

SOUTHERN CALIFORNIA



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GOVERNMENTS**

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Transportation Commission

JOINT MEETING OF THE

REGIONAL COUNCIL, COMMUNITY, ECONOMIC & HUMAN DEVELOPMENT ENERGY & ENVIRONMENT AND TRANSPORTATION COMMITTEES

Please Note Time

**Thursday, March 6, 2014
10:00 a.m. – 12:00 p.m.**

**SCAG Main Office
818 W. 7th Street, 12th Floor
Board Room
Los Angeles, CA 90017
(213) 236-1800**

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Lillian Harris-Neal at (213) 236-1858 or via email at harris-neal@scag.ca.gov. Regular meetings may be viewed live or on-demand at <http://www.scag.ca.gov/NewsAndMedia/Pages/SCAGTV.aspx>

Agendas & Minutes are also available at: <http://www.scag.ca.gov/committees/Pages/default.aspx>

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**JOINT MEETING
AGENDA
REGIONAL COUNCIL AND POLICY COMMITTEES
(COMMUNITY, ECONOMIC & HUMAN DEVELOPMENT COMMITTEE;
ENERGY & ENVIRONMENT COMMITTEE; TRANSPORTATION COMMITTEE)
MARCH 6, 2014**

CALL TO ORDER & PLEDGE OF ALLEGIANCE

(Hon. Greg Pettis, President)

PUBLIC COMMENT PERIOD – Members of the public desiring to speak on items on the agenda, or items not on the agenda, but within the purview of the Council, must fill out and present a Public Comment Card to the Assistant prior to speaking. Comments will be limited to three (3) minutes per speaker. The President has the discretion to reduce the time limit based upon the number of speakers. The President may limit the total time for all public comments to twenty (20) minutes.

CONSENT CALENDAR

Page No.

Approval Item

- | | | |
|---|-------------------|----------|
| 1. <u>Minutes of the November 7, 2013 Joint Meeting of the Regional Council and Policy Committees</u> | Attachment | 1 |
|---|-------------------|----------|

Discussion Item

- | | | |
|---|-------------------|----------|
| 2. <u>Southern California's Water Future - Issues, Challenges and Potential Solutions</u> <ul style="list-style-type: none">• <i>Richard Atwater, Executive Director, Southern California Water Committee (Moderator)</i>• <i>William Croyle, Drought Manager, California Department of Water Resources</i>• <i>Professor James Famiglietti, Ph.D., Director, Center for Hydrologic Modeling, University of California, Irvine</i>• <i>Mark Grey, Ph.D., Director of Environmental Affairs, Building Industry Association of Southern California</i>• <i>Paul Jones, General Manager, Eastern Municipal Water District</i>• <i>Jeff Kightlinger, General Manager, Metropolitan Water District of Southern California</i> | Attachment | 6 |
|---|-------------------|----------|

ADJOURNMENT

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**MINUTES OF THE JOINT MEETING OF THE
REGIONAL COUNCIL AND
COMMUNITY, ECONOMIC & HUMAN DEVELOPMENT (CEHD) COMMITTEE;
ENERGY AND ENVIRONMENT COMMITTEE (EEC); AND THE
TRANSPORTATION COMMITTEE (TC) OF THE
SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS
NOVEMBER 7, 2013**

THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS AND/OR DISCUSSIONS THAT OCCURRED AT THE JOINT MEETING. A VIDEO RECORDING OF THE ACTUAL MEETING IS AVAILABLE AT <http://scag.ca.gov/NewsAndMedia/Pages/SCAGTV.aspx>

EEC Members Present:

Representing

<p>Chair* 1. Hon. Cheryl Viegas-Walker</p> <p>Vice-Chair* 2. Hon. James Johnson</p> <p>3. Hon. Denis Bertone</p> <p>* 4. Hon. Margaret Clark</p> <p>5. Hon. Jordan Ehrenkranz</p> <p>6. Hon. Larry Forester</p> <p>7. Hon. Laura Friedman</p> <p>8. Hon. Sandra Genis</p> <p>* 9. Hon. Ed Graham</p> <p>10. Hon. Linda Krupa</p> <p>* 11. Hon. Mike Munzing</p> <p>12. Hon. David Pollock</p> <p>* 13. Hon. Carmen Ramirez</p> <p>* 14. Hon. Deborah Robertson</p> <p>15. Hon. Stephen Sammarco</p> <p>* 16. Hon. Jack Terrazas</p> <p>17. Hon. Diane Williams</p>	<p><i>El Centro</i></p> <p><i>Long Beach</i></p> <p><i>San Dimas</i></p> <p><i>Rosemead</i></p> <p><i>Canyon Lake</i></p> <p><i>Signal Hill</i></p> <p><i>Glendale</i></p> <p><i>Costa Mesa</i></p> <p><i>Chino Hills</i></p> <p><i>Hemet</i></p> <p><i>Aliso Viejo</i></p> <p><i>Moorpark</i></p> <p><i>Oxnard</i></p> <p><i>Rialto</i></p> <p><i>Redondo Beach</i></p> <p><i>Rancho Cucamonga</i></p>	<p>District 1</p> <p>District 30</p> <p>SGVCOG</p> <p>District 32</p> <p>WRCOG</p> <p>GCCOG</p> <p>Arroyo-Verdugo Cities</p> <p>OCCOG</p> <p>District 10</p> <p>WRCOG</p> <p>District 12</p> <p>VCOG</p> <p>District 45</p> <p>District 8</p> <p>SBCCOG</p> <p>Imperial County</p> <p>SANBAG</p>
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TC Members Present:

Representing

<p>Chair * 1. Hon. Keith Millhouse</p> <p>* 2. Hon. Michael D. Antonovich</p> <p>3. Hon. John Addleman</p> <p>* 4. Hon. Bruce Barrows</p> <p>5. Hon. Lisa Bartlett</p> <p>* 6. Hon. Glen. T. Becerra</p> <p>7. Hon. Russell Betts</p>	<p><i>Moorpark</i></p> <p></p> <p><i>Rolling Hills Estates</i></p> <p><i>Cerritos</i></p> <p></p> <p><i>Simi Valley</i></p> <p><i>Desert Hot Springs</i></p>	<p>VCTC</p> <p>Los Angeles County</p> <p>SBCCOG</p> <p>District 23</p> <p>TCA</p> <p>District 46</p> <p>CVAG</p>
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* 8.	Hon. Art Brown	<i>Buena Park</i>	District 21
* 9.	Hon. Gene Daniels	<i>Paramount</i>	District 24
* 10.	Hon. Jeff DeGrandpre	<i>Eastvale</i>	District 4
* 11.	Hon. Roy Francis	<i>La Habra Heights</i>	District 31
* 12.	Hon. Mario Guerra	<i>Downey</i>	GCCOG
13.	Hon. Bert Hack	<i>Laguna Woods</i>	OCCOG
* 14.	Hon. Matthew Harper	<i>Huntington Beach</i>	District 64
* 15.	Hon. Carol Herrera	<i>Diamond Bar</i>	District 37
16.	Hon. Bill Hodge	<i>Calexico</i>	ICTC
* 17.	Hon. Jim Hyatt	<i>Calimesa</i>	District 3
18.	Hon. Trish Kelley	<i>Mission Viejo</i>	OCCOG
19.	Hon. James Ledford	<i>Palmdale</i>	North L.A. County
* 20.	Hon. Ryan McEachron	<i>Victorville</i>	SANBAG
* 21.	Hon. Marsha McLean	<i>Santa Clarita</i>	North L. A. County
* 22.	Hon. Barbara Messina	<i>Alhambra</i>	District 34
* 23.	Hon. Leroy Mills	<i>Cypress</i>	District 18
* 24.	Hon. Brett Murdock	<i>Brea</i>	District 22
* 25.	Hon. R. Shawn Nelson		Orange County
* 26.	Hon. Pam O'Connor	<i>Santa Monica</i>	District 41
27.	Hon. Micheal O'Leary	<i>Culver City</i>	WSSCOG
* 28.	Hon. Linda Parks		VCOG
* 29.	Hon. Gregory Pettis	<i>Cathedral City</i>	District 2
* 30.	Hon. Ronald Roberts	<i>Temecula</i>	District 5
* 31.	Hon. Mark Rutherford	<i>Westlake Village</i>	District 44
32.	Hon. Teresa Real Sebastian	<i>Monterey Park</i>	SGVCOG
33.	Hon. David Spence	<i>La Cañada/Flintridge</i>	Arroyo-Verdugo Cities
34.	Hon. Tim Spohn	<i>City of Industry</i>	SGVCOG
* 35.	Hon. Jess Talamantes	<i>Burbank</i>	District 42
36.	Hon. Brent Tercero	<i>Pic Rivera</i>	GCCOG
* 37.	Hon. Donald Voss	<i>La Cañada/Flintridge</i>	District 36

CEHD Members Present:

Representing

Chair*	1. Hon. Margaret E. Finlay	<i>Duarte</i>	District 35
Vice-Chair*	2. Hon. Bill Jahn	<i>Big Bear Lake</i>	District 11
	3. Hon. Don Campbell	<i>Brawley</i>	ICTC
	4. Hon. Carol Chen	<i>Cerritos</i>	GCCOG
*	5. Hon. Steven Choi	<i>Irvine</i>	District 14
	6. Hon. Rose Espinoza	<i>La Habra</i>	OCCOG
	7. Hon. Debbie Franklin	<i>Banning</i>	WRCOG

8.	Hon Chris Garcia	<i>Cudahy</i>	GCCOG
9.	Hon. Ron Garcia	<i>Brea</i>	OCCOG
* 10.	Hon. James Gazeley	<i>Lomita</i>	District 39
* 11.	Hon. Carl Morehouse	<i>Ventura</i>	District 47
12.	Hon. Ray Musser	<i>Upland</i>	SANBAG
13.	Hon. Edward Paget	<i>Needles</i>	SANBAG
14.	Hon. Sonny Santa Ines	<i>Bellflower</i>	GCCOG
15.	Hon. Beck Shevlin	<i>Monrovia</i>	SGVCOG
* 16.	Hon. Tri Ta	<i>Westminster</i>	OCCOG

*Regional Council Member

Staff Present

Hasan Ikhata, Executive Director
 Sharon Neely, Chief Deputy Executive Director
 Debbie Dillon, Deputy Executive Director, Administration
 Joe Silvey, General Counsel
 Joann Africa, Chief Counsel
 Basil Panas, Acting Chief Financial Officer
 Huasha Liu, Director of Land Use & Environmental Planning
 Darin Chidsey, Director of Strategy, Policy and Public Affairs
 Lillian Harris-Neal, Clerk of the Board
 Tess Rey-Chaput, Office of Regional Council Support

CALL TO ORDER AND PLEDGE OF ALLEGIANCE

President Greg Pettis, Cathedral City, District 2, called the meeting to order at approximately 10:30 a.m. Hon. Russell Betts, TC Member, representing CVAG, led the Pledge of Allegiance.

PUBLIC COMMENT PERIOD

President Pettis opened the Public Comment Period.

Autumn Bernstein, Director, Climate Plan, commented regarding land use decisions that affect the climate; stated support for the implementation of SCS; and urged prioritization of investments and programs that will benefit the climate and the community.

Gloria Ohland, Director, Policy and Communications, Move L.A., commented regarding Measure R; groundbreaking efforts to help reduce greenhouse gas emissions; and impacts of climate change.

Pauline Chow, Southern California Regional Policy Manager, Safe Routes to School National Partnership (SRTSNP), stated that SRTSNP focuses on programs and policies to decrease childhood obesity; improve the well-being of children; and foster the creation of livable and sustainable communities. She acknowledged SCAG for the implementation of the 2012 RTP/SCS.

Katherine Lee, American Lung Association in California (ALAC), stated that ALAC supports efforts to reduce all emissions that contribute to climate change—a threat in the 21st century—and complimented

SCAG for its leadership to address climate change by supporting policies to reduce fossil fuel use and promote active transportation.

Jonathan Parfrey, Executive Director, Climate Resolve, commented regarding the importance of an operating transmission/distribution grid and suggested modernizing micro grids that can continue to deliver electricity even during days of extreme heat.

Christian Flores, student, California State University of San Bernardino (CSUSB), commented regarding climate change and the importance and accessibility of mobile phone applications to reach-out to communities especially on issues related to public health.

Cornell Lewis, student, California State University of San Bernardino (CSUSB), commented regarding climate change.

Ivan Aguayo, student, California State University of San Bernardino (CSUSB), commented regarding the impact of climate change and the health effects of air pollution in San Bernardino County.

John Longville, Board of Trustees, San Bernardino Community College District, shared his perspective, as a former SCAG President (1992-1993), in drafting the original SCAG Bylaws and the impact of the Regional Councilmembers' leadership in addressing issues in Southern California regarding climate change.

President Pettis closed the Public Comment Period.

ACTION ITEM

1. Minutes of the June 6, 2013 Joint Meeting of the Regional Council and Policy Committees

A motion was made (M. Martinez) to approve the Minutes of the June 6, 2013 Joint Meeting of the Regional Council and Policy Committees. Motion was SECONDED (Robertson) and approved by a MAJORITY VOTE with two (2) ABSTENTIONS (Rush and Ta).

DISCUSSION ITEMS

2. AB 32 Scoping Plan First Update - Discussion Draft for Public Review and Comment

Hasan Ikhata, Executive Director, reported that the California Air Resources Board (ARB) released the public discussion draft of the AB 32 Scoping Plan Update which highlights California's progress in meeting the "near-term" 2020 GHG emission reduction goals. Mr. Ikhata stated that a panel of speakers for Agenda Item No. 3 will present and discuss a wide range of views on climate change as it relates to AB 32's direct requirements and the responsibilities for SCAG to incorporate climate change considerations in transportation planning.

3. Panel Discussion Regarding Climate Change

President Pettis welcomed and introduced Dr. Louise Bedsworth, Deputy Director, Governor's Office of Planning and Research (OPR), as the first speaker on the panel.

Dr. Bedsworth gave a PowerPoint presentation regarding, "*California's Climate Future: The Governor's Environmental Goals and Policy Report (EGPR)*." She discussed the state statute requirements on the

EGPR; its goals and context; the changing demographics in California by location and age group; the challenges of climate change; California's future as it relates to meeting the 2020 GHG targets while integrating climate-readiness and adaptation into planning and investment; and EGPR's vision and cross-cutting goals. In closing, Dr. Bedsworth discussed the EGPR's 'next steps' through public workshops, and regional/topical/sectoral conversations.

President Pettis welcomed and introduced the second speaker on the panel, Warren Duffy, talk show host, columnist and author of the book entitled, *"The Green Tsunami – A tidal wave of eco-babble that is drowning us all."*

Mr. Duffy presented an alternative perspective regarding climate change. He discussed the United Nations International Panel on Climate Change (IPCC)'s release of the Fifth Assessment Report, specifically relating to its conclusion on the warming of the earth's climate and human influence on warming. He quoted an excerpt from a recent article in the German newspaper, *Die Welt*, written by climate scientist and United Nations IPCC lead author, Hans Von Storch. In conclusion, Mr. Duffy stated that he has been educating people on "common sense environmentalism."

President Pettis welcomed and introduced the final speaker on the panel, Dr. Robert Lempert, Director, RAND Pardee Center for Longer Range Global Policy & the Future Human Condition.

Dr. Lempert provided background information on RAND, an independent non-partisan research institution, and presented information on the atmospheric changes of the earth's climate, global effects and the iterative risk management that provides a framework for solutions in addressing these changes. He also discussed the IPCC's Fifth Assessment Report as summarized by the three (3) Working Groups where he is one of the scientists in Working Group 2. In summary, Dr. Lempert reported that there is evidence that climate change is occurring and has significant effects in Southern California. He stated that an emerging body of best practices can help the region to prudently manage these risks.

Discussion ensued and comments/questions were made related to having an impartial perspective on global warming; equity in regulations including in developing countries; range and change of atmospheric conditions that affect global warming; the U.S. Navy's declaration of the shift of global climate as a national security threat; effects of global vegetation and climate change due to increase in carbon dioxide; the City of Santa Monica's recent development of a Climate Action Plan—an action-oriented plan with measures to achieve the community's greenhouse gas emission reduction goal; and the need for global solutions (Munzing, Clark, Rutherford, Ramirez, Harper, O'Connor, and O'Leary).

On behalf of the Regional Council and Policy Committee members, Hasan Ikhata, Executive Director, acknowledged the panel of speakers and presented each of them with a token of appreciation.

ADJOURNMENT

There being no further business, the Joint Meeting of the Regional Council and Policy Committees adjourned at 12:08 p.m.



