.

It's likely that the bill could also slash elsewhere from the EPA budget: Last year's bill cut 30 percent from the office of the EPA administrator and the congressional affairs office by 50 percent.

"In effect, House Republicans are attempting to overturn environmental safeguards by starving EPA of the funds essential to develop and enforce them," said Dan Weiss, a senior fellow and director of climate strategy at the Center for American Progress.

#### Another CR?

The current Interior-EPA allocation may make it difficult for Simpson to pass his budget, given that it will be opposed by most Democrats and some fiscally conservative Republicans who argue the funding level is still too high, according to the former House appropriations aide.

Democrats have already come out strongly against the GOP allocations, urging the chamber to adopt the spending level set by the Senate.

"The insufficiency of these allocations is crystal clear," said Rep. Nita Lowey (D-N.Y.), the ranking member of the House Appropriations Committee. "Many domestic priorities would be slashed to levels far below even sequestration levels. Democrats cannot and will not support Appropriations bills that continue to gut services and investments critical to middle-class American families."

But the chances of the House and Senate resolving their respective budgets this year remain dim, which raises the prospects that appropriators will once again pass a continuing resolution.

That would extend the sequestered funding levels that have significantly strained Interior, Forest Service and EPA.

## Drop in U.S. underground water levels has accelerated: USGS

Deborah Zabarenko, Reuters

WASHINGTON (Reuters) - Water levels in U.S. aquifers, the vast underground storage areas tapped for agriculture, energy and human consumption, between 2000 and 2008 dropped at a rate that was almost three times as great as any time during the 20th century, U.S. officials said on Monday.

The accelerated decline in the subterranean reservoirs is due to a combination of factors, most of them linked to rising population in the United States, according to Leonard Konikow, a research hydrologist at the U.S. Geological Survey.

The big rise in water use started in 1950, at the time of an economic boom and the spread of U.S. suburbs. However, the steep increase in water use and the drop in groundwater levels that followed World War 2 were eclipsed by the changes during the first years of the 21st century, the study showed.

As consumers, farms and industry used more water starting in 2000, aquifers were also affected by climate changes, with less rain and snow filtering underground to replenish what was being pumped out, Konikow said in a telephone interview from Reston, Virginia.

Depletion of groundwater can cause land to subside, cut yields from existing wells, and diminish the flow of water from springs and streams.

Agricultural irrigation is the biggest user of water from aquifers in the United States, though the energy industry, including oil and coal extraction, is also a big user.

The USGS study looked at 40 different aquifers from 1900 through 2008 and found that the historical average of groundwater depletion - the amount the underground reservoirs lost each year - was 7.5 million acre-feet (9.2 cubic kilometers).

From 2000 to 2008, the average was 20.2 million acre-feet (25 cubic kilometers) a year. (An acre-foot is the volume of water needed to cover an acre to the depth of one foot.)

One of the best-known aquifers, the High Plains Aquifer, also known as the Oglala, had the highest levels of groundwater depletion starting in the 1960s. It lies beneath parts of South Dakota, Nebraska, Wyoming, Colorado, Kansas, Oklahoma, Texas and New Mexico, where water demand from agriculture is high and where recent drought has hit hard.

Because it costs more to pump water from lower levels in an aquifer, some farmers may give up, or irrigate fewer fields, Konikow said. Another problem with low water levels underground is that water quality can deteriorate, ultimately becoming too salty to use for irrigation.

"That's a real limit on water," Konikow said. "You could always say that if we have enough money, you build a desalization plant and solve the problem, but that really is expensive."

## Mountain Counties water districts explore small hydro options

Roberta Long, MCWRA writer

Until recently, small hydroelectric projects were too expensive and permits and licensing too timeconsuming for water districts to consider. Now, a number of factors are coalescing to improve the desirability of adding small hydro projects to their district operations.

On March 22, the Technical Advisory Committee of the Mountain Counties Water Resources District held a workshop to explore the benefits and impediments to construction and operation of small hydro projects. Around 50 members of the northern California water world gathered at the El Dorado Irrigation District in Placerville to consider all aspects of adding small hydro projects to existing systems.

The technology has been around since the 1890s, but significant improvements that lower construction costs continue to be made.

