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News Release

Secretary Jewell Applauds Confirmation of Mike Connor as Deputy Secretary of the Department of the Interior

02/27/2014

Contact us

WASHINGTON, D.C. – Secretary of the Interior Sally Jewell today applauded the confirmation of Michael L. Connor to serve as the Deputy Secretary of the Department of the Interior. The U.S. Senate confirmed Connor's nomination, which President Obama announced on July 30, 2013, by a vote of 97 to 0.

"Mike is exactly the right person to help lead this Department – thoughtful, smart, organized and full of energy," said Jewell. "His wealth of knowledge, experience and collaborative approach to complex challenges will be of great benefit to me and to this Department. Mike is a true public servant, and this new role will tap all of his experiences for the benefit of the American people."

As Deputy Secretary, Connor is the second highest ranking official at Interior, with statutory responsibility as the Chief Operating Officer to help lead a Department of more than 70,000 employees and an annual budget of about \$18 billion. Connor replaces David J. Hayes, who concluded a four-year, successful tenure at the Department in June 2013, accepting a position as Senior Fellow at the Hewlett Foundation and professor at Stanford Law School.

Connor has served as Commissioner of the Bureau of Reclamation at Interior since 2009, a position he will leave to take on his new responsibilities. As Commissioner, he oversaw the nation's largest water wholesaler and second largest producer of hydroelectric power in the West with 476 dams, 337 reservoirs, and 58 power plants, including Hoover and Grand Coulee Dams. Connor promoted the sustainable use of water to address current and future challenges facing water users throughout the West who are coping with profound drought conditions.

He completed two major agreements with Mexico on the Colorado River, negotiated and implemented five Indian water rights settlements and led negotiations on the California Bay-Delta Conservation Plan. He also directed Reclamation's efforts to expand hydropower generation at existing facilities through efficiency gains and the installation of new units.

From 2001 until 2009, Connor served as Counsel to the U.S. Senate Energy and Natural Resources Committee and senior advisor to Chairman Bingaman, where he worked on issues related to energy development, land and water management and tribal nations. Connor managed legislation for the Bureau of Reclamation and the U.S. Geological Survey for the Committee. He also handled Native American issues within the Committee's jurisdiction, helping to resolve a number of key Indian land and water rights settlements.

Prior to the Senate, Connor also served at Interior from 1993 to 2001, first in the Solicitor's Office, and then as Director of the Secretary's Indian Water Rights Office. He received his J.D. from the University of Colorado Law School and Bachelor of Science degree in Chemical Engineering from New Mexico State University. A New Mexican, Connor currently lives in Maryland with his wife, Shari, and their two children.

Lowell Pimley, Deputy Commissioner of Operations for the Bureau of Reclamation, will serve as the Acting Commissioner until a replacement has been nominated by the President and confirmed by the U.S. Senate.

Pimley, a civil engineer who joined Reclamation in 1980, was most recently the Director of the Technical Service Center and has spent his career conducting and coordinating planning studies, design and construction support on a variety of water resources and related projects.

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<< Previous

Secretary Jewell Discusses
Administration's Work to
Strengthen Insular Areas'
Economies and Communities at
Annual Interagency Group Meeting

Next >>

Secretary Jewell, NPS Director
Release New Report Showing
National Parks Remain Strong
Economic Engines, Support
243,000 Jobs Nationwide



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News Release

Secretary Jewell Lauds President's Intent to Nominate Estevan López to Serve as Commissioner of Bureau of Reclamation

03/06/2014

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WASHINGTON, D.C. – Secretary of the Interior Sally Jewell today praised President Obama's intent to nominate Estevan López, a professional engineer with over two decades of experience in water resource management, to serve as Commissioner of the Bureau of Reclamation – the largest wholesale water supplier and second largest producer of hydroelectric power in the United States. The U.S. Senate confirmed former Bureau of Reclamation Commissioner Michael Connor to serve as the Deputy Secretary of the Interior on February 27, 2014.

“Reclamation provides critically important water and power resources to the West, helping local economies and preserving natural resources and ecosystems that face complex challenges, from the impacts of drought and climate change to the preservation of wildlife,” Secretary Jewell said. “With decades of dedicated public service to the people of New Mexico and five years in private industry, Estevan’s professional expertise, water management experience and collaborative approach will be valuable assets as we work to manage, develop and protect water resources for the American people.”

If confirmed by the U. S. Senate, López would lead an agency with a \$1 billion annual budget and more than 5,000 employees in 17 Western States. The bureau maintains 476 dams and 337 reservoirs that provide 10 trillion gallons of water for 31 million people. Reclamation also maintains 53 hydropower plants that generate 40 billion kilowatt hours – about 15 percent of nation’s hydropower. Reclamation’s 289 recreation areas received 90 million visits last year.