Lillian Harris-Neal, Clerk of the Board

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DATE: March 6, 2014

TO: Regional Council (RC)
Community, Economic, and Human Development (CEHD) Committee
Energy and Environment Committee (EEC)
Transportation Committee (TC)

FROM: Hasan Ikhata, Executive Director;  (213) 236-1944; Ikhata@scag.ca.gov

SUBJECT: Southern California's Water Future - Issues, Challenges and Potential Solutions

RECOMMENDED ACTION:

Discussion

EXECUTIVE SUMMARY:

At the February 6, 2014 meeting, the Regional Council adopted SCAG's 2014 State and Federal Legislative Priorities. These priorities included support of water bond legislation that invests in water infrastructure that establishes a sufficient and reliable source of water to the Southern California region (and to accommodate the additional 4 million additional residents expected by 2035). Also at that meeting, the Board heard a presentation on the Salton Sea and its role in the statewide water supply system. It was announced by President Pettis that a Joint Policy and RC meeting would be scheduled for March in order to have an update on the pending water bond, pending water legislation and other related information with respected water leaders. The State of Emergency associated with drought conditions announced by the Governor of California and the potential impact to the economy and livability of our member city residents makes this discussion timely.

SCAG seeks to determine how our member cities can support efforts to ensure a reliable water supply for current and future generations. SCAG has invited a panel of respected water experts to discuss their efforts, updates on technological efforts, and exchange of questions on how SCAG can support implementing their plans (see Attachment 1 for bios).

STRATEGIC PLAN:

This item supports SCAG's Strategic Plan Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies.

BACKGROUND:

Emergency Drought Declaration

California's interconnected water system serves over 30 million people and irrigates over 5,680,000 acres of farmland. As the world's largest, most productive and most controversial water system, it manages over 40,000,000 acre feet of water per year. Water and water rights has historically been a divisive issue, and debate continues on whether the state should increase the redistribution of water among sectors while also increasing conservation and preservation of natural ecosystems.

With California facing water shortfalls in the driest year in recorded state history, Governor Edmund G. Brown Jr. proclaimed a State of Emergency on January 17, 2014, and directed state officials to take all necessary actions to prepare for these drought conditions. In the State of Emergency declaration (Attachment 2), Governor Brown directed state officials to assist farmers and communities that are economically impacted by dry conditions and to ensure the state can respond if Californians face drinking water shortages. The Governor also directed state agencies to use less water and hire more firefighters and initiated a water conservation public awareness campaign. In addition, the proclamation gives state water officials more flexibility to manage supply throughout California under drought conditions.

Highlights of State Actions to Address Drought Related Water Resource Issues

While Governor Brown has called on all Californians to voluntarily reduce their water usage by 20 percent and Caltrans has put a water conservation message on their more than 700 electronic highway signs, direct action is being taken across state government in response to the State of Emergency. The California Department of General Services is leading water conservation efforts at state facilities, and the California Department of Transportation is cutting water usage along California's roadways.

In January, the state took action to conserve water¹ to meet minimum needs for operations impacting the environment and the economy, and recently the DWR 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.

The California Department of Public Health identified and offered assistance to communities at risk of 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 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 identifying resources and assistance programs for farmers, ranchers and farmworkers.

Current Water Bond and Bay Delta Conservation Plan

Originally passed in 2010 for the November 2, 2010 ballot, the Safe, Clean, and Reliable Drinking Water Supply Act of 2010, if approved by the voters, would authorize the issuance of bonds in the amount of \$11.14 billion pursuant to the State General Obligation Bond Law to finance a safe drinking water and water supply reliability program. The Bond has been postponed twice from the November 2010 and 2012 and currently appears on the November 4, 2014 General Election ballot. Staff has previously reported to the Board a summary of the water bond at the March 2012 meeting (Attachment 5). Additionally, in August 2013, SCAG hosted the state's Natural Resources Agency Deputy Secretary Dr. Jerry Meral to present a summary of the Bay Delta Conservation Plan which addresses water supply issues and adverse environmental quality impacts to the Sacramento-San Joaquin Rivers Delta and San Francisco Bay (Bay-

¹ Except for a small amount of carryover water from 2013, customers of the State Water Project will get no deliveries in 2014 if current dry conditions persist and deliveries to agricultural districts with long-standing water rights in the Sacramento Valley may be cut 50 percent – the maximum permitted by contract – depending upon future snow survey results. The U.S. Bureau of Reclamation also announced a projected zero allocation to most agricultural districts supplied by the federally run Central Valley Project

REPORT

Delta or Delta) from the State Water Project (SWP) and the federal Central Valley Project (CVP). Attachment 6 is a copy of the staff report providing background summary.

State Legislative Responses to Water Resource Issues

Proposed Legislation

In response to the State of Emergency, on February 19, 2014, Governor Brown joined Senate President pro Tem Darrell Steinberg and Assembly Speaker John A. Pérez to announce legislation that provides \$687.4 million to immediately help communities deal with the drought conditions affecting the state and provide funding to increase local water supplies.

The bill calls for the California Department of Public Health (DPH) to adopt new groundwater replenishment regulations by July 1, 2014, and for the State Water Resources Control Board and the DPH to work on additional measures to allow for the use of recycled water and storm water capture for increasing water supply availability. The bill also makes statutory changes to ensure existing water rights laws are followed, including streamlined authority to enforce water rights laws and increased penalties for illegally diverting water during drought conditions.

Several of the proposals included in this package were proposed in the Governor's January budget, but will now be expedited.

This proposal, embodied in AB 79 and its trailer bill AB 80, passed the Assembly and Senate Budget Committee hearings on February 26, 2014 with strong bipartisan support and is expected to be signed into law prior to the SCAG Board meeting. Additionally, there have been a number of bills introduced in February prior to legislative deadline that address the water drought crisis. Most of these are 'spot' bills, i.e., they are placeholder vehicles that do not presently contain substantive provisions. These recently introduced bills must be in print 30 days before being heard by an initial policy committee (provided the bill has content). A spot bill will not be assigned to committee until the bill is amended to contain content.

Highlights of the AB 79 and AB 80 legislation include:

- \$549 million from the accelerated expenditure of voter-approved bonds, Proposition 84 and Proposition 1E, in the form of infrastructure grants for local and regional projects that are already planned or partially completed to increase local reliability, including recapturing of storm water, expand the use and distribution of recycled water, enhance the management and recharging of groundwater storage and strengthen water conservation.
- \$20 million transferred from the Greenhouse Gas Reduction Fund to the Department of Water Resources (DWR) for direct expenditures and grants to state and local agencies to improve water use efficiency, save energy and reduce greenhouse gas emissions from state and local water transportation and management systems.
- \$14 million for groundwater management across the state, including assistance to disadvantaged

communities with groundwater contamination exacerbated by the drought.

- \$10 million transferred from the Greenhouse Gas Emissions Fund for the California Department of Food and Agriculture to invest in irrigation and water pumping systems that reduce water use, energy use and greenhouse gas emissions.
- \$10 million transferred from the Greenhouse Gas Emissions Fund for the DWR to establish a grant program for state and local agencies to implement residential, commercial or institutional water efficiency projects that reduce water and energy use.
- \$15 million from the General Fund for Emergency Drinking Water Fund to address emergency water shortages due to drought.
- \$13 million from the General Fund to augment the California Conservation Corps and local community conservation corps to expand water use efficiency and conservation activities and to reduce fuel loads to prevent catastrophic fires.
- \$25.3 million from the General Fund for food assistance, which will be structured to maximize the potential federal drought assistance that can be provided to provide food assistance to those impacted by the drought.
- \$21 million from the General Fund and federal funds for housing related assistance for individuals impacted by the drought.

AB 1331 (Rendon) and SB 848 (Wolk)

The Regional Council at its February 6, 2014 meeting adopted the 2014 State and Federal Legislative Priorities recommended by the Legislative/Communications and Membership Committee (LCMC) with minor modifications. These priorities call for support of water bond legislation that invests in water infrastructure that establishes a sufficient and reliable source of water to California. AB 1331(Rendon – South Gate) and SB 848 (Wolk – Napa) are two legislative bills that, if passed, would replace and reduce the current \$11.14 billion water bond on the November 4, 2014 general election approved by the Legislature for the November 2010 general election, and subsequently moved to the 2012 and again to the 2014 general election ballots.

These bills are expected to be substantively amended and staff will continue to seek input from affected regional water stakeholders and provide further input to the LCMC concerning potential action SCAG may wish to consider with respect to these or other water bond bills. SCAG staff report to LCMC dated on February 18, 2014 with details on AB 1331 and SB 848 is attached (Attachment 7). Since preparation of that report, AB 1331 has been scheduled for hearing before the Senate Natural Resources and Water Committee for March 25, 2014; SB 848 passed the Senate Committee on Environmental Quality (6-2) on February 19, 2014, and was amended to, among other provisions, provide for \$100 million to finance urgent measures to provide drinking water in disadvantaged and severely disadvantaged communities. SB 848 is referred to the Senate Governance and Finance Committee with hearing scheduled for February 26, 2014.

State Water Resource Planning

In addition to dealing with the immediate impacts of the drought, the state has also been planning for the future. As mandated in the California Water Code, the California Water Plan (CWP) is the State's long-term strategic plan for guiding the management and development of water resources under these emerging conditions and expectations, and in the face of an uncertain future. California Water Plan Update 2013 (Attachment 4) provides a strategic vision and roadmap for California's water future that is informed by hundreds of stakeholders; dozens of federal, State, and tribal entities; and nearly 40 other companion plans developed by a myriad of state agencies. It does not create mandates, prioritize actions, or allocate funding. Instead, it provides a roadmap that informs legislative action, as well as planning and decision-making, at all levels of government. The 2013 CWP update characterizes water resource conditions in the state today, describes the factors that are driving change, recognizes challenges and impediments to effective solutions, and lays out a suite of potential future actions intended to move California toward more sustainable management of water resources and more resilient water management systems.

Subsequent to the release of the CWP 2013 Update, the California Natural Resources Agency, the California Environmental Protection Agency and the California Department of Food and Agriculture released the California Water Action Plan (Attachment 3), which provides a five (5) year guide for state efforts to enhance water supply reliability, restore damaged and destroyed ecosystems and improve the resilience of infrastructure. Key actions identified in the Plan include:

- Make conservation a California way of life.
- Increase regional self-reliance and integrated water management across all levels of government.
- Achieve the co-equal goals for the Delta.
- Protect and restore important ecosystems.
- Manage and prepare for dry periods.
- Expand water storage capacity and improve groundwater management.
- Provide safe water for all communities.
- Increase flood protection.
- Increase operational and regulatory efficiency.
- Identify sustainable and integrated financing opportunities.

Of note are the proposed efforts of the state to engage local land use authorities on integrating individual government efforts to promote greater consistency between local land use plans and decisions and integrated regional water management plans and decisions (see Attachment 4; section 2).

Regional and Local Water Resource Issues

Regional and local water supply issues include the need for increased regional and local self-reliance,

streamlined permitting for local water reuse or enhancement projects, removing barriers to local and regional funding for water projects, and sustainable financing. Storm water discharge issues have also been a challenging and on-going topic for local jurisdictions and state, regional, and local resource managers.

For example, water resource stakeholders are considering how to effectively use storm water as a local water supply while reducing urban runoff water pollution. A significant amount of water from rain that could be used to replenish groundwater basins and increase local water supplies ends up turning into polluted storm water runoff. Removing barriers and providing incentives for sustainable storm water and groundwater management is critical topic for integrated (i.e., supply and quality) water planning.

Panel of Speakers - Joint Meeting of the Regional Council and Policy Committees

The 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy anticipates the region will add 4 million more people, 1.3 million more households, and 1.7 million more jobs over the next 25 years. The recent events and on-going water resource issues bring into question how our region will ensure adequate water resource to meet the existing demand and to accommodate this growth, which has prompted interest and discussion on broad scientific, technological, and policy responses. SCAG staff has invited speakers to discuss long-term water supply and demand, conservation, the California Water Plan and California Water Action Plan, and regional and local water resource issues.

The joint meeting of the Regional Council and Policy Committees today features a moderated panel discussion followed by a question and answer period, based upon the following:

1. What is the current state of the science regarding the extent of the water shortage in the short and long-term?
2. What immediate actions can be taken to address drought conditions and limit impacts?
3. What longer-term strategies should be considered to ensure stable and safe local, regional, and state water supplies and healthy ecosystems?
4. How can a regional planning agency like SCAG be part of the solution as we work with local agencies to develop land-use and transportation plans to create more sustainable communities?

The bios of the panel of speakers are attached (Attachment 1):

- Richard Atwater, Executive Director, Southern California Water Committee (Moderator)
- William Croyle, Drought Manager, California Department of Water Resources
- Professor James Famiglietti, Ph.D., Director, Center for Hydrologic Modeling, University of California, Irvine
- Mark Grey, Ph.D., Director of Environmental Affairs, Building Industry Association of Southern California

REPORT

- Paul Jones, General Manager, Eastern Municipal Water District
- Jeff Kightlinger, General Manager, Metropolitan Water District of Southern California

FISCAL IMPACT:

The costs to facilitate this panel discussion are included in the FY 14-15 OWP Budget.

ATTACHMENTS:

1. Bios of Panel Speakers
2. Governor's Declaration of State of Emergency
3. California Water Action Plan
4. California Water Plan, Executive Summary
5. SCAG Staff Report to RC, Safe, Clean, and Reliable Drinking Water Supply Act Bond
6. Staff Report to RC, Bay Delta Conservation Plan
7. SCAG Staff Report to LCMC, Water Bond Legislation Report – AB 1331 and SB 848

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Bios of Panel Speakers

Moderator:

Richard Atwater, Executive Director, Southern California Water Committee

The Southern California Water Committee (SCWC) is a nonprofit, nonpartisan public education partnership dedicated to informing Southern Californians about our water needs and our state's water resources. Its 200 member organizations include leaders from business, regional and local government, agricultural groups, labor unions, environmental organizations, water agencies, as well as the general public in Los Angeles, Orange, San Diego, San Bernardino, Riverside, Ventura, Kern and Imperial counties.

Speakers:

William Croyle, Drought Manager, California Department of Water Resources

In December, Mr. Croyle was appointed by the DWR to lead preparations for the drought. Mr. Croyle has 30 years of experience in water operations: Seven years as the department's flood operations branch chief and 23 years with the Central Valley Regional Water Quality Control Board.

James Famiglietti, Director, UC Center for Hydrologic Modeling, University of California, Irvine

Prof. Famiglietti is the founding director of the UC Center for Hydrologic Modeling, a University of California system-wide center formed to develop state-of-the-art predictive models to address high-priority water issues in California and the Western United States. Prof. Famiglietti's research group investigates how the water cycle and freshwater resources are being impacted by climate change. He and his students have pioneered methods using data from NASA's Gravity Recovery and Climate Experiment (GRACE) mission to identify groundwater depletion in the world's major aquifers. Their work has highlighted unsustainable rates of groundwater use around globe - from the Central Valley and the High Plains aquifers in the United States, to the Middle East, India, China and Australia. Professor Famiglietti actively communicates water and climate change issues through academics and to business, government and the general public. He appeared as a featured expert in the 2012 water documentary *Last Call at the Oasis*, and he is a regular contributor to National Geographic Water Currents and to Huffington Post.

Mark Grey, Ph.D., Director of Environmental Affairs, Building Industry Association of Southern California (BIASC)

Dr. Grey is Director of Environmental Affairs for BIA/SC and Technical Director for California's Construction Industry Coalition on Water Quality. Previously, Dr. Grey operated his own consulting firm and served as Director of Technical Services for the nation's largest publicly traded company involved in organic waste recycling. Dr. Grey has more than 20 years of experience working in the Pacific Northwest and California on environmental science and policy issues, and he is skilled at navigating California's current complex regulatory landscape. He has directed multiple integrated studies to examine land use and development practices. Dr. Grey is a certified professional soil scientist and a member of the Soil Science Society of America.

Paul Jones, General Manager, Eastern Municipal Water District

Paul D. Jones II was appointed general manager of Eastern Municipal Water District (EMWD) in July 2011 after having served as general manager at Irvine Ranch Water District for more than 12 years. With \$2.4 billion in assets and an annual operating budget of \$219 million, EMWD maintains an “AA+” rating from the major rating agencies, and is a major participant in the Municipal Bond Market to finance its five-year \$385 million Capital Improvement Program. The agency is a water wholesaler and retailer in western Riverside County with more than 135,000 customers in its 542-square-mile service area. It is one of 26 member agencies that form The Metropolitan Water District of Southern California, and has developed diverse water supply portfolio of imported and local supplies. EMWD also operates four regional reclamation facilities with nearly 230,000 sewer service connections, and is one off the largest producers of recycled water in California.

Jeffrey Kightlinger, General Manager, Metropolitan Water District

Jeffrey Kightlinger is general manager for the Metropolitan Water District of Southern California. As general manager, he is responsible for implementing the policy directives of the Board, including working with elected officials and member agencies to carry out the Metropolitan's mission. The General Manager reports directly to the Board of Directors and provides leadership and management of the water district's public policies and strategic initiatives, assets and resources, and all administrative, operational, and financial activities for Metropolitan.

A PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS the State of California is experiencing record dry conditions, with 2014 projected to become the driest year on record; and

WHEREAS the state's water supplies have dipped to alarming levels, indicated by: snowpack in California's mountains is approximately 20 percent of the normal average for this date; California's largest water reservoirs have very low water levels for this time of year; California's major river systems, including the Sacramento and San Joaquin rivers, have significantly reduced surface water flows; and groundwater levels throughout the state have dropped significantly; and

WHEREAS dry conditions and lack of precipitation present urgent problems: drinking water supplies are at risk in many California communities; fewer crops can be cultivated and farmers' long-term investments are put at risk; low-income communities heavily dependent on agricultural employment will suffer heightened unemployment and economic hardship; animals and plants that rely on California's rivers, including many species in danger of extinction, will be threatened; and the risk of wildfires across the state is greatly increased; and

WHEREAS extremely dry conditions have persisted since 2012 and may continue beyond this year and more regularly into the future, based on scientific projections regarding the impact of climate change on California's snowpack; and

WHEREAS the magnitude of the severe drought conditions presents threats beyond the control of the services, personnel, equipment and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

WHEREAS under the provisions of section 8558(b) of the California Government Code, I find that conditions of extreme peril to the safety of persons and property exist in California due to water shortage and drought conditions with which local authority is unable to cope.

NOW, THEREFORE, I, EDMUND G. BROWN JR., Governor of the State of California, in accordance with the authority vested in me by the state Constitution and statutes, including the California Emergency Services Act, and in particular, section 8625 of the California Government Code **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in the State of California due to current drought conditions.

IT IS HEREBY ORDERED THAT:

1.State agencies, led by the Department of Water Resources, will execute a statewide water conservation campaign to make all Californians aware of the drought and encourage personal actions to reduce water usage. This campaign will be built on the existing Save Our Water campaign (www.saveourh20.org) and will coordinate with local water agencies. This campaign will call on Californians to reduce their water usage by 20 percent.

2.Local urban water suppliers and municipalities are called upon to implement their local water shortage contingency plans immediately in order to avoid or forestall outright restrictions that could become necessary later in the drought season. Local water agencies should also update their legally required urban and agricultural water management plans, which help plan for extended drought conditions. The Department of Water Resources will make the status of these updates publicly available.

3.State agencies, led by the Department of General Services, will immediately implement water use reduction

plans for all state facilities. These plans will include immediate water conservation actions, and a moratorium will be placed on new, non-essential landscaping projects at state facilities and on state highways and roads.

4. The Department of Water Resources and the State Water Resources Control Board (Water Board) will expedite the processing of water transfers, as called for in Executive Order B-21-13. Voluntary water transfers from one water right holder to another enables water to flow where it is needed most.

5. The Water Board will immediately consider petitions requesting consolidation of the places of use of the State Water Project and Federal Central Valley Project, which would streamline water transfers and exchanges between water users within the areas of these two major water projects.

6. The Department of Water Resources and the Water Board will accelerate funding for water supply enhancement projects that can break ground this year and will explore if any existing unspent funds can be repurposed to enable near-term water conservation projects.

7. The Water Board will put water right holders throughout the state on notice that they may be directed to cease or reduce water diversions based on water shortages.

8. The Water Board will consider modifying requirements for reservoir releases or diversion limitations, where existing requirements were established to implement a water quality control plan. These changes would enable water to be conserved upstream later in the year to protect cold water pools for salmon and steelhead, maintain water supply, and improve water quality.

9. The Department of Water Resources and the Water Board will take actions necessary to make water immediately available, and, for purposes of carrying out directives 5 and 8, Water Code section 13247 and Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are suspended on the basis that strict compliance with them will prevent, hinder, or delay the mitigation of the effects of the emergency. Department of Water Resources and the Water Board shall maintain on their websites a list of the activities or approvals for which these provisions are suspended.

10. The state's Drinking Water Program will work with local agencies to identify communities that may run out of drinking water, and will provide technical and financial assistance to help these communities address drinking water shortages. It will also identify emergency interconnections that exist among the state's public water systems that can help these threatened communities.

11. The Department of Water Resources will evaluate changing groundwater levels, land subsidence, and agricultural land fallowing as the drought persists and will provide a public update by April 30 that identifies groundwater basins with water shortages and details gaps in groundwater monitoring.

12. The Department of Water Resources will work with counties to help ensure that well drillers submit required groundwater well logs for newly constructed and deepened wells in a timely manner and the Office of Emergency Services will work with local authorities to enable early notice of areas experiencing problems with residential groundwater sources.

13. The California Department of Food and Agriculture will launch a one-stop website (www.cdffa.ca.gov/drought) that provides timely updates on the drought and connects farmers to state and federal programs that they can access during the drought.

14. The Department of Fish and Wildlife will evaluate and manage the changing impacts of drought on threatened and endangered species and species of special concern, and develop contingency plans for state Wildlife Areas and Ecological Reserves to manage reduced water resources in the public interest.

15. The Department of Fish and Wildlife will work with the Fish and Game Commission, using the best available science, to determine whether restricting fishing in certain areas will become necessary and prudent as drought conditions persist.

16. The Department of Water Resources will take necessary actions to protect water quality and water supply in the Delta, including installation of temporary barriers or temporary water supply connections as needed, and will coordinate with the Department of Fish and Wildlife to minimize impacts to affected aquatic species.

17. The Department of Water Resources will refine its seasonal climate forecasting and drought prediction by advancing new methodologies piloted in 2013.

18. The California Department of Forestry and Fire Protection will hire additional seasonal firefighters to suppress wildfires and take other needed actions to protect public safety during this time of elevated fire risk.

19. The state's Drought Task Force will immediately develop a plan that can be executed as needed to provide emergency food supplies, financial assistance, and unemployment services in communities that suffer high levels of unemployment from the drought.

20. The Drought Task Force will monitor drought impacts on a daily basis and will advise me of subsequent actions that should be taken if drought conditions worsen.

I FURTHER DIRECT that as soon as hereafter possible, this Proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this Proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 17th day of January, 2014.

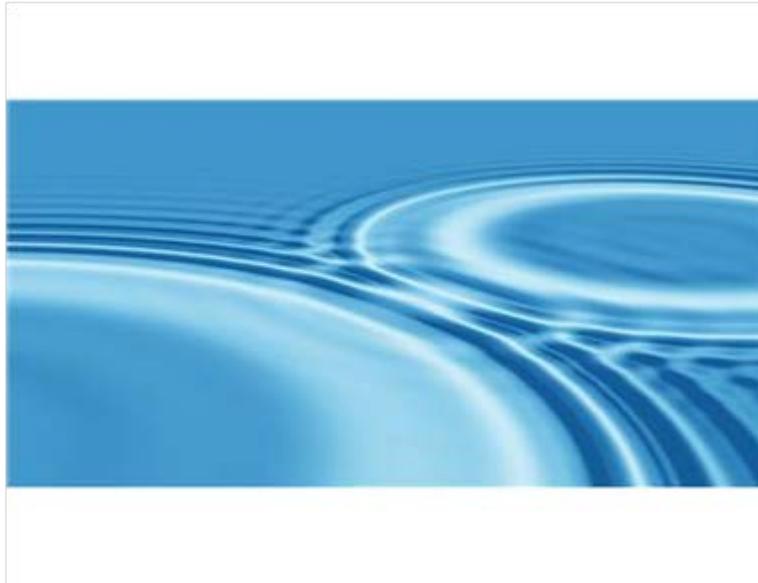
EDMUND G. BROWN JR.,
Governor of California

ATTEST:

DEBRA BOWEN,
Secretary of State

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California Water Action Plan





Among all our uncertainties, weather is one of the most basic. We can't control it. We can only live with it, and now we have to live with a very serious drought of uncertain duration.

Right now, it is imperative that we do everything possible to mitigate the effects of the drought. I have convened an Interagency Drought Task Force and declared a State of Emergency. We need everyone in every part of the state to conserve water. We need regulators to rebalance water rules and enable voluntary transfers of water and we must prepare for forest fires. As the State Water Action Plan lays out, water recycling, expanded storage and serious groundwater management must all be part of the mix. So too must be investments in safe drinking water, particularly in disadvantaged communities. We also need wetlands and watershed restoration and further progress on the Bay Delta Conservation Plan.

It is a tall order.

But it is what we must do to get through this drought and prepare for the next.

Edmund G. Brown Jr.
State of the State Speech, January 22, 2014

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California Water Action Plan: Actions for Reliability, Restoration and Resilience

Introduction

California has seen many flood events, including the most recent flood of 1995 when 48 of 58 counties declared a state of emergency. After two years of dry weather and shrinking reservoir supplies, we are reminded once again that nothing focuses Californians' attention on our limited water resources like drought.

There is broad agreement that the state's water management system is currently unable to satisfactorily meet both ecological and human needs, too exposed to wet and dry climate cycles and natural disasters, and inadequate to handle the additional pressures of future population growth and climate change. Solutions are complex and expensive, and they require the cooperation and sustained commitment of all Californians working together. To be sustainable, solutions must strike a balance between the need to provide for public health and safety (*e.g.*, safe drinking water, clean rivers and beaches, flood protection), protect the environment, and support a stable California economy. This action plan lays out our challenges, our goals and decisive actions needed now to put California's water resources on a safer, more sustainable path. While this plan commits the state to moving forward, it also serves to recognize that state government cannot do this alone. Collaboration between federal, state, local and tribal governments, in coordination with our partners in a wide range of industry, government and nongovernmental organizations is not only important—it is essential. The input and contributions received from all of these partners throughout the drafting of this action plan have resulted in a comprehensive and inclusive plan.

Challenges for Managing California's Water Resources

Water has always been a scarce resource in California. Most of the precipitation falls on the west-facing slopes of Northern California mountain ranges, yet most of the population and irrigated farmland is located in the drier southern half of the state. Precipitation is highly variable year-to-year, but the long warm summers are always dry. In the mid-20th century, state, federal and local agencies vastly expanded the state's system of reservoirs, canals, pumps and pipelines to store water and deliver it to agricultural and urban users in dry areas. Also, in the late 20th century, significant investments were made in the state's flood protection system, including levees and bypasses. These changes to the physical infrastructure have resulted in unintended consequences to the natural world. In general, there is broad consensus about our challenges.

Uncertain water supplies – Reductions in water from major watersheds like the Colorado River watershed and the Sacramento-San Joaquin Delta (Delta) watershed—due to hydrologic and declining environmental conditions—have made these water supplies less reliable. Moreover, climate change impacts to these sources and the Cascade and Sierra headwaters will further strain supply reliability throughout the state. These sources are foundational supplies around which communities develop and manage local resources through strategies such as water use efficiency, recycled water, and groundwater recharge. The unreliable nature of these supplies threatens local, regional and statewide economies. **Collectively, the actions in this plan will contribute to more reliable water supplies.**

Water scarcity/drought – California’s hydrology has always included extended dry periods. Much of California’s water system was originally designed to withstand a seven-year dry period without severe damage to the economy and environment. Today some regions and many communities struggle to maintain adequate water supplies after only a year or two of dry conditions. Climate change makes this situation even more challenging. Less outflow of water coming from the Cascades and Sierras during periods of drought increases seawater intrusion into the Delta. Improving our ability to manage scarce water supplies and over-stressed groundwater basins and better coordination of major reservoir operations is essential to economic and environmental sustainability. Taking action to address drought is especially urgent for agriculture where crops wither without water, and the world’s growing population and food demand create food security concerns. **This action plan includes both immediate steps for 2014 as well as actions that will better prepare California for future droughts.**

Declining groundwater supplies – Groundwater accounts for more than one-third of the water used by cities and farms – much more in dry years, when other sources are cut back. Some of California’s groundwater basins are sustainably managed, but unfortunately, many are not. Inconsistent and inadequate tools, resources and authorities make managing groundwater difficult in California and impede our ability to address problems such as overdraft, seawater intrusion, land subsidence, and water quality degradation. Pumping more than is recharged lowers groundwater levels – which makes extracting water more expensive and energy intensive. Under certain conditions, excessive groundwater pumping could mobilize toxins that impair water quality and cause irreversible land subsidence which damages infrastructure and diminishes the capacity of aquifers to store water for the future. When properly managed, groundwater resources will help protect communities, farms and the environment against the impacts of prolonged dry periods and climate change. **The strategies identified in this action plan will move California toward more sustainable management of our groundwater resources.**

Poor water quality – It is a fact that millions of Californians rely, at least in part, on contaminated groundwater for their drinking water. While most water purveyors blend or treat water to meet public health standards, many disadvantaged communities cannot afford to do so. In addition, domestic wells are drying up in many areas. All Californians have a right to safe, clean, affordable and accessible water adequate for human consumption, cooking and sanitary purposes. Safe water is necessary for public health and community prosperity. **The methods set forth in this action plan will improve the organization of our water quality programs and create new tools to help ensure that every Californian has access to safe water.**

Declining native fish species and loss of wildlife habitat – California’s once robust native fish populations are at or near historic lows. Federal and state fish agencies now list many species of salmon and other fish as endangered and threatened. Wildlife habitat is also being lost at a rapid pace. Climate change further threatens the state’s natural biodiversity. Many do not understand that our fish and wildlife are part of the complex system that provides and protects California’s water resources. Tourism and fishing which provide economic benefits to local communities and to the state are also reliant on healthy ecosystems. Declining species and lost habitat disrupt the cultural, spiritual and ecological practices of California’s Native American tribes. Simply put, California’s diverse and unique ecosystems are irreplaceable and their loss threatens the sustainability of all of California’s communities. **The objectives in this action plan include aggressive ecosystem restoration and other steps that will restore fish populations and benefit wildlife.**

Floods – Over 7 million Californians live in a floodplain. Historically, flooding has occurred in all regions of the state. Our state’s capital, Sacramento, has one of the lowest levels of flood protection of any major city in the nation. Climate change will only exacerbate this problem. More precipitation will fall as rain rather than snow, snowmelt will occur earlier, and there will be more extreme weather events. **This action plan will serve to coordinate and streamline flood control efforts and result in multi-benefit flood projects, helping to mitigate the significant investments needed to improve flood protection for existing communities and infrastructure.**

Supply disruptions – Many parts of California’s water system are vulnerable to earthquakes and flooding, particularly the Delta, which serves as the conveyance hub for a substantial percentage of all water supplies in the Bay Area, the San Joaquin Valley, and Southern California. A large earthquake along any of five major faults or a major storm-induced levee failure could render this water supply unreachable or unusable for urban and agricultural needs for months. **The combined benefits of many of the actions in this plan will better prepare us to manage through potential disruptions in the system.**

Population growth and climate change further increase the severity of these risks – The state’s population is projected to grow from 38 million to 50 million by 2049.¹ The effects of climate change are already being felt and will worsen. The Sierra snowpack is decreasing, reducing natural water storage and altering winter and spring runoff patterns. This is most likely the result of higher temperatures and may also be related to air pollution that deposits fine particulate on the surface of snow, changing its reflectivity and causing it to absorb more heat and melt faster. Higher river and ocean water temperatures will make it harder to maintain adequate habitat for native fish species. Higher ocean temperatures will alter the already changing weather patterns. Sea level rise threatens coastal communities and islands in the Delta. Sea level rise also amplifies the risk that the pumps that supply cities and farms with Delta water will be inundated with seawater in a large earthquake or storms that breach levees. **The strategies identified in this action plan will help protect our resources from more frequent and more severe dry periods which threaten the health of our natural systems and our ability to meet our diverse water supply and water quality needs.**

Goals: Reliability, Restoration and Resilience

The California Water Action Plan has been developed to meet three broad objectives: more reliable water supplies, the restoration of important species and habitat, and a more resilient, sustainably managed water resources system (water supply, water quality, flood protection, and environment) that can better withstand inevitable and unforeseen pressures in the coming decades. Over the next five years, the actions discussed below will move California toward more sustainable water management by providing a more reliable water supply for our farms and communities, restoring important wildlife habitat and species, and helping the state’s water systems and environment become more resilient.

¹ <http://www.dof.ca.gov/research/demographic/reports/projections/view.php> California’s population will cross the 50 million mark in 2049 and grow to nearly 52.7 million by 2060.

Working Together and Continued Collaboration is Essential

Despite the many challenges for water management in California, there is good progress to report. There are thousands of important projects that are being planned or implemented by all levels of government as well as by conservationists, tribes, farmers, water agencies and others. State, regional and local agencies have increasingly been pursuing a strategy of making regions more self-reliant by reducing water demand and by developing new or underused water resources locally. In the future, most new water will come from a combination of improved conservation and water use efficiency, conjunctive water management (i.e., coordinated management of surface and groundwater), recycled water, drinking water treatment, groundwater remediation, and brackish and seawater desalination. There is increased focus on projects with multiple benefits, such as stormwater capture and floodplain reconnection, that can help simultaneously improve the environment, flood management and water supplies. These diversified regional water portfolios will relieve pressure on foundational supplies and make communities more resilient against drought, flood, population growth and climate change.

This Water Action Plan does not replace these local efforts. It complements and leverages them. Collaboration is essential. Successful implementation of this plan will require increased collaboration between state, federal and local governments, regional agencies, tribal governments, and the public and the private sectors. The Legislature is also a key partner.