A major obstacle has been regulatory. Small hydro projects are usually between 10 and 30 MW capacity. Mini hydro is 100kW to 1 MW and micro is 100kW. Small hydro had the same regulatory requirements as large hydropower projects, having to meet National Environmental Protection Act (NEPA) standards and requiring a license from the Federal Energy Regulatory Commission (FERC).

Current energy policy supports small hydro as a renewable energy source with minimal environmental impacts that creates jobs, especially in the rural parts of the country. Since 2010, FERC has been simplifying its approval process. It now provides for two exemptions from licensing, subject to certain conditions. The exemptions are issued in perpetuity.

One applies to small hydro projects of 5 MW or less that will be built at an existing dam, or projects that utilize a natural water feature for head, or an existing project that has a capacity of 5 MW or less and proposes to increase capacity.

The other is a conduit exemption that would be issued for constructing a hydropower project on an existing conduit, for example, an irrigation canal. Conduit exemptions are authorized for generating capacity of 15 MW or less for non-municipal and 40 MW or less for a municipal project. The conduit cannot be primarily for power production and cannot be located on federal lands.

FERC also simplified the licensing application process. Updated permitting information is published on its website, along with templates to develop a request.

It is now possible for water districts to create new revenue to offset the costs of operation and keep water rates down.

#### Placer County Water Agency shares experience

Placer County Water Agency (PCWA) has four small hydro projects in play. Brent Smith, Deputy Director of Technical Services, described them.

1) The Lincoln Metering and Hydroelectric Station takes advantage of an existing plant that meters treated water delivered to the City of Lincoln. The plant is rated at 320 KW, with an annual generation of 1,739,265 KWH. It will operate with two Francis turbines. Average flow is determined at 2,400 gallons per minute (gpm) and peak flow at 10,000 gpm. Capital cost is set at \$1,675,000, annual revenue

at \$173,200. Simple payback will take 9.7 years. Construction is expected to start in fall, with service beginning May 2014.

2) Gold Run Pipeline and Hydroelectric Station Project. Hydro is incorporated into a major pipeline replacement project on the Boardman Canal east of Colfax that provides raw water to western Placer County. A 200-foot drop creates an average head of 195 feet. Average flow is anticipated at 13.8 cubic feet per second (cfs), with peak at 26 cfs. A Crossflow turbine will be used for the hydroelectric operation, which replaces a pressure safety valve. The plant is rated at 300 KW, annual generation at 1,062,000 KWH. Capital cost is projected at \$611,000, annual revenue at \$116,800. Simple payback is 5.6 years.

3) Secret Town Pipeline and Hydroelectric Project. This is a future project that will replace another pipeline east of Colfax and install a crossflow turbine. A drop near the inlet will provide an average head of 198 feet. Average flow is determined to be 13.6 cfs, with 26 cfs at peak. Annual generation is expected to be 1,503,210 KWG. The plant rating is 235 KW. The capital cost is estimated at \$1,671,500. With annual revenues of \$186,935, the simple payback period will be 8.9 years.

Gold Run and Secret Town are in the pre-design phase.

4) Long Ravine Pipeline and Hydroelectric Station. This project involves 4,400 feet of pipeline a few miles above Colfax. The project is over 100 years old. Just upstream of the inlet structure is a 67-foot drop, and above that is another 40 feet of drop. Average head is 210 feet. More can be obtained by capturing additional drops. Average flow is 13.6cfs with a peak of 26 cfs. Other parameters are to be determined.

The power produced at the small hydro stations will be sold under contract with Pacific Gas and Electric Company.

Environmental Specialist Heather Trejo described her experience with the FERC and CEQA processes. She reported much of the FERC application was done online. It was a "smooth process." The application was uploaded to the website.

In California, the California Environmental Quality Act (CEQA) requirements are used in place of NEPA. Under CEQA, projects under 5 MW can qualify for an exemption if they do not change the flow, temperature or dissolved oxygen of the water.

[Note: HR 267 (Cathy McMorris Rodgers, R-WA), Hydropower Regulatory Efficiency Act of 2013, and S 545 (Lisa Murkowski, (R-AK), Hydropower Improvement Act of 2013, each change the exemption from 5 MW to 10 MW.]