Estevan R. López is currently the Director of the New Mexico Interstate Stream Commission, a position he has held since 2003. From 2001 to 2003, Mr. López served as County Manager of Santa Fe County. Prior to that, he served as the Land Use and Utilities Department Director of Santa Fe County from 2000 to 2001. Mr. López also served as the Utilities Department Director of Santa Fe County from 1998 to 2000 and as Utilities Division Deputy Director of Santa Fe County from 1997 to 1998. From 1990 to 1997, he was a Public Utility Engineer at the New Mexico Public Utility Commission. Previously, Mr. López worked at Arco Alaska, Inc. as an Operations Engineer and then a Well Work Supervisor. He received a B.S. from the New Mexico Institute of Mining and Technology.

Lowell Pimley is serving as the Acting Commissioner until the U.S. Senate has confirmed a replacement. Pimley, a civil engineer who joined Reclamation in 1980, was the Deputy Commissioner of Operations for the Bureau of Reclamation before being asked to serve as Acting Commissioner and was previously the Director of the Technical Service Center and has spent his career conducting and coordinating planning studies, design and construction support on a variety of water resources and related projects.

<< Previous

Historic Agreement Reached on
Upper Klamath Basin Water

Next >>

Secretary Jewell, Mayor Garcetti
Announce Urban Wildlife Refuge
Partnership to Connect LA Youth
to Great Outdoors



www.doi.gov

News Release

Department of the Interior and Salton Sea Authority Sign Joint Memorandum of Understanding

MOU Improves Collaboration to Address Salton Sea Resources

03/04/2014

[Contact Us](#)

WASHINGTON – Department of the Interior Assistant Secretary for Water and Science Anne Castle has signed a Memorandum of Understanding with Salton Sea Authority to improve collaboration between federal, tribal and local entities on natural resource issues involving the Salton Sea. The MOU is a key step in cementing each party's commitment to find collaborative solutions to resource challenges, to share available technical and scientific information and expertise, and to prioritize partnerships to improve resource conditions in and around the Sea.

"We support the push for practical and implementable projects to protect the resources of the Salton Sea and surrounding communities," said Castle. "The Department has a key role to play – ensuring that these efforts are prioritized and based on the best available technical and scientific information."

Joining Assistant Secretary Castle in Washington, D.C., for the signing were Salton Sea Authority President James Hanks and officials from the Imperial Irrigation District, Imperial County, and the California Natural Resources Agency.

"The decline of the Salton Sea's size, water quality and habitat will reach a tipping point after 2017, when mitigation flows to the Salton Sea cease and the local impacts of the largest agriculture-to-urban water conservation and transfer program rapidly materialize," Hanks said. "It's important that we do all we can now. By helping the sea, we protect the Imperial Valley and the region."

The Salton Sea Authority is a joint powers agency created under California law in 1993 for the purpose of ensuring the beneficial uses of the Salton Sea. The Authority is comprised of the following cooperating agencies: Coachella Valley Water District, Imperial Irrigation District, Imperial and Riverside counties, and the Torres Martinez Desert Cahuilla Indians.

The Department of the Interior has diverse interests and roles at the Salton Sea involving many agencies within the Department including the Bureau of Reclamation, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, the Bureau of Land Management and the U.S. Geological Survey. Ongoing pilot projects administered by the U.S. Fish and Wildlife Service's Red Hill Bay project are the type of projects that can protect the environmental resources of the Sea as well as improve conditions for local communities.

The Salton Sea is located in Southern California in Imperial and Riverside counties. With an average area of approximately 375 square miles, it is the largest lake in California. The Salton Sea is a terminal body of water affected by a number of natural and anthropogenic processes, such as increasing salinity concentration. Rainfall in the region averages less than three inches per year and inflow is comprised primarily of agricultural runoff with smaller contributions from the New, Alamo, and Whitewater rivers. The Salton Sea provides critical habitat and is a key stopover point for migratory birds along the Pacific Flyway.

Release New Report Showing
National Parks Remain Strong
Economic Engines, Support
243,000 Jobs Nationwide

FY2015 Budget for Interior

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Released On: March 05, 2014

Lowell Pimley Named Acting Bureau of Reclamation Commissioner

WASHINGTON – Newly confirmed Deputy Secretary Michael L. Connor has praised Secretary of the Interior Sally Jewell's decision to appoint Lowell Pimley to serve as acting Commissioner of the Bureau of Reclamation until a new Commissioner is selected by President Obama and confirmed by the Senate.

