

ASSEMBLY COMMITTEE ON WATER, PARKS AND WILDLIFE

**Wednesday, December 4, 2013, 1:30-3:30 p.m.
Shasta County Board of Supervisors Chambers, 1450 Court St. #263, Redding,**

INFORMATIONAL HEARING SERIES: THE NEED FOR A 2014 WATER BOND: LOCAL PERSPECTIVES

BACKGROUND

The purpose of this hearing series is to explore the need for a general obligation bond in 2014 to help fund water-related projects and programs and to hear local perspectives on the potential public benefits to communities throughout the state from such a water bond. A "hydrologic region" is the most basic planning unit that the California Department of Water Resources (DWR) uses in the California Water Plan. There are ten hydrologic regions in the State and the map for each one matches the contours of a major watershed, which is an area of land where all of the water that falls on it or flows under it drains to a common set of locations. These locations can be visible, such as streams and rivers, or hidden in groundwater basins. However, both types of local water supplies are generally interconnected. The portfolio of water resources in many areas of California can also include raw water that is imported from other watersheds via canals or tunnels as well as local supplies that are created by recycling wastewater or desalinating brackish water or sea water.

Today's hearing will focus on the Sacramento River and North Lahontan Hydrologic Regions and the Mountain Counties Overlay (MCO). The 15-county MCO spans both the Sacramento River and San Joaquin Regions from a portion of the Cascade Range across the western slope foothills and mountains of the Sierra Nevada. The MCO area provides more than 60 percent of California's developed water supply and up to half of the water flowing into the Sacramento-San Joaquin Delta Estuary (Delta).

Short History of the 2009 Water Bond

In 2009, former Governor Schwarzenegger convened the Legislature in extraordinary session to take up issues related to protecting and restoring the Delta ecosystem and improving water reliability and management, including addressing water conveyance, storage, conservation and groundwater, and considering a general obligation bond. Subsequently, a historic five-bill package of water legislation was passed and signed, including SB 2 (Cogdill), Chapter 3, Statutes of the 2009-10 Seventh Extraordinary Session (SBX7 2).

SBX7 2 called for a bond to be placed on the November 2010 ballot that, if approved by the voters, would authorize the issuance of \$11.14 billion in general obligation bonds for a wide range of water projects and programs including water conservation and efficiency, groundwater protection and cleanup, integrated regional water management, ecosystem and watershed protection and restoration, water recycling, and water storage (Water Bond).

Delay and Anomaly

However, in 2010 and again in 2012, supporters of the Water Bond recognized that a sluggish economy coupled with the state's need to focus on its dire budget shortfall meant that delaying the bond vote could increase its chances of success. AB 1265 (Caballero) moved the Water Bond to the 2012 general election and deleted a provision allowing for-profit entities to be members of joint powers authorities for bond-funded surface water storage projects. AB 1422 (Perea) moved the Water Bond to the November 4, 2014 statewide general election but otherwise left the text unchanged. While changing the text of an initiative measure requires a 2/3rds vote of each house, changing the date of an election can be done with only a majority vote. As a result, the Water Bond currently on the ballot is still titled the "Safe, Clean, and Reliable Drinking Water Supply Act of 2012."

Efforts to Reduce and Refocus the Bond

Both houses of the Legislature have engaged in substantial efforts to reanalyze and right-size a bond so that voters can be confident that it addresses California's most pressing water infrastructure and program needs and is accountable.

In the Assembly, Speaker John A. Pérez convened a Water Bond Working Group comprised of members with diverse regional and statewide perspectives and chaired by Assemblymember Anthony Rendon. With a historic level of new members in the Assembly and a high degree of interest in the bond, the Working Group members conducted an extensive series of workshops and meetings among themselves and with their Assembly peers covering the background and composition of the current Water Bond, shifts in priorities that have occurred since it was passed in 2009, and the need to reduce its size and increase its accountability.