Water has shaped California's past, its present, and will help define its future. Water has always been among the state's most contentious issues. California is at its best when people come together in the face of adversity to solve difficult problems. Only by working together can we improve and sustain the state's water future for generations to come.

Actions

1. Make conservation a California way of life;
2. Increase regional self-reliance and integrated water management across all levels of government;
3. Achieve the co-equal goals for the Delta;
4. Protect and restore important ecosystems;
5. Manage and prepare for dry periods;
6. Expand water storage capacity and improve groundwater management;
7. Provide safe water for all communities;
8. Increase flood protection;
9. Increase operational and regulatory efficiency;
10. Identify sustainable and integrated financing opportunities.

Together, these actions address the most pressing water issues that California faces while laying the groundwork for a sustainable and resilient future and are critical to moving the state forward now. They reflect an integration of new ideas with the ongoing important work that the state and federal government, local agencies, and others are already engaged in and require coordination and collaboration across levels of government. They will not address all of our challenges. Some of these actions are new proposals. Some are currently being planned and should be completed more rapidly, implemented in a better way, or on a larger scale. Success will require the cooperation of many partners; the state's role is to lead, help others, and remove barriers to action.

1. MAKE CONSERVATION A CALIFORNIA WAY OF LIFE

Conservation must become a way of life for everyone in California. Much has changed in the past half century, and our technology, values and awareness of how we use water have helped to integrate conservation into our daily lives. There is more that can be done and all Californians must embrace this effort. In 2009, the state adopted the Water Conservation Act through the passage of Senate Bill X7 7 requiring that we achieve a 20 percent reduction in urban per capita water use by December 31, 2020, promoting expanded development of sustainable water supplies at the regional level, and requiring agricultural water management plans and efficient water management practices for agricultural water suppliers. Conservation and efficiency are also keys to reducing the energy needed to pump, transport, treat and deliver water – an important action included in the state’s Climate Change Scoping Plan for reducing greenhouse gas emissions. We must continue to build on our existing efforts to conserve water and promote the innovation of new systems for increased water conservation.

- **Expand Agricultural and Urban Water Conservation and Efficiency to Exceed SBX7 7 Targets**
The administration will expand existing programs to provide technical assistance, shared data and information, and incentives to urban and agricultural local and regional water agencies, as well as local governmental agencies, to promote agricultural and urban water conservation in excess of the amounts envisioned by SBX7 7. We will work collaboratively with stakeholders to identify and remove impediments to achieving statewide conservation targets, recycling and stormwater goals; to evaluate and update targets for additional water use efficiency, including consideration of expanding the 20 percent by 2020 targets by holding total urban water consumption at 2000 levels until 2030, achieving even greater per capita reductions in water use. The administration will also work with local and regional entities to develop performance measures to evaluate agricultural water management.
- **Provide Funding for Conservation and Efficiency**
The administration will work with the Legislature to expand funding for urban and agricultural water use efficiency research, and the development and implementation of efficiency standards through existing and new programs that save water and the energy associated with water use. Conservation programs must include numeric targets and be designed to achieve the state-developed targets and performance measures.
- **Increase Water Sector Energy Efficiency and Greenhouse Gas Reduction Capacity**
The administration will continue supporting the collection of regional data and development of efficiency standards that save water and energy associated with water use and will provide guidance on conservation rates and sustainable financing that achieve water and energy savings. The administration will also continue to collaborate with water and wastewater agencies and energy utilities to educate consumers on the water-energy nexus. The administration will work with the Legislature to eliminate barriers to co-funding projects with water and energy benefits and expand and prioritize funding and technical support for water and wastewater agencies that achieve energy efficiency co-benefits and greenhouse gas reductions.
- **Promote Local Urban Conservation Ordinances and Programs**
Local agencies are increasingly conserving water by prohibiting certain types of wasteful water use. Examples include: prohibiting watering hard surfaces such as sidewalks, walkways, driveways or parking areas; prohibiting outdoor watering during periods of rain; and not serving water to customers in restaurants unless specifically requested. Local agencies are also pioneering incentive programs, for example, converting lawns to drought tolerant landscapes—and programs to capture rainwater.

2. INCREASE REGIONAL SELF-RELIANCE AND INTEGRATED WATER MANAGEMENT ACROSS ALL LEVELS OF GOVERNMENT

While California has vast infrastructure to store and deliver water miles from its origin, the majority of infrastructure management and investment resides at the local and regional levels. Sometimes that management is done by agencies responsible for multiple functions such as flood management, water supply and water quality. Other times, individual agencies handle those functions separately. Over the past decade, the state has provided technical and financial assistance to regions to incentivize inter-agency/stakeholder cooperation in planning and implementing multi-objective actions that provide both regional and statewide benefits to water resources management and protection. Called "integrated water management," this approach balances the objectives of improving public safety, fostering environmental stewardship, and supporting economic stability. Developing local supplies can also save energy by reducing the distance that water must be transported. State grants are provided to both incentivize regional integration and leverage local financial investment.

Ensuring water security at the local level includes efforts to conserve and use water more efficiently, to protect or create habitat for local species, to recycle water for reuse, to capture and treat stormwater for reuse, and to remove salts and contaminants from brackish or contaminated water or from seawater. But, mostly it requires integrating disparate or individual government efforts into one combined regional commitment where the sum becomes greater than any single piece.

- **Support and Expand Funding for Integrated Water Management Planning and Projects**
The administration will work with the Legislature to enhance the Integrated Water Management Planning program. Providing funding for regionally-driven, multi-benefit projects that prioritize protection of public health is critical. The administration will target funding to local regional projects that increase regional self-reliance and result in integrated, multi-benefit solutions for ensuring sustainable water resources.
- **Update Land Use Planning Guidelines**
The Governor's Office of Planning and Research (OPR) will engage local land use authorities, California Native American tribes, and water agencies to amend the general plan guidelines to promote greater consistency between local land use plans and decisions and integrated regional water management plans and decisions. OPR will also work with the Legislature to determine whether water should be a mandatory feature of the general plan guidelines.
- **Legislation for Local and Regional Self Reliance**
The administration will work with the Legislature to encourage local governments to adopt or amend local ordinances that enhance local and regional water supply reliability and conservation, such as ordinances that establish minimum requirements for infiltration or injection of water into the groundwater table, detection and prevention of utility system leaks, landscaping measures, and indoor/outdoor water use efficiency standards.
- **Provide Assistance to Disadvantaged Communities**
The administration will provide technical assistance, tools, and allocate dedicated funds for grant administration, project development, and stakeholder collaboration to under-represented and economically-disadvantaged communities to promote greater participation and success in regional grant programs.

- **Demonstrate State Leadership**

All state agencies should take a leadership role in designing new and retrofitted state owned and leased facilities to increase water efficiency, use recycled water, and incorporate stormwater runoff capture and low-impact development strategies.

- **Encourage State Focus on Projects with Multiple Benefits**

The administration will direct agencies and departments to evaluate existing programs and propose modifications to incentivize and co-fund multi-benefit projects that promote integrated water management, such as stormwater permits that emphasize stormwater capture and infiltration, which provide both flood protection and groundwater recharge benefits, and agricultural groundwater recharge projects that emphasize water quality and conjunctive use. The commitment to emphasize multiple benefit projects will be applied to most of the actions in this plan.

- **Increase the Use of Recycled Water**

California needs more high quality water, and recycling is one way of getting there. The state will adopt uniform water recycling criteria for indirect potable reuse of recycled water for groundwater recharge. Technical and financial assistance will be provided to projects that meet these criteria. The administration will also develop criteria for direct potable reuse and will seek to consolidate the state's recycling programs in the State Water Resources Control Board to promote program efficiencies.

- **Streamline Permitting for Local Water Reuse or Enhancement Projects**

The administration will review and propose measures to streamline permitting for local projects that make better use of local water supplies such as recycling, stormwater capture, and desalination of brackish and seawater as well as projects that provide multiple benefits, such as enhancing local water supplies while improving wildlife habitat.

3. ACHIEVE THE CO-EQUAL GOALS FOR THE DELTA

The Delta is California's major collection point for water, serving two-thirds of our state's population and providing irrigation water for millions of acres of farmland. The region supports farming, wetland and riparian habitats, as well as numerous fish and wildlife species. In recent years, important fish populations have declined dramatically, leading to historic restrictions on water supply deliveries. Moreover, the current system relies on water flowing through a network of fragile levees from the northern part of the Delta to the pumps in the south, where two out of three fish trapped near the pumps die. These levees were not designed to resist a significant seismic event, the probability of which is greater than 60 percent over the next 50 years. They are also vulnerable to major floods and rising sea levels, all of which puts unacceptable risk on the people who live in the Delta as well as the water supply for 25 million people and 3 million acres of farmland. Plans are underway to address these problems. The issues are contentious and have been for decades. But, the status quo in the Delta is unacceptable and it would be irresponsible to wait for further degradation or a natural disaster before taking action.

The Delta Stewardship Council was created in legislation to achieve the state-mandated co-equal goals of providing a more reliable water supply for California and to protect, restore and enhance the Delta ecosystem. Those two goals are to be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource and agricultural values of the Delta as an evolving place. The council recently adopted its Delta Plan and will establish a high-level interagency coordinating body to commence implementation of a suite of actions designed to achieve the co-equal goals. The Implementation Committee can play a strong role in moving forward on the actions included in this plan, which include and build on many of the priorities included in the council's Delta Plan.

- **Begin Implementation of the Delta Plan**

The administration directs all of its relevant agencies to fully participate in the Implementation Committee established by the Delta Stewardship Council and to work with the Delta Science Program, the Interagency Ecological Program, and others to implement the Delta Science Plan to enhance water and natural resource policy and management decisions.

- **Complete Comprehensive Plans to Recover Populations of Threatened and Endangered Species in the Delta and Improve Water Supply Reliability for Users of Delta Water**

State and federal agencies will complete planning for a comprehensive conservation strategy aimed at protecting dozens of species of fish and wildlife in the Delta, while permitting the reliable operation of California's two biggest water delivery projects. The Bay Delta Conservation Plan (BDCP) will help secure California's water supply by building new water delivery infrastructure and operating the system to improve the ecological health of the Delta. It will also restore or protect approximately 145,000 acres of habitat to address the Delta's environmental challenges. The BDCP is made up of specific actions, called conservation measures, to improve the Delta ecosystem. It includes 22 conservation measures aimed at improving water operations, protecting water supplies and water quality, and restoring the Delta ecosystem within a stable regulatory framework. The project will be guided by 214 specific biological goals and objectives, improved science, and an adaptive management approach for operating the water conveyance facilities and implementing other conservation measures including habitat restoration and programs to address other stressors. As the Delta ecosystem improves in response to the implementation of the conservation measures, water operations would become more reliable, offering secure water supplies for 25 million Californians, an agricultural industry that feeds millions, and a thriving economy.

State and federal agencies will complete the state and federal environmental review documents; seek approval of the BDCP by the state and federal fishery agencies; secure all permits required to implement the BDCP; finalize a financing plan; complete the design of BDCP facilities; and begin implementation of all conservation measures and mitigation measures, including construction of water conveyance improvements. Once the BDCP is permitted, it will become part of the Delta Plan.

- **Restore Delta Aquatic and Intertidal Habitat**

In coordination with restoration proposed by the BDCP, a specific set of projects or acreage for restoration will be identified in the six priority areas listed in the Delta Plan: (1) Yolo Bypass; (2) Cache Slough Complex; (3) the confluence of the Cosumnes and Mokelumne rivers; (4) the lower San Joaquin River floodplain; (5) Suisun Marsh; and, (6) western Delta/eastern Contra Costa County. The Department of Water Resources, in consultation and coordination with the Department of Fish and Wildlife, the Delta Science Program, and the Delta Plan Implementation Committee will initiate projects to restore 8,000 acres of intertidal and associated subtidal habitat in the Delta and Suisun Marsh. These agencies will also coordinate with federal agency partners to ensure consistency with federal restoration efforts or requirements.

- **Implement Near-Term Delta Improvement Projects**

In coordination with restoration proposed in BDCP, the Department of Water Resources will initiate a project to remove fish passage barriers within the Yolo Bypass and modify the Fremont Weir to increase the amount and quality of fish rearing habitat by improving access to seasonal floodplain habitat.

- **Maintain Important Infrastructure**

The Department of Water Resources will continue implementation of the Delta Levees Subventions, Delta Special Projects, and Floodway Corridor Programs to provide financial assistance to local agencies for repair and improvement of levees and other multipurpose projects in the Delta.

- **Bay Delta Water Quality Control Plan**

The State Water Resources Control Board will complete its update of the Water Quality Control Plan for the Delta and its upstream watersheds. The plan establishes both regulatory requirements and recommended actions. The State Water Resources Control Board's action will balance competing uses of water including, municipal and agricultural supply, hydropower, fishery protection, recreation, and other uses.

4. PROTECT AND RESTORE IMPORTANT ECOSYSTEMS

Streams and rivers once ran freely from high in the mountains to downstream reaches, meandering naturally through lowland and floodplain habitats, connecting with coastal estuaries and the Pacific Ocean. The variability of natural water flows in this complex system created vibrant and resilient habitat for many species and functioned to store water, recharge groundwater, naturally purify water, and moderate flooding. Over 80 percent of the Central Valley's historical floodplain, riparian and seasonal wetland habitats have been lost in the last 150 years. This loss affects the physical and ecological processes of the Central Valley and beyond, contributes to the decline of salmon and steelhead, restricts habitat for waterfowl and other species, and impacts water supply, flood protection, and sediment control. In watersheds around the state, fish and wildlife no longer have access to habitat or enough cold, clean water at key times of the year. In response to these losses and ecological challenges, as well as in anticipation of the effects of climate change on the timing, volume and temperature of water flows, activities to protect and restore the resiliency of our ecosystems will help support fish and wildlife populations, improve water quality, and restore natural system functions. This effort will increase collaboration and transparency and ensure that management decisions are supported by the best available science.

- **Restore Key Mountain Meadow Habitat**

The Department of Fish and Wildlife, in coordination with other state resource agencies, will restore 10,000 acres of mountain meadow habitat in strategic locations in the Sierra Nevada and Cascade mountain ranges, which can increase groundwater storage and provide habitat for more than 100 native species, many of which are at risk as threatened or endangered. The department will also coordinate with federal agencies, local governments, conservation organizations, tribes, and others as necessary on this action to maximize efforts and avoid duplication.

- **Manage Headwaters for Multiple Benefits**

Watersheds in the Cascades, Sierra Nevada and other forested areas of the state are the places of origin for more than two-thirds of the state's developed water supply. Water originating in the Cascades and Sierra Nevada supplies all or part of the need for 23 million Californians and millions of acres of agricultural land. Up to one-half of the fresh water flowing into the Delta begins as snow and rain in these watersheds.

Many of these crucial watersheds are in poor health due to a number of factors. A changing climate of warmer temperatures will exacerbate the diseases and pests that create additional fire risk and, with more precipitation falling as rain instead of snow, create significant operational challenges for our reservoirs. Large, intense fires such as the recent Rim Fire will produce tons of sediment, much of which will end up in reservoirs, significantly reducing storage capacity and impacting water quality.

In order to reduce the significant risks posed to the water resources flowing from the Cascade, Sierra and other watersheds in the state, there is a critical need to address the following:

- Restore forest health through ecologically sound forest management. Overgrown forests not only pose a risk of catastrophic fire, but can significantly reduce water yield.
 - Protect and restore degraded stream and meadow ecosystems to assist in natural water management and improved habitat. Meadows provide a natural storage opportunity, critically important with a changing climate, while properly functioning stream systems reduce downstream sedimentation and enhance critical aquatic habitat.
 - Support and expand funding for protecting strategically important lands within watersheds to ensure that conversion of these lands does not have a negative impact on our water resources. By working with willing landowners, protection of key lands from conversion will result in a healthier watershed by reducing polluted runoff and maintaining a properly functioning ecosystem.
- **Bring Back Salmon to the San Joaquin River**

The Department of Fish and Wildlife and the Department of Water Resources will lead the state's effort to achieve the goals of restoring flows to the San Joaquin River from Friant Dam to the confluence of the Merced River, and bring back a naturally-reproducing, self-sustaining Chinook salmon fishery while reducing or avoiding adverse water supply impacts. Chinook will be reintroduced pursuant to the San Joaquin River Restoration Program, and the Department of Fish and Wildlife will complete construction of the conservation hatchery and research facility. The Department of Water Resources will perform activities that support the implementation of channel and structural improvements that result in restoring fish and flows. The administration will work with the Legislature and others to secure further funding as necessary to achieve these activities and the restoration goal.
 - **Protect Key Habitat of the Salton Sea Through Local Partnership**

The Natural Resources Agency, in partnership with the Salton Sea Authority, will coordinate state, local and federal restoration efforts and work with local stakeholders to develop a shared vision for the future of the Salton Sea. The Salton Sea is one of the most important migratory bird flyways in North America and is immediately threatened with reduced inflows and increasing salinity. The Department of Fish and Wildlife and the Department of Water Resources will begin immediately to implement the first phase of this effort with the construction of 600 acres of near shore aquatic habitat to provide feeding, nesting and breeding habitat for birds. This project is permitted to increase to 3,600 acres and could be scaled even greater with additional resources. Concurrently, the Natural Resources Agency and the Salton Sea Authority are developing a roadmap for the Salton Sea that will evaluate additional restoration projects and identify economic development opportunities through renewable energy development.
 - **Restore Coastal Watersheds**

The Department of Fish and Wildlife in coordination with other state resource agencies and other stakeholders, as appropriate, will develop at least 10 off-channel storage projects, modernize at least 50 stream crossings, and also implement at least 10 large-scale habitat projects along the California coast in strategic coastal estuaries to restore ecological health and natural system connectivity, which will benefit local water systems and help defend against sea level rise.