"Lowell has the depth of knowledge and breadth of experience to manage through the complex issues facing Reclamation," said Connor. "The collaborative relationships he has built during his tenure as Deputy Commissioner have prepared him to step into the responsibilities of this position."

Pimley has served as Deputy Commissioner for Operations since January 2013 with oversight of Reclamation's five regions, the Native American and International Affairs Office, and Technical Resources, which includes the Technical Service Center, Research and Development Office, Power Liaison and Dam Safety Officer/Design, Estimating, Construction.

"It is a great honor to take on this responsibility during the transition to a new Commissioner," Pimley said. "I look forward to leading Reclamation through what will be a very interesting and challenging time for water managers in the West. Mike Connor has left some big shoes to fill but I will do my best to step into them."

Prior to being named Deputy Commissioner, Pimley was the Director of the Technical Service Center in Denver, conducting and coordinating planning studies, design and construction support on a variety of water resource and related projects.

He joined Reclamation in 1980 as a civil engineer where he developed and directed designs on varied project features ranging from tunnels to bridges to large pipeline systems. Over the years Pimley's responsibilities expanded to include project reviews for domestic and international civil works projects as well as policy development for Reclamation's planning, design, cost estimating and construction programs.



Pimley has bachelor's and master's degrees in Civil Engineering from Montana State University. He has been a Registered Professional Engineer in Colorado since 1985.

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Reclamation is the largest wholesale water supplier and the second largest producer of hydroelectric power in the United States, with operations and facilities in the 17 Western States. Its facilities also provide substantial flood control, recreation, and fish and wildlife benefits. Visit our website at www.usbr.gov.

Relevant Links:

[Lowell Pimley Biography](#)



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News Release

Secretary Jewell Underscores Administration Support for California During Historic Drought

Tours Operational Facilities with Federal and State Officials

03/11/2014

[Contact us](#)

SACRAMENTO, CA – During a visit to California this week, Secretary of the Interior Sally Jewell examined the on-the-ground conditions of the historic drought and related water issues and reiterated the full support of the Obama Administration to provide relief and support in partnership with California.

The visit comes on the heels of President Obama's proposed budget for fiscal year 2015, which includes \$1 billion government-wide for a Climate Resilience Fund to invest in developing more resilient communities, and finding solutions to climate challenges through technology development and applied research. It also proposes \$1 billion for the Bureau of Reclamation, including \$118.6 million to fund operations, management and improvements within the Central Valley Project in California.

"The Administration remains committed to an 'all in' approach to the federal response to drought conditions in the West," said Secretary Jewell. "I commend Governor Brown and state officials for their response thus far, and I will continue to work closely with the state to ensure a balanced and coordinated approach to providing for the water needs of people, agriculture, businesses, power, and the environment."

"California is working closely with its federal partners to deal with the drought and prepare our state for other extreme weather events," said California Governor Edmund G. Brown Jr. "This current drought is just a portent of things to come and it underscores the importance of swift action on the Bay Delta Conservation Plan."

Secretary Jewell and California Secretary for Natural Resources John Laird today toured water storage and conveyance facilities in Central California and met with agricultural water users who rely on water exported from the Sacramento-San Joaquin Delta. Jewell applauded the ongoing collaborative federal-state response efforts.

"The Administration is committed to long-term water supply improvements and environmental restoration in California," said Jewell. "We are working closely with the state to complete the Bay Delta Conservation Plan and take other important actions that will achieve the dual goals of a reliable water supply for California and a healthy Bay Delta ecosystem that supports the state's economy."

President Obama's FY2015 budget includes \$66.5 million for WaterSMART programs, nearly a 17 percent increase from 2014, to assist communities in stretching water supplies and improving water management. This funding supports the Department's goal to increase by 840,000 acre-feet the available water supply for agricultural, municipal, industrial, and environmental uses in the Western United States through water-conservation programs by the end of 2015. To date, WaterSMART projects have successfully produced 730,000 acre-feet toward that goal.

As called for in the President's Climate Action Plan, the National Drought Resilience Partnership is coordinating federal preparedness for drought and is working closely with the state of California, local government, agriculture, and other partners to improve community preparedness and resilience to drought. The partnership includes the Departments of the Interior, Agriculture, Energy, and Commerce (NOAA), U.S. Army

Corps of Engineers, Federal Emergency Management Agency and Environmental Protection Agency.