The 2013 Assembly Water Bond Working Group process included:

- 5 public hearings (3 in the Assembly; 2 in the Senate)
- 6 legislator briefings on water policy and funding
- Establishment of *Principles* that set priorities and emphasized accountability to the voters
- 3 rounds of public comments, and
- Publishing the *Water Bond Framework* & posting summaries of public comments on the Water, Parks & Wildlife Committee website at <http://awpw.assembly.ca.gov/waterbond>

Those efforts resulted in a public hearing in July of 2013 to present and receive comment on a set of Water Bond "principles" and another public hearing in August of 2013 to present and receive comment on a more specific "framework" for a revised water bond language.

Following the Working Group process, AB 1331, an Assembly Water, Parks and Wildlife Committee bill awaiting hearing in the Senate Natural Resources and Water Committee (SNRW), was amended on August 26, 2013 into the *Climate Change Response for Clean and Safe Drinking Water Act of 2014*. AB 1331 repeals the existing bond and places a \$6.5 billion bond on the November 4, 2014 ballot that is better tailored to current water management challenges. AB 1331 was further refined on September 11, 2013.¹

Specifically, the \$6.5 Billion Assembly Water Bond proposal includes:

- \$1 Billion for maintaining and improving Drinking Water Quality
- \$1.5 Billion for protecting Rivers & Watersheds
- \$1.5 Billion to fund integrated regional water management that will improve water delivery and help regions reduce the impact of climate change on water supply.
- \$1 Billion to protecting The California Delta that is critical to the state water supply system and a key ecological resource.
- \$1.5 Billion for Water Storage projects that will also reduce the impact of climate change on clean, reliable and affordable water supply.²

Meanwhile, the Senate has also actively sought to educate members of the Legislature and the public on a need to refocus and reduce the Water Bond by holding a series of four informational hearings during 2013.³ The Senate has two current bond measures, SB 40 (Pavley) and SB 42 (Wolk). Like AB 1331, both are also awaiting hearing in SNRW. SB 40, the *Safe, Clean, and Reliable Drinking Water Supply Act of 2014*, changes and updates the name of the current bond act and calls for reducing and potentially refocusing it. SB 42, the *Safe Drinking Water, Water Quality, and Flood Protection Act of 2014*, would repeal the existing bond and place an entirely new \$6.475 billion measure on the November 2014 ballot.

Sacramento River & North Lahontan Hydrologic Regions

The Sacramento River Region, as defined by the California Water Plan, runs from the crest of the Sierra Nevada on the east and the crest of the Coast Range on the west, down through the American River watershed to the northern part of the Delta. The Region includes the Sacramento River, which is the state's largest and arises from the Klamath Mountains to flow the length of the Sacramento Valley before entering the Delta and joining with the San Joaquin River. The Sacramento River Region includes, in addition to Shasta Dam, which is operated by the U.S. Bureau of Reclamation (Reclamation) and a primary feature of the federal Central