- **Continue Restoration Efforts in the Lake Tahoe Basin**

California, in partnership with the state of Nevada and the federal government, will continue its efforts to protect the beautiful and unique waters of Lake Tahoe. The Natural Resources Agency will maintain its role in leading the coordination of the state departments, the boards, and the conservancy involved in the bi-state efforts underway to restore, preserve and enhance the Lake Tahoe region. California's restoration efforts at Lake Tahoe include, among other things, support of the Tahoe Regional Planning Agency's implementation of its Regional Plan Update, putting into place the science provisions contained in the recently enacted SB 630, and support for projects contained in the region's Environmental Improvement Program.

- **Continue Restoration Efforts in the Klamath Basin**

The Department of Fish and Wildlife and the Natural Resources Agency will continue to work with diverse stakeholders to implement the Klamath Basin restoration and settlement agreements. Those agreements include measures to improve water quality in the Klamath River, restore anadromous fish runs, including Chinook and Coho salmon, and improve water reliability for agricultural and other uses by providing a drought planning mechanism for low water years. The administration will work with Congress to secure the necessary federal authorizations for the agreements and secure the necessary funding for removal of four hydroelectric dams on the Klamath River and funding for the necessary basin restoration.

- **Water for Wetlands and Waterfowl**

The Department of Fish and Wildlife in coordination with other state resource agencies will develop and implement a water acquisition, management, and water use efficiency strategy in coordination with the U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, Central Valley Project Improvement Act refuge water program, and Central Valley Joint Venture to secure reliable and affordable water for managed wetlands statewide. The administration will work with the Legislature, and others, to secure funding to acquire water and to replace or repair the most in need conveyances for delivering water for wetlands.

- **Eliminate Barriers to Fish Migration**

This action has three parts. First, in coordination with the Central Valley Project Improvement Act Anadromous Fish Screen Program, the Department of Fish and Wildlife will create and publish a Priority Unscreened Diversion List in the Central Valley area. Second, the administration will work with the Legislature and others to secure funding to install or repair the top 10 unscreened diversions on the priority list described above. Third, in smaller watersheds around the state, the Department of Fish and Wildlife will complete a comprehensive analysis, working with other state and federal agencies, to optimize barrier removal projects and river and stream priorities, and then complete culvert and bridge improvement and small dam removal projects to provide anadromous fish species access to historic spawning and rearing habitat.

- **Assess Fish Passage at Large Dams**

The Department of Fish and Wildlife, in coordination with state and federal resource agencies, will develop an evaluation and feasibility process for addressing fish passage at California's rim dams and develop rim dam solution plans for the most feasible locations. Rim dams are the large dams at the base of most major river systems in California. They are too integral to California's water infrastructure to consider removing, but, where feasible, passage around the rim dams may be necessary to recover salmon and steelhead, because 95 percent of the historical habitat for these fish is above the dams. This action will require coordination with local water agencies and dam owners and operators, as well as other stakeholders.

- **Enhance Water Flows in Stream Systems Statewide**

The State Water Resources Control Board and the Department of Fish and Wildlife will implement a suite of individual and coordinated administrative efforts to enhance flows statewide in at least five stream systems that support critical habitat for anadromous fish. These actions include developing defensible, cost-effective, and time-sensitive approaches to establish instream flows using sound science and a transparent public process. When developing and implementing this action, the State Water Resources Control Board and the Department of Fish and Wildlife will consider their public trust responsibility and existing statutory authorities such as maintaining fish in good condition.

- **Achieve Ecological Goals through Integrated Regulatory and Voluntary Efforts**

The San Francisco Bay and Sacramento-San Joaquin River Delta are some of the most studied ecosystems in the nation. Similarly, there are many scientific and management plans about the decline of salmon and steelhead in California. A fundamental ecological principle is that aquatic species and estuarine ecosystems need enough cold, clean water at the right times of year to ensure species abundance and health and ecological function. Integration across and between all voluntary and regulatory efforts may be necessary to truly achieve basic ecological outcomes.

As a goal, the state must continue to consider how to provide water flows necessary to meet current state policy, such as significantly increasing salmon, steelhead and trout populations while also supporting viable, self-sustaining populations of a broad range of other native aquatic species, and ensure sustainable river and estuary habitat conditions for a healthy, functional Bay Delta ecosystem. The administration, with the involvement of stakeholders, will build on the work in tributaries to the Sacramento and San Joaquin rivers, analyze the many voluntary and regulatory proceedings underway related to flow criteria, and make recommendations on how to achieve the salmon and steelhead and ecological flow needs for the state's natural resources through an integrated, multi-pronged approach.

5. MANAGE AND PREPARE FOR DRY PERIODS

Water supply reliability is critical to maintaining California's economy. Temporary shortages caused today by extended, severe dry periods will become more frequent with climate change. Effective management of water resources through all hydrologic conditions will reduce impacts of shortages and lessen costs of state response actions. Many actions will help to secure more reliable water supplies and consequently improve drought preparedness. The actions identified below are specifically designed to address drought conditions and make California's water system more resilient.

- **Revise Operations to Respond to Extreme Conditions**

State natural resources and water quality agencies, in collaboration with their federal counterparts, will implement a series of administrative solutions through a transparent process to make water delivery decisions and propose options to address water quality and supply objectives in extreme conditions. Through these state agencies, the administration will exercise the maximum administrative discretion and flexibility possible to address the current dry conditions now and into 2014. Especially in drought conditions, adaptive management can have substantial fishery, water quality, and water supply benefits. The identification of such opportunities requires continued improved water forecasting and prompt inter and intra agency coordination and communication. It also requires an effective coordination mechanism involving the Department of Water Resources, the U.S. Bureau of Reclamation, the State Water Project and the Central Valley Project contractors, the state and federal fishery agencies, and the State Water Resources Control Board, at a minimum.

- **Streamline Water Transfers**

State agencies, in collaboration with their federal counterparts, will take all feasible steps to streamline water transfer processes to address both extreme situations and normal system operations. These include refining the schedule for the water transfer process, while considering cumulative, ground and surface water and third party impacts; and ensuring that transfers are based on measured water use. The administration will also improve outreach in support of local water transfer programs.

6. EXPAND WATER STORAGE CAPACITY AND IMPROVE GROUNDWATER MANAGEMENT

On average, the state receives about 200 million acre-feet of water per year in the form of rain and snow. In reality, the average rarely occurs, as California has the most variable weather conditions in the nation and climate change may increase the variability. Storage, whether surface storage or groundwater storage, can hold water when it flows heavily for use at times when it does not and create greater flexibility in the system. Above ground (surface storage) can be in the form of large on-stream dams and reservoirs, or smaller on stream and off stream reservoirs. Groundwater storage consists of replenishing groundwater basins either directly through injection, or by allowing water to percolate into the ground naturally or from constructed spreading basins and some forms of stormwater capture. Surface storage can be operated in conjunction with groundwater storage to increase opportunities for groundwater recharge during high flow periods and thereby increase comprehensive water management benefits. Constructing surface storage can be challenging for environmental or financial reasons. Developing groundwater storage can be challenging because many basins are contaminated and this method of storage also requires an ability to measure and withdraw water.

The bottom line is that we need to expand our state's storage capacity, whether surface or groundwater, whether big or small. Today, we need more storage to deal with the effects of drought and climate change on water supplies for both human and ecosystem needs. Climate change will bring more frequent drought conditions and could reduce by half our largest natural storage system—the Sierra snowpack—as more precipitation falls as rain rather than snow, and as snow melts earlier and more rapidly. Moreover, we must better manage our groundwater basins to reverse alarming declines in groundwater levels. Continued declines in groundwater levels could lead to irreversible land subsidence, poor water quality, reduced surface flows, ecosystem impacts, and the permanent loss of capacity to store water as groundwater.

Demand for water goes well beyond water supply and flood management, the traditional purposes for which California's major reservoirs were built. Today, water storage is also needed to help provide widespread public and environmental benefits, such as seasonal fish flows, improved water quality, water cool enough to sustain salmon, and increased flexibility to meet multiple demands, especially in increasingly dry years. The financing of additional water storage in California must reflect not just specific local benefits, but also these broader public benefits.

- **Provide Essential Data to Enable Sustainable Groundwater Management**

The administration will expand and fund the California Statewide Groundwater Elevation Monitoring Program, which provides essential data to characterize the state's groundwater basins, including identifying basins in decline. In coordination with federal, tribal, local and regional agencies, state agencies will conduct groundwater basin assessments and develop assessment reports.

- **Support Funding Partnerships for Storage Projects**

The administration will work with the Legislature to make funding available to share in the cost of storage projects if funding partners step forward. The state will facilitate among willing local partners and stakeholders the development of financeable, multi-benefit storage projects, including working with local

partners to complete feasibility studies. For example, the Sites Project Joint Powers Agreement, formed by a group of local government entities in the Sacramento Valley, is a potential emerging partnership that can help federal and state government determine the viability of a proposed off stream storage project – Sites Reservoir.

- **Update Bulletin 118, California’s Groundwater Plan**

The Department of Water Resources, in consultation with the U.S. Bureau of Reclamation, U.S. Geological Survey, the State Water Resources Control Board, and other agencies and stakeholders will update Bulletin 118 using field data, California Statewide Groundwater Elevation Monitoring, groundwater agency reports, satellite imagery, and other best available science, so that this information can be included in the next California Water Plan Update and be available for inclusion in future water management and land use plans. The Bulletin 118 update should include a systematic evaluation of major groundwater basins to determine sustainable yield and overdraft status; a projection of California’s groundwater resources in 20 years if current groundwater management trends remain unchanged; anticipated impacts of climate change on surface water and groundwater resources; and recommendations for state, federal and local actions to improve groundwater management. In addition, the Bulletin 118 update should identify groundwater basins that are in a critical condition of overdraft.

- **Improve Sustainable Groundwater Management**

Groundwater is a critical buffer to the impacts of prolonged dry periods and climate change on our water system. The administration will work with the Legislature to ensure that local and regional agencies have the incentives, tools, authority and guidance to develop and enforce local and regional management plans that protect groundwater elevations, quality, and surface water-groundwater interactions. The administration will take steps, including sponsoring legislation, if necessary, to define local and regional responsibilities and to give local and regional agencies the authority to manage groundwater sustainably and ensure no groundwater basin is in danger of being permanently damaged by over drafting. When a basin is at risk of permanent damage, and local and regional entities have not made sufficient progress to correct the problem, the state should protect the basin and its users until an adequate local program is in place.

- **Support Distributed Groundwater Storage**

The administration will support a comprehensive approach to local and regional groundwater management by funding distributed groundwater storage projects that are identified in groundwater management plans and removing barriers to implementation.

- **Increase Statewide Groundwater Recharge**

The administration will work with the Legislature to discourage actions that cause groundwater basin overdraft and provide incentives that increase recharge. State agencies will work with tribes and federal, regional and local agencies on other actions related to promoting groundwater recharge and increasing storage, including improving interagency coordination, aligning land use planning with groundwater recharge, and identifying additional data and studies needed to evaluate opportunities, such as capturing and recharging stormwater flows and other water not used by other users or the environment.

- **Accelerate Clean-up of Contaminated Groundwater and Prevent Future Contamination**

Throughout the state, groundwater basins are contaminated by historic manufacturing, farming practices and other current uses. The State Water Resources Control Board and the Department of Toxic Substances Control will develop recommendations and take action to prevent the spread of

contamination, accelerate cleanup, and protect drinking water in urban areas. The State Water Resources Control Board will continue to implement appropriate control measures to address these sources through its water quality permitting authority.

7. PROVIDE SAFE WATER FOR ALL COMMUNITIES

All Californians have a right to safe, clean, affordable and accessible water adequate for human consumption, cooking, and sanitary purposes. Disadvantaged communities, in particular, often struggle to provide an adequate supply of safe, affordable drinking water. The reasons for this are numerous: changes in drinking water quality standards, pollution, aging infrastructure, lack of funding for basic infrastructure, lack of funding for ongoing operation and maintenance, and unreliable supplies resulting in service interruptions are among the most common. Programs designed to protect the quality of our waters for drinking and other uses are housed in multiple agencies, reducing their effectiveness and ability to meet communities' needs.

- **Consolidate Water Quality Programs**

The administration is pursuing consolidation of the drinking water and surface and groundwater quality programs into a single agency to achieve broader program efficiencies and synergies that will best position the state to respond to existing and future challenges. This initiative will also better restore and protect water quality and public health for disadvantaged communities.

- **Provide Funding Assistance for Vulnerable Communities**

The administration will work with the Legislature to establish a stable, long-term funding source for provision of safe drinking water and secure wastewater systems for disadvantaged communities. The funding will be made available through a framework of statutory authorities for the state, tribes, regional organizations, and county agencies that will assess alternatives for providing safe drinking water and wastewater, including regional consolidation, and to develop, design, implement, operate and manage these systems for small disadvantaged communities impacted by contaminated drinking water and lack of sanitary wastewater infrastructure.

- **Manage the Supply Status of Community Water Systems**

The state will identify drought-vulnerable public water systems and monitor the status of these systems to help prevent or mitigate any anticipated shortfalls in supply and to secure alternative sources of water for the communities when needed. The state will also work with local governments and agencies to identify drought-vulnerable areas served by domestic wells and collaborate to prevent or mitigate any anticipated shortfalls.

8. INCREASE FLOOD PROTECTION

California's exposure to flood risk presents an unacceptable threat to public safety, infrastructure, and our economy. More than 7 million people and \$580 billion in assets are exposed to flood hazards in the state and the lack of sufficient and stable funding for flood management exacerbates the state's risk.

When California floods, public safety and health is endangered, critical infrastructure is damaged, vital services become isolated or interrupted, vast agricultural areas are rendered unproductive, and water supplies are threatened or impacted. The effects of climate change on the state's water runoff patterns will magnify these challenges. Actions by state, local, tribal and regional governments, however, can reduce flood risks and improve

the state's preparedness and resiliency when flooding inevitably occurs. Flood projects done in an integrated, regionally-driven way can also achieve multiple benefits. It is possible through collaborative planning efforts to integrate our flood and water management systems, and implement flood projects that protect public safety, increase water supply reliability, conserve farmlands, and restore ecosystems.

- **Streamline and Consolidate Permitting**

The administration will convene a task force of federal, state and local permitting and flood management agencies, to develop a programmatic regulatory permitting process to replace current site-by-site mitigation requirements and expedite permitting of critical maintenance activities and flood system improvement projects. The effort to streamline and consolidate will also incorporate regional advanced mitigation as a means to expedite planning.

- **Create a Delta Levee Assessment District**

The administration, in consultation with the Delta Protection Commission and the Department of Water Resources, will sponsor legislation establishing a Sacramento-San Joaquin River Delta levee assessment district with authority to collect fees needed to repair and maintain more than 1,000 miles of Delta levees, many of them privately constructed before modern engineering standards were in place.

- **Improve Access to Emergency Funds**

The administration will sponsor legislation revising the California Disaster Assistance Act to enhance the Governor's Office of Emergency Services' ability to advance funds for flood response efforts in close coordination with the Department of Water Resources.

- **Better Coordinate Flood Response Operations**

The Governor's Office of Emergency Services, working in coordination with the Department of Water Resources, the U.S. Army Corp of Engineers, and others, will develop and implement a common interagency protocol that all jurisdictions and agencies at all levels of government operating in the Delta in an emergency will use to establish joint field incident commands for flood operations and other emergency response functions.

- **Prioritize Funding to Reduce Flood Risk and Improve Flood Response**

An estimated \$50 billion is needed to reduce flood risk statewide. The administration will focus on the highest risk areas and develop proposals to fund projects through a combination of financing options.

- **Identify State Funding Priorities for Delta Levees**

The Delta Stewardship Council, in consultation with the Department of Water Resources, the Central Valley Flood Protection Board, the Delta Protection Commission, local agencies, and the California Water Commission, should develop funding priorities for state investments in Delta levees. These priorities will be consistent with the provisions of the Delta Reform Act in promoting effective, prioritized strategic state investments in levee operations, maintenance, and improvements in the Delta for both levees that are a part of the State Plan of Flood Control and non-project levees.