Following Governor Brown's declaration of a Drought State of Emergency on January 17, the Departments of the Interior, Agriculture and Commerce began working with the state of California to provide operational flexibility to store and convey water, expedite environmental review and compliance actions, and pursue new or fast-track existing projects that might help stretch California's water supplies.

"I want to commend the state and federal teams on their response to the dry conditions through changes in water operations, promoting water conservation, water recycling and seeking every opportunity to provide the water needed for beneficial uses," said Bureau of Reclamation Acting Commissioner Lowell Pimley. "I also want to thank the water users of California, from the largest water contractors to individual businesses to each and every household for their efforts to reduce consumption. With the ongoing drought and long-term water resource challenges associated with a changing climate, increasing population and diminishing supply – protection and conservation of precious water resources is critical."

Reclamation operates the Central Valley Project to provide water for more than 3 million acres of land in the top agricultural producing counties in the nation's leading farm state. The California Department of Food and Agriculture reported in its 2012 California Agricultural Highlights publication that farm production in the state totaled more than \$43 billion. About a third of that production, or about \$12 billion, came from the Central Valley. The Central Valley Project also delivers water supplies for municipalities, industrial uses, and fish, wildlife and environmental purposes.

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<< Previous

Secretary Jewell, Mayor Garcetti
Announce Urban Wildlife Refuge
Partnership to Connect LA Youth
to Great Outdoors

Next >>

Secretary Jewell Joins Point
Arena Community to Celebrate
Monument Designation



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES



Weekly Drought Brief Monday March 10, 2014

CURRENT CONDITIONS

Recent Precipitation: Varied amounts of rain and snow fell over the past week across much of the state. Precipitation totals (in inches) from Monday, March 3 through Sunday, March 9:

- **Folsom: 0.75"** in the last week. 11.77" since July 1, 69% of normal by this date.
- **Fresno: 0.00"** in the last week. 3.40" since July 1, 40% of normal by this date.
- **Hetch Hetchy: 1.50"** in the last week. 14.44" since July 1, 53% of normal by this date.
- **Los Angeles: 0.00"** in the last week. 5.47" since July 1, 46% of normal by this date.
- **Modesto: .31"** in the last week. 4.92" since July 1, 49% of normal by this date.
- **Oroville: 2.72"** in the last week. 15.04" since July 1, 60% of normal this date.
- **Pollock Pines: 2.08"** in the last week. 18.92" since July 1, 47% of normal by this date.
- **Redding: 3.48"** in the last week. 16.64" since July 1, 63% of normal by this date.
- **Sacramento: 0.45"** in the last week. 6.98" since July 1, 42% of normal by this date.
- **Shasta: 5.12"** in the last week. 25.52" since July 1, 52% of normal by this date.
- **Willits: 4.48"** in the last week. 24.12" since July 1, 60% of normal by this date.

Near-term Outlook for Precipitation: After scattered showers end on Monday, the rest of the week will likely be dry across California, as a strong high pressure area develops over the West Coast.

Despite above average rain and snow in February, much of California has received only about 50% of normal precipitation for this rainy season. Heavy rain and snow would have to fall throughout California very frequently from now until May to reach average annual rain and snowfall levels. Even with such precipitation, California would remain in drought conditions, due to low water supplies in reservoirs from the two previous dry years.

Snow survey: The most recent [snowpack survey](#), conducted on February 27, recorded California snowpack at 24% of normal. A more [recent update](#) using automated devices shows snowpack at 31% of normal as of March 9.

Reservoir Levels (% capacity): [Reservoir Levels](#) as of March 1 are very low, including: Don Pedro 53%; Exchequer 22%; Folsom Lake 38%; Lake Oroville 44%; Millerton Lake 32%; New Melones 44%; Pine Flat 20%; San Luis 36%; Shasta 43%; and Trinity Lake 50%. An update of water levels at [other smaller reservoirs](#) is also available.

Vulnerable Water Systems: The California Department of Public Health is providing technical and funding assistance to help several communities facing near-term drinking water shortages and is monitoring water systems across the state to determine where else it can provide support. Updated information can be found at the [CDPH Drinking Water Program](#) website.

Fire Danger: 665 fires have been reported across the state since January 1, burning 1,388 acres. CALFIRE reports that this current fire activity is well above the year-to-date average of 223 fires, burning 773 acres. 22 new fires were reported over the past week.

KEY ACTION ITEMS FROM LAST WEEK

Federal Government

- **President signs the Drought Information Act:** Congress passed and the President signed last week a federal bill to reauthorize the [National Integrated Drought Information System Reauthorization Act](#) (NIDIS). This act enables a federal early warning system for droughts by providing information, forecasts and assessments to vulnerable states. NIDIS was championed by the Western Governors Association, based on the drought vulnerability of western states.