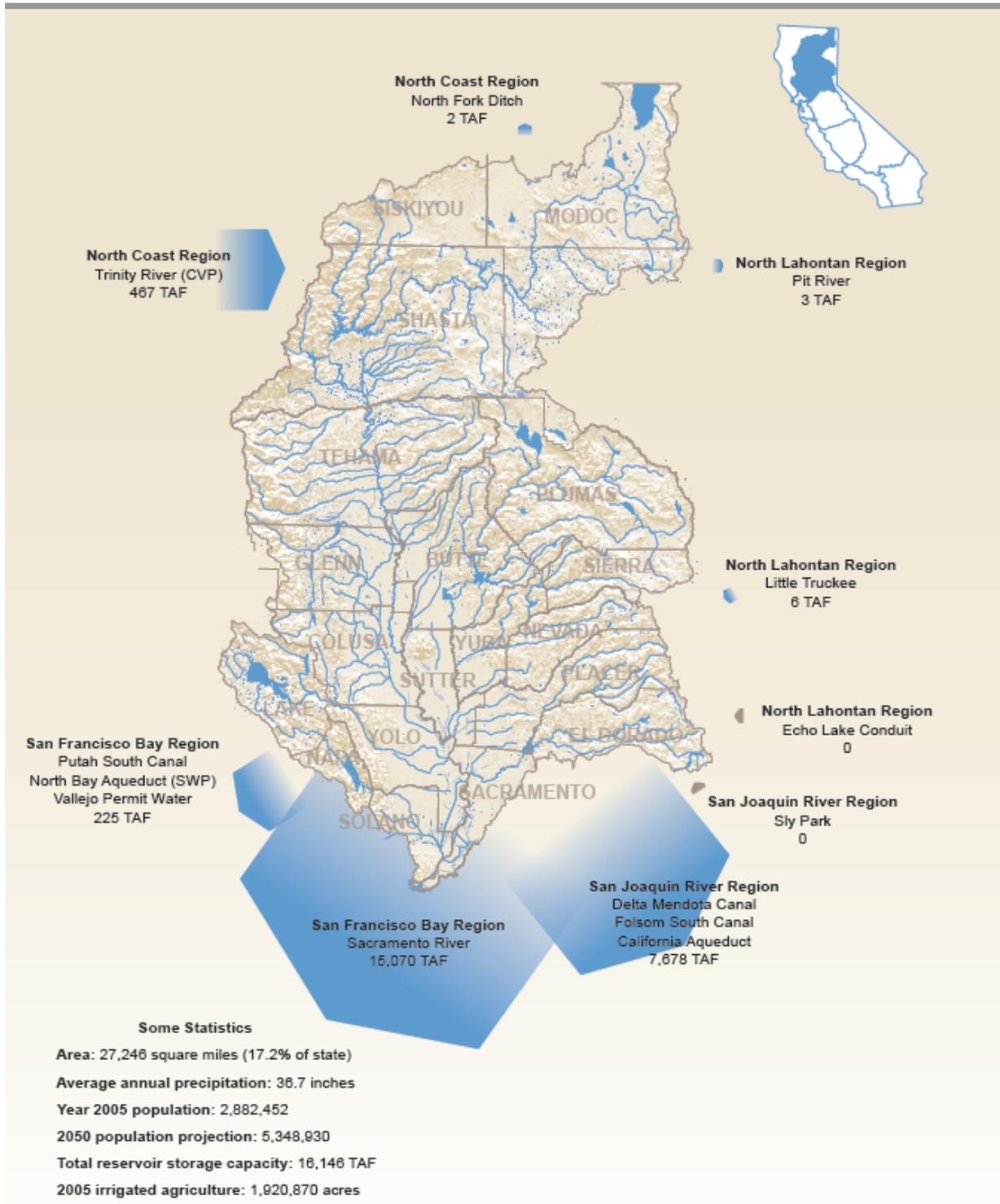
¹ Specific bills, including AB 1331, SB 40, and SB 42, may be reviewed and tracked through the California Legislative Information web site maintained by the Office of Legislative Counsel at: <http://leginfo.legislature.ca.gov/>.

² Information on the Assembly water bond process, including links to comment letters on the Assembly Working Group Framework, can be found at: <http://awpw.assembly.ca.gov/waterbond> .

³ Information on the Senate Water Bond Oversight Hearings can be found at: <http://sntr.senate.ca.gov/informationaloversighthearings> .

Valley Project (CVP), the Oroville Dam, which is the main storage facility for the State Water Project (SWP) operated by DWR. Both reservoirs release water into the Sacramento River which is then exported in the southern Delta as far south as the San Joaquin Valley via the CVP Delta-Mendota Canal, and almost to the Mexican border via the SWP California Aqueduct

Sacramento River Hydrologic Region



As demonstrated by the graphic on the preceding page, much of California's water supply originates in the Sacramento River Hydrologic Region. That supply is also augmented by water from CVP facilities outside of the watershed on the Trinity River in the North Coast Region. Trinity River water is diverted through the Trinity Alps via the 10.7 mile Clear Creek Tunnel to Whiskeytown Lake. From there it mingles with water from the Clear Creek drainage and flows down Clear Creek to the Sacramento River for delivery to CVP contractors.