- **Encourage Flood Projects That Plan for Climate Change and Achieve Multiple Benefits**

State agencies engaged in planning and implementing flood projects, such as those outlined in the Central Valley Flood Protection Plan, will factor in the effects of climate change as well as pursue projects that provide the greatest number of benefits in addition to flood and public safety. Projects should be developed in a manner that anticipates the extremes that are predicted to worsen due to climate change, and pursue multiple benefits as a climate adaptation strategy like increasing water supply reliability,

giving rivers more room to move through widening floodways, conserving farmlands, and restoring ecosystems.

9. INCREASE OPERATIONAL AND REGULATORY EFFICIENCY

Efficiently operating the State Water Project and Central Valley Project, while complying with the requirements of state and federal endangered species acts and operating consistent with the conditions of water rights, contracts and other entitlements, is a delicate balancing act. Current coordination efforts, while longstanding and intended to cover a broad range of conditions, do not reflect the entire Delta watershed, nor do they effectively integrate all of the activities that other agencies and organizations are undertaking to improve the ecosystem.

- **Prepare for 2014 and Beyond Through Better Technology and Improved Procedures**

The administration will work with federal and regional counterparts to improve coordination of operations of all major water supply (storage facilities and direct diversions), flood control, hatchery facilities, and habitat restoration projects to improve water supply and fishery conditions. The goals are to improve water project near-term operational flexibility for water year 2014 and build upon those actions in subsequent years. Better technology can result in improved coordination and more accurate data for decision making. Examples of better technology and improved coordination include but are not limited to the following:

- Improve data availability, communication procedures, and analytical methods used to monitor and communicate risks to listed fish species and to water supplies when making regulatory decisions associated with implementation of incidental take provisions in the existing biological opinions.
- Develop a pilot project to test if a new index for Old River and Middle River reverse flows enables compliance with biological opinion requirements.
- Develop and employ new turbidity models to improve real-time turbidity management in the south Delta.
- Analyze through the South Delta Science Collaborative associated operational approaches for minimizing loss of salmon in the area of the Old River barrier and effects of the operations on water supply.
- Develop a Delta smelt life cycle model to help manage operations to avoid entrainment of smelt at the water project's intakes.
- Implement a 3.5-year study to enhance and modernize Delta smelt monitoring (fish abundance and geographic distribution in the Delta), to improve the ability to protect fish populations while minimizing the impacts of fish protective measures on water project operations.
- Work with federal agencies to improve coordination of hatchery fish releases with hydrologic conditions and water project operations to improve fish survival.
- Improve state and federal interagency coordination and water contractor coordination on real-time forecasting and management associated with meeting water quality control objectives, to optimize project operations and avoid redirected fishery impacts.

- Fund and revive the National Hydrological Dataset for California to improve high-quality framework geospatial data and the precision and accuracy of mapping and scientific studies.
- **Improve and Clarify Coordination of State Bay Delta Actions**
The problems affecting the Delta need to be addressed on multiple fronts, including habitat loss, export conveyance, water projects operations, pollution control, and flows. The principal state entities charged with addressing these issues are the Delta Stewardship Council, Department of Water Resources, Department of Fish and Wildlife, and the State Water Resources Control Board. Several federal agencies exercise regulatory authority related to these issues. There are also multiple water districts, private parties, nongovernmental organizations and tribal communities with a profound stake in these issues.

A coordinated approach to managing the Delta is essential to serve the needs of California’s residents. State agencies will commit to using collaborative processes to achieve water supply, water quality and ecosystem goals. This approach embraces enhanced sharing of data, consistent use of peer-reviewed science, coordinated review under the California Environmental Quality Act, improved integration of related processes, and encouragement of negotiated resolutions.

- The Delta Stewardship Council, Department of Water Resources, Department of Fish and Wildlife, and the State Water Resources Control Board will ensure all relevant information is shared and will assist each other, as appropriate, to complete respective efforts to improve Delta conditions.
- State entities will encourage negotiated agreements among interested parties to implement flow and non-flow actions to meet regulatory standards and support all beneficial uses of water. State staff will participate in these processes to the maximum extent possible when requested.
- The Delta Stewardship Council’s Implementation Committee, which includes leaders from all the affected state entities, will meet regularly to review progress in coordination.
- The administration will direct relevant agencies and departments to work with the Delta Science Program, the Interagency Ecological Program, and others conducting science in the Delta to implement the Delta Science Plan, committing resources and funding for shared science to achieve integrated, collaborative and transparent science to enhance water and natural resource policy and management decisions.

10. IDENTIFY SUSTAINABLE AND INTEGRATED FINANCING OPPORTUNITIES

California has a long history of making sound financial investments in water resources. However, our current investments are not keeping pace with the need. Our infrastructure is aging, levees are in need of repair, communities are without safe water, and our environment, farms and economy are suffering from unreliable and degraded water supplies. The effects of climate change will only accelerate the challenges facing our water resources and infrastructure. This plan includes actions that will require multiple funding sources. We have access to a variety of funding sources including federal grants and loans, general obligation bonds, revenue bonds, rate payer dollars, local initiatives, user fees, beneficiary fees, local and statewide taxes, private investment, public-private partnerships, and more. A better understanding of the variety and types of funds and financing available for water investment will help us to make the best, most efficient and sustainable uses of the funding available.

- **Remove Barriers to Local and Regional Funding for Water Projects**

The administration will work to clarify the 1996 Right to Vote on Taxes Act's (Proposition 218) applicability to water related fees and taxes, including sponsoring legislation if necessary.

- **Develop Water Financing Strategy**

The administration will develop a water financing strategy that leverages various sources of water-related project funding and proposes options for eliminating funding barriers, including barriers to co-funding multi-benefit projects. The strategy will identify all potential funding sources for water-related projects including cap and trade auction revenue under AB 32, energy efficiency funds, user and beneficiary fees, polluter fees, local measures, and other sources and will establish principles to guide the use of these funding sources. The strategy will consider measures for energy efficiency and renewable energy to achieve greenhouse gas reductions that would be a co-benefit of water infrastructure investments.

- **Analyze User and Polluter Fees**

The administration will direct agencies to identify areas where user and/or polluter fees may be appropriate. The agencies will assess the following: areas where users may not be fully funding the costs or impacts associated with their use, instances where polluters are not able to diminish their pollution and have not adequately accounted for the impacts of that pollution, and opportunities to use fees to incentivize positive behavior. The agencies will provide recommendations on fees, who would pay them, how they would be collected, and how they would be used.

Conclusion

All Californians have a stake in our water future. These actions set us on a path toward reliability, restoration, and resilience in California water. We must adapt to this “new normal” and recapture California’s resource management leadership and our economic and environmental resilience and reliability. There are no silver bullets or single projects that will “fix the problem.” We must have a portfolio of actions to comprehensively address the challenges this state faces. Some actions must be taken immediately to address current risks such as the looming drought and inadequate safe drinking water. Additionally, over the next five years, we must address fundamental changes in our approach to water resource management and be prepared for the changes the future holds.

Executive Summary

The California Water Plan: Investment in Innovation and Infrastructure

California water managers and elected officials are responsible for ensuring reliable and clean water supplies for a growing population, reducing flood risks to ensure public safety, and enhancing and restoring the state's ecosystems, all while safeguarding California's economy. These responsibilities exist at a time when the demands placed on natural resource-based assets and services are increasing and while funding for resource management is more and more limited. This necessitates doing more with less.

As mandated in the California Water Code, the California Water Plan (CWP) is the State's long-term strategic plan for guiding the management and development of water resources under these emerging conditions and expectations, and in the face of an uncertain future. *California Water Plan Update 2013* (Update 2013) provides a strategic vision and roadmap for California's water future that is informed and supported by hundreds of stakeholders; dozens of federal, State, and tribal entities; and nearly 40 other companion plans developed by myriad State agencies.

California Water Plan Vision

California has healthy, resilient watersheds and reliable and secure water resources and management systems. Public health, safety, and quality of life in rural, suburban, and urban communities are significantly improved as a result of advancements in integrated water management. The water system provides the certainty needed for quality of life, sustainable economic growth, business vitality, and agricultural productivity. California's unique biological diversity, ecological values, and cultural heritage are protected and have substantially recovered.

Update 2013 does not create mandates, prioritize actions, or allocate funding. Instead, it provides a roadmap that informs legislative action, as well as planning and decision-making, at all levels of government. It characterizes water resource conditions in the state today, describes the factors that are driving change, recognizes challenges and impediments to effective solutions, and lays out a comprehensive suite of potential future actions intended to move California toward more sustainable management of water resources and more resilient water management systems. Ultimately, sustainability and resiliency need to be measured in terms of improved public safety (societal benefits), environmental stewardship (environmental benefits), and economic stability (financial benefits).

PUBLIC SAFETY

- Reduce flood risk Statewide.
- Provide safe drinking water.
- Improve water quality for fisheries and recreation.

ENVIRONMENTAL STEWARDSHIP

- Enhance Bay-Delta ecosystem.
- Restore terrestrial and aquatic habitats.
- Improve watershed management.
- Raise awareness and increase stewardship.

ECONOMIC STABILITY

- Enhance State economic output.
- Contribute to job creation and security.
- Promote food production security.
- Provide stable funding for infrastructure.

A Call for Action: Integration, Alignment, and Investment

Despite significant investments made in management and improvement of the state’s natural and human-made water resource infrastructure over the past few decades, Californians today face rising and unacceptable risks from flooding, water shortages, unhealthy water quality, and ecosystem degradation. These challenges will only intensify in the future without bold action backed by stakeholder support. Many of California’s ecosystems and much of our water supply and flood protection infrastructure are no longer functioning properly or have exceeded their life cycles. For example, many communities depend on aging water supply and flood management infrastructure badly in need of maintenance or replacement; many essential species and ecosystems are rapidly declining; and some Californians do not have access to safe, clean drinking water. To compound the situation, such stressors as climate change, earthquakes, and lack of stable funding further threaten the integrity and reliability of the state’s water supply, flood protection, and environmental systems.

Update 2013’s strategies and actions promote three themes to address the challenges facing California today: 1) advance integrated water management (IWM); 2) strengthen government agency alignment; and 3) invest in innovation and infrastructure. The themes are interconnected and work together.

Themes of 2013 California Water Plan



Advance Integrated Water Management

With Update 2013, the State is renewing its commitment to IWM. IWM is a strategic approach to planning and implementing water management programs that combines flood management, environmental stewardship, and water supply actions to deliver multiple economic, environmental, and social benefits across watershed and jurisdictional boundaries. The IWM approach provides a set of principles and practices that strengthen government agency alignment and efficiencies through collaborative and transparent planning. This in turn promotes stakeholder and decision-maker support for cost-effective investments in multi-benefit projects and more diversified water portfolios. This support provides increased advocacy, as well as a greater number and variety of potential implementers and

1 financiers. The result is more efficient, effective, and regionally appropriate water resource planning and
2 management that leads to higher returns on investment; actions with more sustainable outcomes; and
3 greater water system resiliency and adaptability to future challenges, such as growth and climate change.

4 The previous updates to the CWP introduced IWM as an effective approach to achieving more sustainable
5 management of the state's water resources. Update 2013 represents an important next step in advancing
6 IWM by articulating the outcomes or types of benefits of greatest value to stakeholders, and further
7 clarifying and defining the scope and focus of IWM as an outcome-based approach. Desired outcomes
8 include improved system flexibility and resiliency; increased advocacy for multi-beneficiary projects
9 from potential implementers and financiers; and delivery of benefits at a faster pace, using fewer
10 resources than are typically required to implement single-benefit projects. IWM and integrated regional
11 water management (IRWM) practices have made strides over the past 12 years, and Update 2013
12 encourages the expansion and enhancement of these practices.

13 Strengthen Government Agency Alignment

14 California has a wide variety of climates, landforms, and institutions, as well as a diverse, place-based
15 range of cultures, which can be described as *anthrodiversity* (e.g., the human aspect of biodiversity that
16 denotes the value of sustaining varied human habitats, such as rural, suburban, and urban communities).
17 For example, there are more than 2,300 public resource management agencies at four primary levels of
18 government (federal, State, regional, and local). Californians' disparate priorities, beliefs, practices, and
19 resource consumption rates define and support California's rich social diversity. The most effective and
20 efficient solutions are an amalgam of diverse input and data from a large variety of elected officials,
21 opinion leaders, stakeholders, scientists, and subject experts. These circumstances necessitate that data
22 management, planning, policy-making, and regulation occur in a more collaborative, regionally
23 appropriate manner. Sustainable outcomes will rely on a blend of subject expertise and perspectives
24 woven together into comprehensive place-based and regionally appropriate policies and projects.

25 Discussions regarding water management priorities, including how they should be funded, often devolve
26 into conflict, often with stakeholders or decision-makers operating from different sets of information
27 prepared for disparate purposes. In most cases, the information is accurate but can be incomplete, drawn
28 out of context, or based on fundamentally different assumptions. The outreach and collaboration process
29 of Update 2013 has attempted to translate these different perspectives into practical information to enable
30 decision-making and expedite implementation. For example, the future scenarios described in Chapter 5,
31 "Managing an Uncertain Future," provide a framework for making common assumptions and applying
32 analytical tools to align understanding of possible future water conditions across diverse stakeholder
33 interests. This type of collaborative planning has yielded well-supported, implementable
34 recommendations.

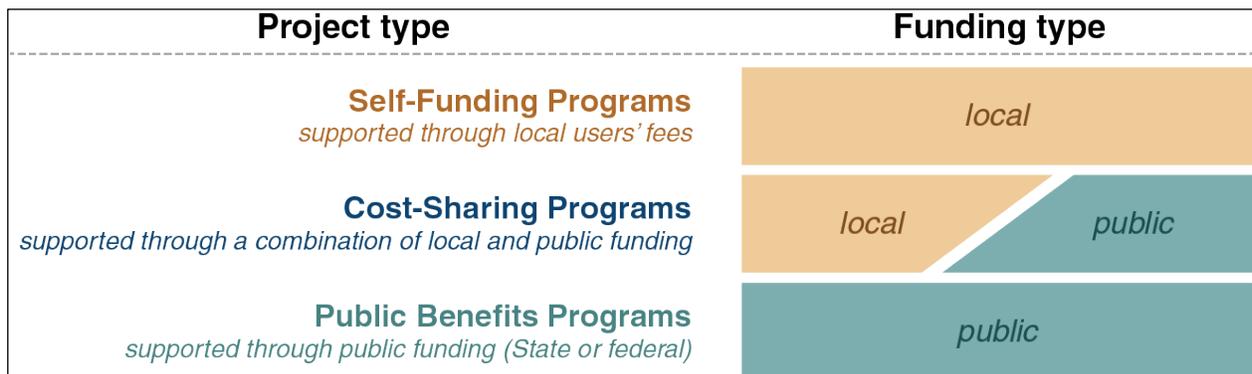
35 Update 2013 builds on strategies and actions to strengthen agency alignment from that presented in
36 *California Water Plan Update 2009* (Update 2009). The primary purpose for improving alignment among
37 and within federal, State, tribal, and local government agencies is to expedite implementation of resource
38 management strategies and help assure efficient implementation of multi-benefit projects. (Refer to
39 Volume 1, Chapter 4, "Strengthening Government Alignment," for a more detailed discussion.)

1 **Invest in Innovation and Infrastructure**

2 How California decides to prioritize and pay for necessary water resource management improvements is
 3 one of the most significant issues the state faces today. Past investments have provided a down payment
 4 and a good basis for further improvements; however, the financing methods of the past are no longer
 5 sustainable. The stakes are high as future investment decisions will significantly affect public safety,
 6 environmental stewardship, and economic stability. What is at stake includes flood risk to Californians’
 7 lives and assets; sustainability of natural resources, including the stewardship or extinction of
 8 species/habitats and the ecosystem services they can provide; and California’s \$2 trillion economy, which
 9 has significant value, both nationally and globally, and directly affects the fate of existing businesses,
 10 their employees, and their employees’ families.

11 California has nearly \$600 billion of assets and over 7 million people at risk of flooding. There are also
 12 over 10,000 projects identified within the 48 IRWM plans. In total, resource management actions will
 13 require up to \$500 billion of future investment over the next few decades to reduce flood risk, provide
 14 reliable and clean water supplies, and enhance ecosystems and their services. The price tag is daunting,
 15 but failure to address these challenges will put more and more Californians at risk. We are beginning to
 16 integrate resource management and planning, but funding remains fragmented, unstable, and inefficient,
 17 which limits opportunities for further integration. In fact, many current funding practices/constructs,
 18 developed decades ago, drive investment priorities more so than emerging plans and stakeholder priorities
 19 (which have significantly changed over the last several decades). These rigid funding constricts also do
 20 not allow the adaptability necessarily to respond to emerging challenges.

21 Update 2013 calls for more strategic, disciplined, and aligned investments in innovation and infrastructure
 22 (both naturally occurring and human-made) and identifies shared stakeholder values and potential
 23 mechanisms for future financing. Moving forward, the State needs to clarify funding purposes, as well as
 24 assess and articulate the value of current and future expenditures, to secure the necessary investments that
 25 will deliver sustainable and resilient water resources. It will take decades to upgrade the aging water-
 26 related infrastructure and accomplish ecosystem improvements. However, we need to continue taking
 27 steps toward financing implementation of a diverse portfolio of water management actions with an
 28 equally diverse portfolio of funding sources, including self-funding, cost-sharing, and public benefit.