State Government

- **Real-time water management leads to post-storm water supply:** State and federal water management agencies working together late last week allowed exports of additional water from the Delta based on the recent storm. This recent precipitation provided a small window of opportunity to capture additional water for storage both north and south of the Delta, so state and federal water projects have [increased pumping](#) for a limited time to capture as much water as possible under current regulatory standards. This action is being closely coordinated with state and federal fishery agencies and the State Water Board, which is exercising flexibility allowed under law. This real-time water management will continue to adjust operations to maximize water for beneficial uses.
- **Local Drought Clearinghouse:** The Governor's Office of Planning and Research has organized an information clearinghouse to help local governments and water agencies with drought related questions or requests. Debbie Davis, Local Drought Liaison, is leading this effort (drought.clearinghouse@opr.ca.gov, 1-916-327-0068). The Clearinghouse plans to publish a drought toolkit for local governments later this week.
- **Outreach to home improvement stores:** The California Department of General Services is contacting home improvement companies to request that they promote water conservation products at their stores and amplify the state's water conservation message in the coming months.
- **Government Facilities Training Workshop:** The Department of General Services is also holding a water conservation training workshop for managers of government facilities on Wednesday (March 12th), which will help facility managers take short and longer term actions to conserve water in government facilities across the state.
- **State Funding:** The Department of Finance is helping several state agencies and departments expedite preparation of emergency drought funding, so that support will be available to impacted individuals and communities in the coming weeks and months.
- **Food assistance system being developed:** The California Department of Social Services and the Office of Emergency Services are establishing a drought related food assistance system to ensure that needy communities can access emergency food as the drought intensifies and agricultural related unemployment grows.
- **Cost Data:** Cal OES continues to gather drought-related costs from state agencies and local governments, which is reported weekly to the Drought Taskforce.
- **Governor's Drought Task Force:** The Taskforce continues to meet daily to take actions that conserve water and coordinate state response to the drought.

Local Government

- **Local Emergency Proclamations:** A total of 29 local Emergency Proclamations have been received to date from city, county, and tribal governments, as well as special districts:
 - **Counties:** Glenn, Inyo, Kern, Kings, Lake, Madera, Mendocino, Merced, Modoc, Santa Barbara, San Joaquin, Sonoma, Sutter, Tulare, Tuolumne, Yuba
 - **Cities:** Brookside Township-Mendocino County, City of Willits-Mendocino County, City of St. Helena-Napa County, City of Calistoga-Napa County, City of American Canyon-Napa County
 - **Tribes:** Hoopa Valley Tribe in Humboldt County, Yurok Tribe in Del Norte County, Tule River Indian Tribe in Tulare County, Karuk Tribe in Siskiyou/Humboldt Counties
 - **Special Districts:** Lake Don Pedro Community Services District, Placer County Water Agency (PCWA), Twain Harte Community Services District, Carpinteria Valley Water District
- **Water Agency Conservation Efforts:** The Association of California Water Agencies [has identified](#) over 100 local water agencies that have implemented water conservation actions. These water agencies [are responding to the drought](#) by implementing conservation programs, which include voluntary calls for reduced water usage and mandatory restrictions where water shortages are worst.
- **County Drought Taskforces:** A total of 24 counties have established drought task forces to coordinate local drought response. These counties include: Amador, Butte, Fresno, Madera, Mendocino, Merced, Modoc, Monterey, Nevada, Placer, Plumas, Sacramento, San Joaquin, San Luis Obispo, San Mateo, Santa Barbara, Santa Clara, Siskiyou, Solano, Stanislaus, Sutter, Tehama, Tulare, and Tuolumne.

DROUGHT RELATED WEBSITES FOR MORE INFORMATION

Governor's [Proclamation of Drought Emergency](#)
State's Water Conservation Campaign, [Save our Water](#)
California Department of Food and Agriculture, [Drought information](#)
California Department of Water Resources [Current Water Conditions](#)
California Data Exchange Center, [Snow Pack/Water Levels](#)
California State Water Resources Control Board, Water Rights, [Drought Info and Actions](#)
California Natural Resources Agency, [Drought Info and Actions](#)
California Department of Public Health, Drinking Water [CDPH Drinking Water Program](#)
California State Water Project, [Information](#)
USDA Drought Designations by County [CA County Designations](#)
USDA Disaster and Drought Assistance Information [USDA Programs](#)
Small Business Administration Disaster Support: www.sba.gov/disaster.