The exemption application for the Lincoln project was circulated on May 2012. The exemption was issued in October. Trejo said an important component of the application was stakeholder involvement. The other was perfecting the application.

As a result of their experiences, Trejo and Smith made some recommendations: Engage firms that are experienced in this specialized form of engineering. Feasibility studies should reflect actual costs. Cost estimates need to capture all costs. Specify equipment that will last. Take a long-term perspective for payback (10-20 years). Prepare to deal with private property owners.

## PRESS RELEASES

# **Bureau of Reclamation Releases Updated Climate Data for Water Managers**

WASHINGTON, DC - The Bureau of Reclamation and collaborators developed new downscaled climate projections that allow water managers to incorporate the new Coupled Model Inter-comparison Project Phase 5 data from the World Climate Research Program into their water management planning. The data, representing 234 contemporary climate projections for the contiguous United States, was downscaled to a 12 kilometer resolution in order to be more useful to water managers.

"CMIP5 projections represent a new source of information about how a changing climate may impact water supplies in the United States," Reclamation Commissioner Michael L. Connor said. "Reclamation and its partners are taking leading roles to develop an understanding on how this new information complements previous climate projections made available through CMIP3, and on how CMIP5 projections should be considered in water planning and management."

The World Climate Research Program develops global climate projections through its CMIP roughly every five to seven years. Results from CMIP3 were released in 2007 and later used in Reclamation research and assessments including the 2011 SECURE Water Act Report and WaterSMART Basin Studies completed in the Colorado, Yakima and St Mary River - Milk River Basins.

"CMIP5 includes more comprehensive global climate models, updated greenhouse gas emissions scenarios and a broader set of experiments to address a wider variety of science questions," Acting Science Adviser Levi Brekke said. "Through the West-Wide Climate Risk Assessment Implementation Team, Reclamation will consider best approaches for using CMIP5 projections in the future."

Reclamation, Lawrence Livermore National Laboratory, Santa Clara University, Climate Central, Climate Analytics Group, Scripps Institution of Oceanography, the U.S. Geological Survey and U.S. Army Corps of Engineers developed the new downscaled data collaboratively supported by funding from a WaterSMART Climate Analysis Tools Grant and Reclamation's Science and Technology Program.

## Interior Awards WaterSMART Funding in California and New Mexico to Stretch Water Supplies, Provide Flexibility to Water Managers

\$15.6 million awarded to five reclamation and reuse projects

**WASHINGTON** – Secretary of the Interior Sally Jewell and Bureau of Reclamation Commissioner Michael L. Connor today announced that Reclamation has selected five Title XVI water reuse projects in California and New Mexico to receive \$15.6 million in funding through the Department of the Interior's WaterSMART program.

"This funding can help communities in California and New Mexico stretch their water supplies using time-tested methodologies and piloting new concepts," said Secretary Jewell. "We all want to make sure that we're using water efficiently and sustainably, and the WaterSMART program establishes a cohesive framework to provide federal leadership and assistance to our local partners as we work together to tackle this challenge."

"Through this program, Reclamation is able to partner with local entities to provide needed water for municipal, industrial, agricultural, recreational and environmental needs," Commissioner Connor said. "This is necessary for a secure water supply that improves the environment, supports jobs and ensures a clean water supply."

Five congressionally authorized Title XVI Water Reclamation and Reuse projects in California and New Mexico will receive cost-shared funding for planning, design and construction of their projects. The Title XVI program focuses on identifying and investigating opportunities to reclaim and reuse wastewaters and naturally impaired ground and surface water in the 17 western states and Hawaii.

The Albuquerque Metropolitan Area Water Reclamation and Reuse Project in New Mexico will use \$1.89 million to design and construct an expanded treatment system at the Southside Water Reclamation Plant. The project expects to save 2,500 acre-feet of water annually in addition to the 3,000 acre-feet of reclaimed water produced by other components of the Albuquerque Metropolitan Area Water Reclamation and Reuse Project.