29 **Self-Funding programs** are primarily financed through revenue bond sales that are supported through
 30 users’ fees. Many local major water-supply projects, including local and regional water-supply
 31 conveyance, treatment, distribution, and wastewater treatment, are included in this category. Some
 32 systemwide projects can also be included in this category. Small and isolated disadvantaged communities

1 are one exception, as many of their water supply systems need upgrades to provide adequate water supply
 2 and/or address their water quality issues. Typically, local/regional water purveyors' and wastewater
 3 agencies' user fees, with some exceptions, provide adequate funding for operation and maintenance of
 4 their water systems. Nonetheless, operation and maintenance of the flood management system by the
 5 State and local flood assessment districts is more challenging.

6 **Cost-Sharing programs** have local and regional benefits, as well as State and national benefits. Many of
 7 the proposed infrastructures fit within this category and are generally funded through a cost-shared
 8 agreement among the federal, State, and local agencies, depending on the program/project beneficiary.
 9 Examples of these types of projects include some regional water supply security projects and most flood
 10 protection projects. Many flood and community districts sell bonds secured by specific tax assessments to
 11 fund their capital improvements. Passage of Assembly Bill 218 in 1996 put new restrictions on this type
 12 of financing by requiring approval by two-thirds of voters. The result has been delays in some capital
 13 improvements and failure to approve others.

14 **Public benefit programs** have statewide and societal benefits. They are generally supported by State and
 15 federal public funding. Examples of these projects are the systemwide ecosystem enhancements,
 16 systemwide flood-risk reduction projects, and some watershed management programs. Cities, counties,
 17 and the State generally finance their capital improvement programs through General Obligation bonds,
 18 which are secured by full faith of the credit issuer. Many local agencies and disadvantaged communities
 19 may not have adequate funding or means of financing local shares of their infrastructure improvement
 20 through bond sales (i.e., lack of credit or high interest rates). In these cases, providing low-interest State
 21 and/or federal loans to local agencies to cover their local cost share of the project will be helpful.

22 **Integrated Water Management in Action**

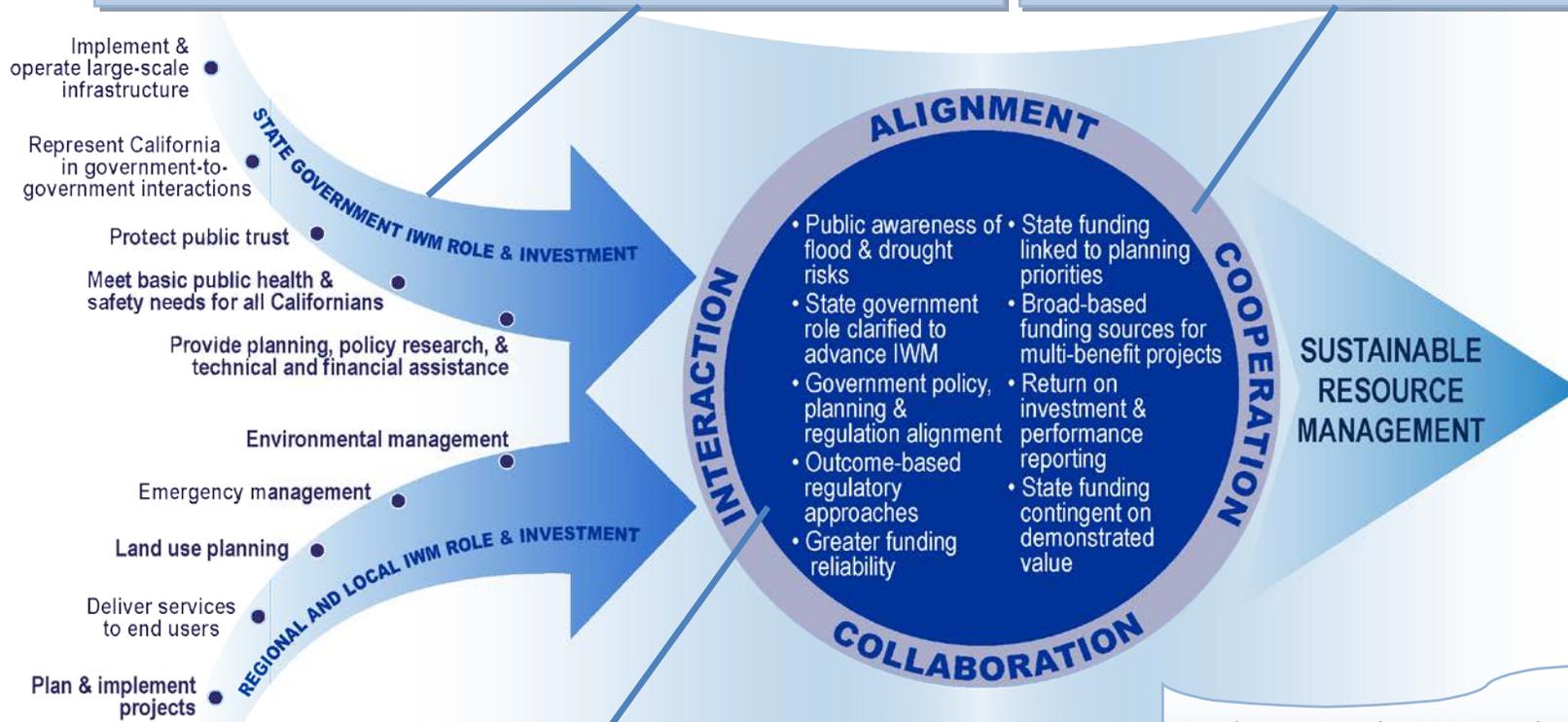
23 The immediate and changing conditions, priorities, and challenges described in Update 2013 require that
 24 Californians step up existing efforts to provide integrated, reliable, sustainable, and secure water
 25 resources and management systems for our health, public safety, economy, and ecosystems — today and
 26 for generations. The State needs to continue to invest in innovation and infrastructure, as detailed in
 27 Chapter 7, “Finance Planning Framework.” To accomplish this requires implementing a strategic water
 28 plan with vision and goals, and an implementation plan with objectives and near-term and long-term
 29 actions. The plan must build on State and stakeholder accomplishments since Update 2009, as well as the
 30 fundamental lessons of water resource management learned in recent years. The figure below emphasizes
 31 how State, regional, and local entities must come together (align) to deliver the resources needed to
 32 effectively implement (invest in) IWM actions. Several key IWM activities are summarized (in the arrows
 33 located on the left side of the figure, “Integrated Water Management in Action”) for State, regional, and
 34 local government roles and investment. The roles of the respective government entities cannot be
 35 accomplished without significant new collaboration and alignment, particularly regarding international,
 36 interstate, statewide, and interregional IWM activities.

37 The outcomes shown in the circle represent key accomplishments that must occur to achieve the Update
 38 2013 IWM vision and objectives. Volume 1, Chapter 8, lays out 17 objectives and a menu of more than
 39 250 actions that can move California toward accomplishing the desired outcomes. These outcomes will be
 40 tracked in future CWP updates and can be used to help guide, prioritize, track, and adaptively manage
 41 future State investment in IWM actions. Alignment, interaction, cooperation, and collaboration (shown
 42 around the figure's circle) provide the catalyst needed for sustainable resource management.

Integrated Water Management in Action

State, regional, and local entities must come together to effectively implement IWM actions. These roles cannot be accomplished without significant new collaboration and alignment, particularly regarding international, interstate, statewide, and interregional IWM activities.

Alignment, interaction, cooperation, and collaboration (shown around the circle) provide the catalyst needed for sustainable resource management.



These nine desired outcomes will be tracked in future CWP updates and can be used to help guide, prioritize, track, and adaptively manage future State investment in IWM actions.

Implementing the IWM roadmap is contingent on reliable State, federal and local investment in innovation and infrastructure.

1 Navigating the California Water Plan

2 While the entirety of Update 2013 is intended to inform the actions of water managers, the *Highlights*
3 booklet (to be available in early 2014) and certain Volume 1 chapters are particularly helpful in advising
4 future policies with a concise description of the water management needs facing California and with
5 implementable recommendations to help accomplish the Update 2013 vision. Chapter 1, “Planning for
6 Environmental, Economic, and Social Prosperity,” provides a concise call for action from policy-makers, as
7 well as a summary of major concepts that advance the State’s commitment to IWM. Chapter 2, “Imperative
8 to Invest in Innovation and Infrastructure,” describes extensive conversations with stakeholders about the
9 role of State government in IWM, the three themes for Update 2013, and how these themes can be used to
10 support decisions. These conversations and the close collaboration with stakeholders, which used the vision,
11 mission, goals, and principles as a compass, were instrumental in crafting the abovementioned 17 objectives
12 and 250+ related actions discussed in Chapter 8, “Roadmap For Action.” Chapter 8 also describes the vision
13 and mission of Update 2013, IWM goals to help identify and prioritize future water management actions,
14 and guiding principles to help planning and decision-making.

15 Even though the 17 objectives and the related actions are supported by hundreds of stakeholders and dozens
16 of State agencies, they must be prioritized for implementation. These actions are intended to provide policy
17 and lawmakers, resource managers and land use planners, communities and businesses, academia, and other
18 water leaders with a foundation and framework for water planning and management, policies and practices,
19 and public and private investments. They are also intended to inform legislative action for change.

20 To assist water managers with implementing these objectives and related actions, a “toolbox” of 30
21 resource management strategies is provided in Volume 3 of Update 2013. Federal, State, tribal, and local
22 entities are encouraged to use these tools to advance IWM, strengthen agency alignment, and invest in
23 innovation and infrastructure.

24 Integral to achieving the goals and objectives in Chapter 8, Chapter 7 provides a first-of-its-kind finance
25 planning framework in which multiple requirements, perspectives, and previously non-integrated financing
26 information can be considered. This framework is intended to be used as a cornerstone for stakeholders and
27 policy-makers to work collaboratively through critical funding needs and issues, develop durable finance
28 mechanisms, and identify reliable revenue sources.

29 The remaining chapters of Volume 1 (Chapters 3, 4, 5, and 6) provide the background and rationale for the
30 actions described in Chapter 8.

31 Conclusion

32 Update 2013 provides a full description of California’s planning backdrop and context, a call for action, and
33 a recommended path toward sustainable water management. Update 2013 was crafted with extensive
34 collaboration; it represents matters of most importance and urgency to stakeholders and several State
35 agencies. The plan provides an actionable blueprint for California’s water future. When combined with the
36 planning backdrop and context, the Update 2013 “Roadmap For Action” provides practical, well-reasoned,
37 and critical decision support that can be readily implemented by the governor, Legislature, and water
38 leaders.

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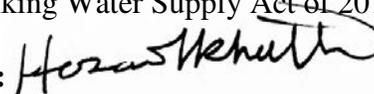
REPORT

DATE: March 1, 2012

TO: Energy and Environment Committee (EEC)
Regional Council (RC)

FROM: Sharon A. Neely, Deputy Executive Director, Strategy, Policy & Public Affairs,
neely@scag.ca.gov, (213)-236-1992

SUBJECT: Safe, Clean, and Reliable Drinking Water Supply Act of 2012 Bond Proposition

EXECUTIVE DIRECTOR'S APPROVAL: 

RECOMMENDATION:

For information only; no action required.

EXECUTIVE SUMMARY:

Status update to Safe, Clean, and Reliable Drinking Water Supply Act of 2012, approved for the November 6, 2012 ballot which, if approved by voters, would authorize \$11.14 billion to finance a safe drinking water and water supply reliability program.

STRATEGIC PLAN:

This item supports SCAG's Strategic Plan Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies.

BACKGROUND:

Originally passed in 2010 for the November 2, 2010 ballot, the bond proposition (SB 2 X7, 2010 Legislative Session) would have enacted the Safe, Clean, and Reliable Drinking Water Supply Act of 2010, which, if approved by the voters, would have authorized the issuance of bonds in the amount of \$11.14 billion pursuant to the State General Obligation Bond Law to finance a safe drinking water and water supply reliability program. The bill provided for the submission of the bond act to the voters at the November 2, 2010 statewide general election. Former Governor Arnold Schwarzenegger requested that the bond proposition be postponed, and on August 10, 2010, Governor Schwarzenegger signed the California State Legislature's postponement of the vote (AB 1265, 2010 Legislative Session), which moved the bond proposition to the November 6, 2012 statewide general election.

Specifics of the Bill

The bill (SB 2 X7, by way of AB 1265) authorizes a \$11.14 billion water infrastructure bond for the November 2012 ballot. The Legislative Analyst's Office estimates annual debt service on the water bond to range from \$724.7 million to \$809.3 million. The water bond, if approved by voters, would allocate the funds as follows:

CHAPTER 5 - Drought Relief	\$455,000,000
- Drought Relief Projects	\$190,000,000
- Economic impact from drought	\$90,000,000
- Small Community wastewater	\$75,000,000
- Safe Drinking Water Revolving Loan	\$80,000,000
- New River	\$20,000,000

REPORT

CHAPTER 6 - Regional Supply	\$1,400,000,000
- IRWMP - allocated	\$1,000,000,000
- (Unallocated/Interregional)	\$50,000,000
- Local Conveyance	\$350,000,000
CHAPTER 7 - Delta	\$2,250,000,000
- Projects, including	\$750,000,000
- Ag economy (out of projects pot)	[\$250,000,000]
- Ecosystem/BDCP	\$1,500,000,000
CHAPTER 8 - Statewide Water System Operational Improvement (Water Storage)	\$3,000,000,000
CHAPTER 9 - Conservation and Watershed Protection	\$1,785,000,000
CHAPTER 10 - Groundwater Protection and Water Quality	\$1,000,000,000
CHAPTER 11 - Recycling	\$1,250,000,000
- Recycling	\$1,000,000,000
- Conservation	\$250,000,000
TOTAL	\$11,140,000,000

Out of the \$11.14 billion, there are nearly \$2 billion in earmarks that were included in order to win the votes necessary to get the bill to the Governor’s desk. Chapter 9 contains the following earmarks:

Chapter 9 - Conservation and Watershed Protection	
State Coastal Conservancy	\$255,000,000
WCB – Water Rights	\$100,000,000
WCB – Watershed	\$215,000,000
Los Angeles & San Gabriel Rivers	\$75,000,000
Santa Monica Mountains Conservancy	\$75,000,000
Baldwin Hills	\$20,000,000
Santa Monica Bay – SMMC	\$25,000,000
Coastal Salmon	\$50,000,000
Lake Tahoe	\$100,000,000
Farmland Conservation/Watershed Coordinator	\$20,000,000
River Parkways	\$50,000,000
Sierra Nevada	\$75,000,000
Salton Sea	\$100,000,000
Climate Change Planning	\$10,000,000
Watershed Education Centers	\$30,000,000
Waterfowl	\$10,000,000
CDF	\$100,000,000
Klamath	\$250,000,000
Siskiyou County	\$20,000,000
CSU Fresno/Cal Poly	\$50,000,000
Ocean Protection	\$50,000,000
CVP – Salmonid	\$60,000,000
Public Infrastructure Mitigation	\$50,000,000
TOTAL	\$1,785,000,000

The fears that led to the postponement of the bond proposition to the 2012 ballot are still relevant and there has been discussion in Sacramento over reducing the size of the proposition. Assemblyman Kevin Jeffries has proposed cutting the funding of each project in the position by 25%. State Senate Pro Tempore Darrell Steinberg purportedly is not opposed to trimming funding. The Jeffries proposal was killed in an Assembly subcommittee, but Senator Steinberg may revive it and try to find support for a bond calling for \$7–\$8 billion in new debt (instead of the \$11.14 billion currently proposed).

REPORT

Modifying the bond proposition, however, could be a difficult task. Even when taking into consideration potential opposition from the public over the size of the bond, or how the money will be spent (i.e., earmarks), a change in the proposition would require a two-thirds vote of the Legislature. The crafting of this legislation was the result of extensive, broad-based bipartisan negotiation by leadership of both parties, and thus, changing its substantive provisions by two-thirds vote likely will be a very challenging task. There are currently no legislative vehicles proposing to amend the water bond appearing on the November ballot.

Finally, there is also discussion that Governor Jerry Brown might prefer to postpone the water bond proposition again (to the November 2014 ballot) because of another tax increase initiative that will also likely be on the November 6, 2012 ballot.

ATTACHMENT:

None

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REPORT

DATE: August 1, 2013

TO: Regional Council (RC)
Energy and Environment Committee (EEC)

FROM: Hasan Ikhata, Executive Director, ikhata@scag.ca.gov, (213) 236-1944

SUBJECT: Bay Delta Conservation Plan (BDCP)

EXECUTIVE SUMMARY:

The Governor's Office has requested to update the Regional Council about the Bay Delta Conservation Plan (BDCP). Either the Governor or Dr. Jerry Meral, Deputy Secretary of the California Natural Resources Agency will provide a brief presentation. The BDCP is being prepared to address existing water supply issues and adverse environmental quality impacts to the Sacramento-San Joaquin Rivers Delta and San Francisco Bay (Bay-Delta or Delta) from the State Water Project (SWP) and the federal Central Valley Project (CVP). An administrative draft of the BDCP is currently available for informal public review. The final draft chapters of the BDCP are scheduled to be released for public review and comment in October 2013. Staff has provided a summary background for your information.