CALIFORNIA DEPARTMENT OF WATER RESOURCES

NEWS FOR IMMEDIATE RELEASE

NEWS FOR IMMEDIATE RELEASE

March 10, 2014

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Severity of Past Droughts Quantified by New Streamflow Reconstructions

SACRAMENTO – As part of ongoing work to improve California’s drought preparedness and better adapt to climate change, the Department of Water Resources (DWR) today released a report examining tree-ring data to help better understand historic periods of drought. The report helps develop long-term reconstructions of streamflow or precipitation for the Klamath, Sacramento, and San Joaquin river basins. The report, prepared for DWR by researchers at the University of Arizona, is available [here](#). Funding for part of the Klamath Basin work was provided by the U.S. Bureau of Reclamation under its WaterSMART program.

Initial work on the reconstruction project began in 2010, at a time when California was just emerging from the 2007-09 drought. Completion of the final report coincides with a new three-year drought and a Water Year 2014 that so far is one of the driest years in the historical record.

California’s roughly one hundred years of observed data are, however, only a small subset of the hydrologic record that can be reconstructed by measuring tree rings and calibrating them to observed data. The tree-ring measurements made for this project allowed development of reconstructions that begin in the year 900 for the Sacramento River and San Joaquin River systems, and in the 1500s for various sites in the Klamath Basin.

“Streamflow reconstruction from tree rings takes advantage of the great longevity and climate sensitivity of several tree species in California and Oregon,” said lead author David Meko, a University of Arizona research professor of dendrochronology. “The tree-ring patterns record unusual climate events and modes of variability that occurred before the short period of gaged streamflow.”

Drought is a recurring part of California's climate. The report's reconstructions show numerous periods of four or more years when streamflows were below median conditions.

In addition, the report reveals that all three river basins share common major periods of extreme low flow conditions, although the degree of severity varies from river to river. The most severe shared periods were the 1100s (20 – 50 year sustained dry periods), 1570 to early 1580s (up to decades-long periods), and 1920s -1930s (up to 20-year periods). The Sacramento and San Joaquin basins shared 1580 as the single driest year of record. The driest single year for Klamath River streamflow was 1655 (1580 was 17th driest). The graphic below illustrates notable low-flow periods in the river basins. A tabulation listing all dry periods of four or more years is attached.

Paleoclimate information such as these reconstructed streamflows captures a broader range of hydrologic variability than provided in the historical record, thereby putting our short period of observed droughts in perspective.

A repeat of the "Dustbowl Drought" of the 1920s and 1930s (our most severe historical event in terms of duration) with today's urban and agricultural development would sorely challenge California's infrastructure and institutional framework for water management. That challenge would pale in comparison to the time of the Medieval Climate Anomaly, when sustained severe drought gripped much of the western United States.

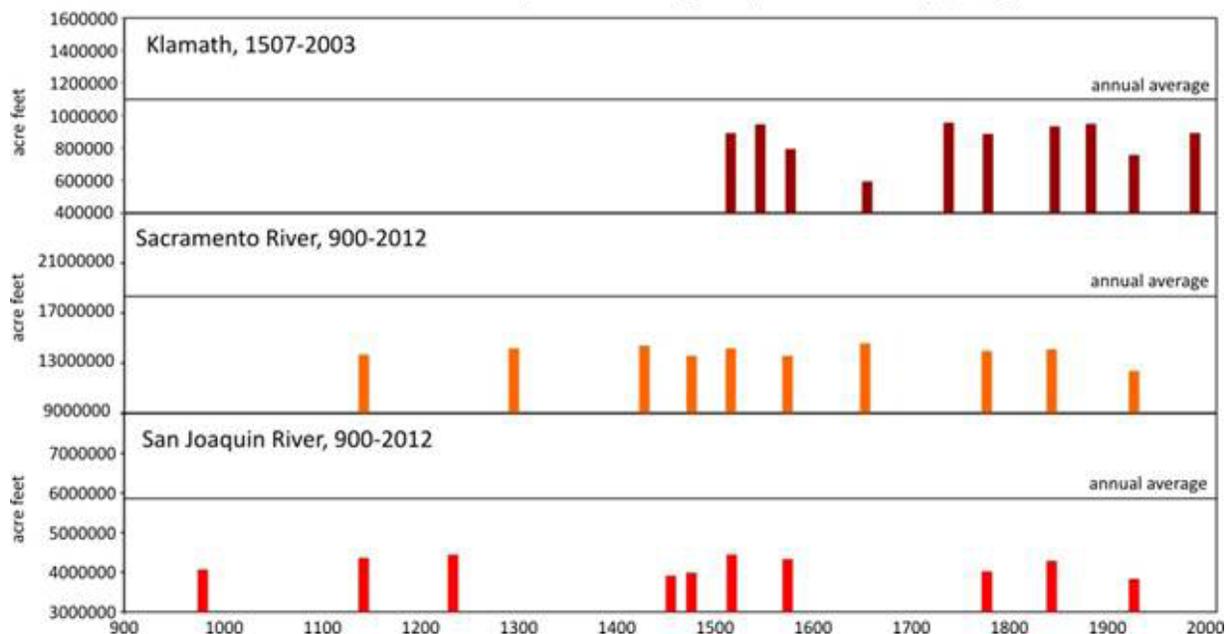
Paleoclimate information is useful in helping to understand and model natural variability in the climate system that may provide clues for improving drought prediction at the seasonal time scales important for water management.