The **North Bay Water Reuse Program** in northern California will receive \$4 million to provide recycled water to agricultural, environmental, industrial and landscape uses throughout Marin, Sonoma and Napa Counties. It will include upgrades to the treatment processes and construction of storage, pipelines and pump station facilities to distribute recycled water. It will reduce the reliance on local and imported surface and groundwater supplies and reduce the amount of effluent released into San Pablo Bay and its tributaries.

Other projects receiving funding in California are Long Beach Area Water Reclamation Project (\$1.7 million), San Jose Area Water Reclamation and Reuse Program (\$4 million) and Watsonville Area Water Recycling Project (\$4 million).

Interior established WaterSMART (Sustain and Manage America's Resources for Tomorrow) in February 2010 to facilitate the work of Interior's bureaus in pursuing a sustainable water supply for the nation. Since its establishment in 2010, WaterSMART has provided more than \$139 million in competitively-awarded funding to non-federal partners, including tribes, water districts, municipalities, and universities through WaterSMART Grants and the Title XVI Program.

The proposals were ranked through a published set of criteria in which points were awarded for projects that effectively stretch water supplies and contribute to water supply sustainability, address water quality concerns or benefit endangered species; incorporate the use of renewable energy or address energy efficiency; deliver water at a reasonable cost relative to other water supply options; and that meet other program goals.

For complete descriptions on the awarded projects or to learn more about WaterSMART Title XVI funding, please visit <u>www.usbr.gov/WaterSMART/title</u>.

Reclamation is the largest wholesale water supplier in the United States, and the nation's second largest producer of hydroelectric power. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. For more, visit <u>http://www.usbr.gov</u>

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## **Title XVI Authorized Project Funding**

## California

## Long Beach Area Water Reclamation Project

## Alamitos Barrier Recycled Water Project Expansion

## Water Replenishment District of Southern California

#### Federal Funding: \$1,712,683

The Alamitos Barrier Recycled Water Project Expansion will increase the effluent treatment capacity of the Leo J. Vander Lans Water Treatment Facility located in Long Beach, California. The treatment capacity of the Facility will increase from three million gallons per day to eight million gallons per day. The treated effluent is used to maintain the Alamitos Barrier, which is an engineered fresh water pressure ridge designed to protect the Central Groundwater Basin and Coastal Plains from seawater intrusion. This project will eliminate the need for potable water to be used in the Alamitos Barrier.

#### North Bay Water Reuse Program

#### Sonoma County Water Agency Federal Funding: \$4,000,000

The North Bay Water Reuse Program will provide recycled water to agricultural, environmental, industrial, and landscape uses throughout Marin, Sonoma, and Napa counties in northern California. The program will include upgrades of treatment processes and construction of storage, pipelines and pump station facilities to distribute recycled water. It will reduce the reliance on local and imported surface and groundwater supplies and reduce the amount of effluent released to San Pablo Bay and its tributaries.

#### San Jose Area Water Reclamation and Reuse Program City of San Jose, Calif. Federal Funding: \$4,000,000

This is a joint effort of local municipalities and water districts administered by the City of San Jose to serve recycled water throughout Santa Clara County. Current infrastructure includes more than 120 miles of pipeline, four pump stations and 9.5 million gallons of storage. Recycled water is used for multiple purposes, including environmental restoration, urban agriculture, landscape and industry.

#### Watsonville Area Water Recycling Project Pajaro Valley Water Management Agency Federal Funding: \$4,000,000

The Watsonville Area Water Recycling Project is a joint effort by the City of Watsonville and the Pajaro Valley Water Management Agency, and is intended to reduce over-drafting of groundwater resources and subsequent seawater intrusion. This project provides 4,000 acre-feet of recycled water per year for irrigation by blending effluent from the City's wastewater treatment plant it with higher quality water to reduce salinity.

## **New Mexico**

#### Albuquerque Metropolitan Area Water Reclamation and Reuse Project

## Albuquerque Bernalillo County Water Utility Authority

## Federal Funding: \$1,887,317

The Albuquerque Bernalillo County Water Utility Authority will use the funds to design and construct an expanded treatment system at the Southside Water Reclamation Plant. The project is expected to save 2,500 acre-feet of water annually in addition to the 3,000 acre-feet of reclaimed water being produced by other components of the Albuquerque Metropolitan Area Water Reclamation and Reuse Project.