STRATEGIC PLAN:

This item supports SCAG's Strategic Plan Goal 1 – Improve Regional Decision-Making by Providing Leadership and Consensus Building on Key Plans and Policies; Objective A: Create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.

BACKGROUND:

SCAG is looking forward to an update from the Governor or Dr. Jerry Meral, Deputy Secretary of the California Natural Resources Agency, about the Bay Delta Conservation Plan (BDCP). The BDCP addresses existing water supply issues and adverse environmental quality impacts to the Sacramento-San Joaquin Rivers Delta and San Francisco Bay (Bay-Delta or Delta) from the State Water Project (SWP) and the federal Central Valley Project (CVP). As proposed, the plan would cost \$24.5 billion over 50 years. Water users would pay for the cost of constructing 37 miles of water tunnels under the Delta, transporting water through sensitive eco areas. The public would pay for restoring the ecosystem.

The BDCP is a Habitat Conservation Plan / Natural Community Conservation Plan (HCP/NCCP) that puts forth a strategy for redesigning SWP and CVP water conveyance operations and facilities and for restoring and preserving sensitive Bay-Delta ecosystems. The HCP/NCCP is intended to provide permitting and regulatory certainty for improvement projects related to the SWP and CVP. In return for conservation and management actions that will protect Bay-Delta ecosystems, permits will be issued to cover negative impacts on threatened and endangered species created by the proposed project. A permit duration of 50 years is being requested as part of the BDCP.

The proposed activities that will be covered by this permit include the following:

- ▶ New Water Facilities Construction, Operations, and Maintenance –
 - “The Tunnel” – The proposed facilities will include new intake facilities, pumping plants, a new tunnel and pipelines. There will also be other construction activities related to creating the new water conveyance facility including, new transmission lines, concrete plants, fuel

- stations, etc.
- Conveyance Facilities Maintenance Activities
- Modifications to the Yolo Bypass
- ▶ Operations and Maintenance of (existing) State Water Project Facilities
- ▶ Nonproject Diversions – These include water diversions to support agriculture or waterfowl production.
- ▶ Habitat Restoration, Enhancement, and Management Activities - Conservation measures of the BDCP will be covered as part of the permit.

There is currently discussion about whether or not the BDCP will address the State's goals (established by the 2009 Delta Reform Act) to provide a more reliable water supply for California while protecting, restoring, and enhancing the Delta ecosystem.

Stakeholders have voiced the following concerns about the proposed tunnel alternative.

- ▶ The BDCP does not address water security issues, such as, what happens if the infrastructure fails; Southern California would still be dependent on the Bay Delta supply.
- ▶ The proposed tunnel system is too big and will result in the diversion of too much water. This will result in negative impacts to habitat and water quality further upstream as well as negative impacts to the Delta residents and the local economy, which is dependent on healthy, local fisheries and agricultural activities. The proposed restoration and conservation measures in the BDCP will not be enough to mitigate these effects.
- ▶ The large tunnel is too expensive; it would be better to put the money to use helping local jurisdictions, water agencies, and other stakeholders to improve water efficiency practices and develop alternative water supplies.
- ▶ Smaller tunnels would do a better job and be more cost-effective.

The administrative draft BDCP has been released. The information is subject to change and is not yet open to public comment. The final draft BDCP that will be open for public review and comment is scheduled to be released in October 2013.

It is expected that a water bond measure will be put to voters to help the State finance this infrastructure project. A water bond proposition (SB 2 X7, 2010 Legislative Session) originally slated to go on the November 2, 2010 ballot has been postponed twice due to the unfavorable economic climate. The bond proposition would have enacted the Safe, Clean, and Reliable Drinking Water Supply Act of 2010, which, if approved by the voters, would have authorized the issuance of bonds in the amount of \$11.14 billion pursuant to the State General Obligation Bond Law to finance a safe drinking water and water supply reliability program.

The water supply reliability proposal is estimated to produce 177,000 jobs in California. The approved 2012-2035 RTP/SCS estimates an additional 4 million residents in Southern California will require and depend on a reliable water supply.

REPORT

DATE: February 18, 2014

TO: Legislative/Communications and Membership Committee (LCMC)

FROM: Darin Chidsey; Director, Strategy, Policy & Public Affairs; (213) 236-1836;
chidsey@scag.ca.gov

SUBJECT: Water Bond Legislation Report – AB 1331 (Rendon) and SB 848 (Wolk)

RECOMMENDED ACTION:

For Information Only; No Action Necessary.

EXECUTIVE SUMMARY:

The Regional Council at its February 6, 2014 meeting adopted the 2014 State and Federal Legislative Priorities recommended by the Legislative/Communications and Membership Committee (LCMC) with minor modifications. These priorities call for support of water bond legislation that invests in water infrastructure that establishes a sufficient and reliable source of water to California. AB 1331 and SB 848 are two legislative bills that, if passed, would replace and reduce the current \$11.14 billion water bond on the November 4, 2014 general election approved by the Legislature for the November 2010 general election, and subsequently moved to the 2012 and again to the 2014 general election ballots. These bills are expected to be substantively amended and staff will continue to seek input from affected regional water stakeholders and provide further input to the Committee concerning potential action SCAG may wish to consider with respect to these or other water bond bills.

STRATEGIC PLAN:

This item supports SCAG's Strategic Plan, Goal 2: Obtain Regional Transportation Infrastructure Funding and Promote Legislative Solutions for Regional Planning Priorities; Objective b) Identify and support legislative initiatives.

BACKGROUND:

Originally passed in 2010 for the November 2, 2010 ballot, the bond proposition (SB 2 X7, 2010 Legislative Session) would have enacted the Safe, Clean, and Reliable Drinking Water Supply Act of 2010, which, if approved by the voters, would have authorized the issuance of bonds in the amount of \$11.14 billion pursuant to the State General Obligation Bond Law to finance a safe drinking water and water supply reliability program. The bill provided for the submission of the bond act to the voters at the November 2, 2010 statewide general election. Former Governor Arnold Schwarzenegger requested that the bond proposition be postponed, and on August 10, 2010, Governor Schwarzenegger signed the California State Legislature's postponement of the vote (AB 1265, 2010 Legislative Session), which moved the bond proposition to the November 6, 2012 statewide general election. In January 2012, Governor Jerry Brown indicated that the measure should be removed from the 2012 ballot and, instead, be placed on the 2014 ballot. On July 9, 2012, AB 1422 sponsored by Assembly member Henry Perea removed the water bond measure from the November 6, 2012 ballot and placed it on the November 2014 ballot.

REPORT

The existing water bond measure authorizes an \$11.14 billion water infrastructure bond that proposes to allocate funds thusly:

• Drought Relief	\$ 455,000,000
• Regional Supply	\$ 1,400,000,000
• Delta	\$ 2,250,000,000
• Statewide Water System Operational Improvement	\$ 3,000,000,000
• Conservation and Watershed Protection	\$ 1,785,000,000
• Groundwater Protection and Water Quality	\$ 1,000,000,000
• Recycling	<u>\$ 1,250,000,000</u>
• Total:	\$11,140,000,000

Of the above totals, the \$1.785 billion for the Conservation and Watershed Protection are ‘earmarked’ for 23 specific projects throughout the state and this section is considered to be one of the reasons, in addition to the overall size of the proposed bond, that the measure may be vulnerable to defeat in a general election.

AB 1331

Since the bond proposition passed in the Legislature, various polls have shown that the likelihood of passage by the voters of the current water bond proposition is tenuous. In recognition, the Assembly in 2013 formed the Assembly Water Bond Working Group consisting of 9 Democratic Assembly members representing the regions of California from North to South to develop a water bond measure for the 2014 ballot. The Working Group conducted a process to achieve this objective which included:

- 8 public hearings in the Assembly and Senate;
- 6 legislator briefings on water policy and funding;
- Development of Assembly Principles to set priorities that emphasized accountability to voters;
- Development of a water bond framework;
- 3 rounds of public comments on the Principles and the framework.

AB 1331, the Clean and Safe Drinking Water Act of 2014, by Assembly member Anthony Rendon (D-South Gate) was developed from the Assembly Water Bond Working Group process, of which Assembly member Rendon was a member, and proposes to amend the water bond proposal to the voters at the November 2014 election to provide for a \$6.5 billion water bond that provides funding over the next several years for five categories of urgent needs for water infrastructure:

• Clean and Safe Drinking Water	\$1,000,000,000
• Protecting Rivers, Lakes, Streams Coastal Waters, & Watersheds	\$1,500,000,000
• Regional Water Management for Climate Change	\$1,500,000,000
• Sacramento-San Joaquin Delta Sustainability	\$1,000,000,000
• Storage for Climate Change	<u>\$1,500,000,000</u>
• Total:	\$6,500,000,000

AB 1331, rather than earmarking funds, would authorize funding for a wide range of purposes intended for “Protecting Rivers, Lakes, Streams, Coastal Waters, and Watersheds” by allocating funding in three ways: 1) \$500 million for ‘state obligations’ under multi-party water settlements, \$250 million for the

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State’s conservancies, and the remaining \$750 million to be allocated among the regions of California. With respect to the regional allocation, the bill permits allocation to any state agency so long as accountability to voters is preserved, and only if the Governor and the Legislature approve. According to the author, this type of regional allocation provides many benefits over earmarks to specific agencies, including, in general, greater transparency and accountability to voters over time by requiring legislative and Governor approval; greater response to climate change when the data is known or as they occur when making funding allocations; the consideration of many specific spending factors when determining specific funding within a region and in balance with other regions.

Because AB 1331 has been significantly amended in January, 2013, and likely will be amended again in February, there is no current list of on-record support and opposition. The bill currently resides in the Senate Committee on Natural Resources with no hearing scheduled. The Metropolitan Water District (MWD) of Southern California is on record with a ‘Support If Amended’ position on the current version of the bill. MWD is continuing to work with the author to address a number of concerns with the bill, with its top priority for this or any bond measure before the legislature being to make sure criteria for funding improvements in the Delta ensure that “habitat restoration projects can compete fairly and openly with other projects that advance a sustainable Delta.” A copy of MWD’s position letter is attached to this report. SCAG staff has been in contact with both staff of both Assembly member Rendon and the MWD and will advise this Committee of developments and, if offered, substantive amendments to this bill between now and its next meeting.

SB 848

SB 848, the Safe Drinking Water, Water Quality, and Flood Protection Act of 2014, introduced by Senator Lois Wolk (D-Napa) on January 9, 2014, would replace the \$11.14 billion existing water bond currently on the November 2014 ballot with a new \$6.475 billion general obligation bond that would allocate bond funds as follows:

• Safe Drinking Water and Water Quality Projects	\$ 2,000,000,000
• Water Quality and Watershed Protection Projects	\$ 2,100,000,000
• Flood Control and Storm Water Management	\$ 1,375,000,000
• Water System Operational Improvements	<u>\$ 1,000,000,000</u>
• Total:	\$ 6,475,000,000

Under bill provisions, from the allocations for the Safe Drinking Water and Water Quality Projects, \$1.4 billion will be allocated to hydrologic regions for purposes of integrated regional water management planning in accordance with the following schedule:

• North Coast:	\$ 66,000,000
• San Francisco Bay:	\$ 196,000,000
• Central Coast:	\$ 85,000,000
• Los Angeles subregion:	\$ 267,000,000
• Santa Ana subregion:	\$ 191,000,000
• San Diego subregion:	\$ 146,000,000
• Sacramento River:	\$ 117,000,000
• San Joaquin River:	\$ 96,000,000
• Tulare/Kern (Tulare Lake):	\$ 97,000,000
• North/South Lahontan:	\$ 72,000,000

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- Colorado River Basin: \$ 67,000,000
- Total: \$ 1,400,000,000

Other notable general provisions of this bill include:

- Requires that all bond expenditures be consistent with the state's sustainable communities strategy;
- Includes a 10% set aside for planning funds allocated for each program to finance planning and monitoring necessary for the successful design, selection, and implementation of the projects authorized under that program;
- Intent language to give special consideration to projects subject to grant allocation that employ new or innovative technology or practices, including decision support pools that demonstrate the multiple benefits of integration of multiple jurisdictions, including, but not limited to, water supply, flood control, land use, and sanitation;
- A maximum 5% of funds allocated for a program may be used to pay the administrative costs of that program.

SB 848 was introduced on January 9, 2014 and is heard in the Senate Natural Resources and Water Committee at its first policy hearing on February 11, 2014. The bill was significantly amended in the Senate Natural Resources Committee on February 11 but mock-up amendatory language is not available as of preparation of this report. Staff will provide update to the Committee regarding the amended provisions at its February 18 meeting. The bill passed Natural Resources Committee on 6-0 vote and is referred to the Senate Committee on Environmental Quality, where purportedly it will be heard on February 19 and possibly amended again. Since introduction numerous entities have expressed on record support or opposition to SB 848. These include:

Support

American Planning Association
Big Sur Land Trust
California Association of Local Conservation Corps
California Trout (Seek Amendments)
Clean Water Action (Seek Amendments)
Community Water Center (Seek Amendments)
Contra Costa County Board of Supervisors
Environmental Defense Fund
Land Trust of Santa Cruz County
Leadership Counsel for Justice and Accountability (Seek Amendments)
Monterey Bay Aquarium
PolicyLink (Seek Amendments)
Sacramento County Board of Supervisors
Sacramento Regional County Sanitation District
Sierra Club California
Solano County Board of Supervisors
Sonoma County Water Agency
Trout Unlimited (Seek Amendments)
Yolo County Board of Supervisors

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Water Bond Coalition

Opposition

Association of California Water Agencies (Unless Amended)
Browns Valley Irrigation District (Unless Amended)
California Alliance for Jobs
California Building Industry Association (Unless Amended)
California Business Properties Association
California Chamber of Commerce
California Citrus Mutual
California Cotton Ginners and Growers Association
California Farm Bureau Federation (Unless Amended)
Calleguas Municipal Water District (Unless Amended)
Castaic Lake Water Agency
Corona, City of
Dublin San Ramon Services District (Unless Amended)
Eastern Municipal Water District (Unless Amended)
Helix Water District (Unless Amended)
Kern County Water Agency
Las Virgenes Municipal Water District (Unless Amended)
Mesa Water District (Unless Amended)
Metropolitan Water District of Southern California (Unless Amended)
Mojave Water Agency
Monte Vista Water District (Unless Amended)
Moulton Niguel Water District (Unless Amended)
Nesei
Northern California Water Association (Unless Amended)
Riverside Public Utilities (Unless Amended)
San Bernardino Valley Municipal Water District
Santa Ana Watershed Project Authority
South Tahoe Public Utilities District (Unless Amended)
Southern California Water Committee
Three Valley's Municipal Water District (Unless Amended)
Upper San Gabriel Valley Municipal Water District
Valley Center Municipal Water District (Unless Amended)
Western Agricultural Processors Association
Western Growers Association
Western Municipal Water District
Westlands Water District
Wheeler Ridge-Maricopa Water Storage District

The Metropolitan Water District of Southern California currently maintains an “Oppose Unless Amended” position on SB 848. In its opposition letter, MWD cites a proposed amendment to the bill that would direct funds for Delta Sustainability only to the Delta Conservancy is in conflict with the 2009 Delta Reform Act providing that such funds should be directed among multiple entities. Additionally, MWD asserts its top priority for any bond legislation is to make sure criteria for funding improvements in the Delta ensure that habitat restoration projects can compete fairly and openly with other projects based on their scientific merits. A copy of MWD’s position letter is attached to this report.

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Because both AB 1331 and SB 848 would, if passed, replace the current water bond proposition on the general election ballot, a 2/3's vote threshold by both chambers of the legislature is required to pass the legislation to the Governor for signature or veto.

Summary

With the Governor's recent calling of a drought State of Emergency in California and the increased likelihood of imposition of water rationing and other extraordinary measures throughout the year to conserve water, both of these legislative bills will receive significant scrutiny through the legislative session and likely will be substantively amended in the near future.

Additionally, SCAG at its March 6, 2014 Joint Policy Committee meeting will convene a group of regional and statewide water policy stakeholders to discuss the drought, as well as short and longer-term strategies for securing a stable water supply for Southern California.

Staff will continue to monitor and reach out to regional water stakeholders regarding this bill after purported significant amendments are incorporated into the bill, as well as to gather input from the discussion at its March Joint Policy Committee to assess whether both AB 1131 or SB 848 or other water related bills warrant further consideration or action from SCAG. Staff will report back to this Committee concerning any further developments to these bills.

ATTACHMENTS:

- 1) AB 1331 MWD Position Letter
- 2) SB 848 MWD Position Letter

Reviewed by:



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Director, Strategy, Policy & Public Affairs