Jeanine Jones of DWR said, "Drought prediction skillful enough to use for water management decision-making remains a research challenge for the science community. Having improved climate forecasting capabilities at time scales of months to a year in advance would provide great benefit for drought preparedness."

Looking into the future, the reconstructions also help provide context for expected impacts of climate change. The report compares drought durations seen in the paleoclimate record with those projected by downscaled global climate change models run to simulate conditions by the end of the century. The results indicate that the paleoclimate data may be useful for assessing future climate projections in the context of past centuries.

Report co-author Connie Woodhouse, professor and interim head of the University of Arizona School of Geography and Development, said, "These tree-ring records document the range of drought characteristics, including duration, that have occurred in the past, under natural climate variability. These droughts could occur in the future, but under warmer temperatures that will further exacerbate their impacts."

Lowest ten 10-year averages (non-overlapping)



Klamath = Klamath River at Keno

Sacramento River = Sacramento River runoff

San Joaquin River = San Joaquin River runoff

Sacramento River runoff is the sum of unimpaired flow in million acre-feet at:
 Sacramento River above Bend Bridge

Feather River at Oroville (aka inflow to Lake Oroville)
 Yuba River near Smartville

American River below Folsom Lake

San Joaquin River Runoff is the sum of unimpaired flow in million acre-feet at:

Stanislaus River below Goodwin Reservoir (aka inflow to New Melones Res.)

Tuolumne River below La Grange (aka inflow to New Don Pedro Reservoir)

Merced River below Merced Falls (aka inflow to Lake McClure)

San Joaquin River inflow to Millerton Lake

Runs^a with length ≥ 4 years in three flow reconstructions

Klamath^b		Sacramento^{4c}		San Joaquin^{4d}	
Years	N	Years	N	Years	N
1515-1522	8	921- 924	4	946- 950	5
1540-1543	4	945- 950	6	977- 981	5
1547-1552	6	975- 981	7	1072-1075	4
1578-1582	5	1072-1075	4	1143-1148	6
1592-1597	6	1130-1136	7	1155-1158	4
1642-1646	5	1143-1148	6	1172-1177	6
1648-1668	21	1150-1158	9	1210-1213	4
1738-1744	7	1170-1177	8	1233-1239	7
1756-1761	6	1233-1239	7	1294-1301	8
1764-1767	4	1292-1301	10	1395-1402	8
1775-1779	5	1390-1393	4	1407-1410	4
1783-1787	5	1395-1400	6	1425-1428	4
1792-1798	7	1407-1410	4	1450-1461	12
1843-1846	4	1425-1432	8	1463-1466	4
1848-1852	5	1451-1457	7	1471-1483	13
1873-1876	4	1475-1483	9	1505-1508	4
1880-1884	5	1515-1521	7	1518-1523	6
1912-1915	4	1540-1543	4	1540-1545	6
1917-1920	4	1569-1572	4	1569-1572	4
1924-1935	12	1578-1582	5	1578-1582	5
1987-1992	6	1592-1595	4	1592-1595	4
		1636-1639	4	1629-1632	4
		1645-1648	4	1645-1648	4
		1652-1655	4	1652-1655	4
		1753-1760	8	1688-1691	4
		1780-1783	4	1753-1757	5
		1843-1846	4	1780-1783	4
		1856-1859	4	1793-1796	4
		1917-1922	6	1843-1846	4
		1926-1935	10	1855-1859	5
		1946-1951	6	1928-1931	4
		1959-1962	4	1946-1950	5
		1987-1992	6	1959-1962	4
				1987-1992	6
				2000-2004	5

- a** runs defined as consecutive years below median
- b** Klamath River at Keno, 1507-2003; median =1113 thousand acre-feet (TAF)
- c** Sacramento River runoff, 900-2012, median=17800 TAF
- d** San Joaquin River runoff, 900-2012, median=5598 TAF

With California facing one of the most severe droughts on record, Governor Brown declared a [drought State of Emergency](#) and directed state officials to take all necessary actions to prepare for water shortages. The Governor [signed legislation](#) to [immediately help](#) communities deal with the devastating dry conditions affecting our state and to provide funding to increase local water supplies after it was passed with bipartisan support in the legislature.

Governor Brown met with [President Obama](#) about crucial federal support during the ongoing drought, and the state [continues](#) to work with [federal partners](#) to ensure [coordinated drought monitoring](#) and response. Governor Brown and the administration have also [expressed support](#) for [federal legislation](#) introduced by Senators Feinstein and Boxer and Representatives Jim Costa, Tony Cárdenas and Sam Farr.

Across state government, action is being taken. The Department of General Services is leading water [conservation efforts](#) at state facilities, and the California State Architect has asked California [school districts and Community Colleges](#) to act on the Governor's call to reduce water usage. The Department of Transportation is cutting water usage along California's roadways by 50 percent. Caltrans has also launched a public awareness campaign, putting a water [conservation message](#) on their more than 700 electronic highway signs.

In January, the state took [action to conserve](#) water in numerous Northern California [reservoirs](#) to meet minimum needs for operations impacting the environment and the economy, and recently the Department of Water Resources and U.S. Bureau of Reclamation announced they would seek the authority to make [water exchanges](#) to deliver water to those who need it most. The State Water Resources Control Board announced it would work with hydropower generators and the Federal Energy Regulatory Commission to [preserve water](#) in California reservoirs, and the California Department of Fish and Wildlife and the California Fish and Game Commission [restricted fishing](#) on [some waterways](#) due to low water flows worsened by the drought.

The state is working to protect local communities from the dangers of extreme drought. The California Department of Public Health [identified](#) and offered [assistance](#) to [communities](#) at risk of severe drinking water shortages and is working with other state and local agencies to develop solutions for vulnerable communities. CAL FIRE hired [additional firefighters](#) and is continuously [adjusting staffing](#) throughout the state to help address the [increased fire threat](#) due to drought conditions. The California Department of Food and Agriculture launched a [drought website](#) to help farmers, ranchers and farmworkers find resources and assistance programs that may be available to them during the drought.

Even as the state deals with the immediate impacts of the drought, it's also planning for the future. In 2013, the California Natural Resources Agency, the California Environmental Protection Agency and CDFA released the [California Water Action Plan](#), which will guide state efforts to enhance water supply reliability, restore damaged and destroyed ecosystems and improve the resilience of our infrastructure.

Governor Brown has called on all Californians to voluntarily reduce their water usage by 20 percent, and the [Save Our Water](#) campaign launched four [public service announcements](#) encouraging residents to conserve and has resources available in [Spanish](#). Last December, the Governor formed a [Drought Task Force](#) to review expected water allocations and California's preparedness for water scarcity. In May 2013, Governor Brown issued an [Executive Order](#) to direct state water officials to expedite the review and processing of voluntary transfers of water.





STATEMENT OF THE COLORADO RIVER BASIN STATES

REGARDING THE MINUTE 319 ENVIRONMENTAL PULSE FLOW

MORELOS DAM - MARCH 27, 2014

On January 14, 2014, representatives from the Colorado River Basin States, in their role as members of the Consultative Council, submitted a Delivery Plan for the Colorado River Environmental Pulse Flow that is a component of Minute 319, the Minute executed in 2012 titled, "Interim International Cooperative Measures in the Colorado River Basin through 2017 and Extension of Minute 318 Cooperative Measures to Address the Continued Effects of the April 2010 Earthquake in the Mexicali Valley, Baja California." The Delivery Plan was developed by a combination of federal, state, local, and non-governmental entities on both sides of the U.S.-Mexico border and submitted for a recommendation of approval by the Consultative Council and approval by the Commissioners of the IBWC. The Basin States are pleased that Commissioners Drusina and Salmon accepted the proposed Delivery Plan and that the Pulse Flow is proceeding as contemplated by Minute 319. Minute 319 contains a package of cooperative measures, including those relating to environmental benefits such as the Pulse Flow, and is intended to provide benefits to both countries during the 5-year period it is in place.

The Basin States look forward to continuing the cooperative working relationship developed among governmental and non-governmental entities in both countries to implement all elements of Minute 319 and the Basin States look forward to continuing progress toward developing a comprehensive Minute that would be in effect through 2026.