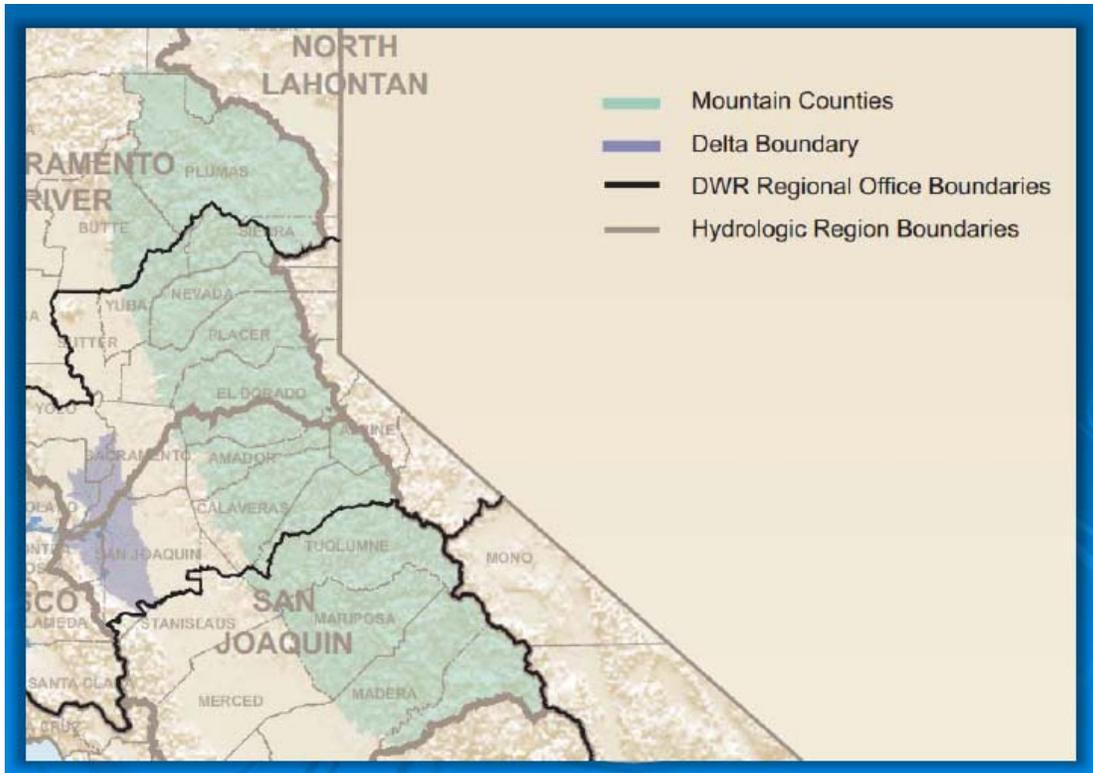
North Lahontan Region

To the east of the Sacramento River Region, over the crest of the Sierra Nevada and bounded by our border with Nevada, lies the North Lahontan Hydrologic Region. In contrast to the Sacramento River Region, the high desert area is arid, with relatively flat valleys adjacent to mountains. Probably the most famous feature of the North Lahontan Region is Lake Tahoe, the largest Alpine lake in North America and the second deepest. Although it is fed by numerous tributaries, the Truckee River is Lake Tahoe's only outlet.

Mountain Counties Overlay

In 2005 DWR created the MCO as one of two "overlays" to the 10 hydrologic planning regions in the California Water Plan.⁴ The MCO extends from the southern tip of Lassen County to the northern part of Fresno County. Overlay areas are those that are recognized to be of statewide significance and have common management conditions, issues, and provide for integrated planning opportunities. Currently, DWR is proposing expanding the boundaries of the Mountain Counties Overlay Area in order to facilitate broader planning efforts. (See map next page.)

⁴ The other overlay area is in the Sacramento-San Joaquin River Delta/Suisun Marsh.



Regional Issues

Area of Origin Water Rights

In California, there are generally three types of surface water rights: riparian, "pre-1914" appropriative and post-1914 appropriative. Riparian rights usually come with owning a parcel of land that is adjacent to a stream. Appropriative rights allow the diversion of water for use on non-riparian property (property not including or adjacent to a stream) or for storing the water for later use. The Water Commission Act of 1914 established a system of appropriative water rights permits and licenses that are now administered by the State Water Resources Control Board (State Water Board). But that Act also "grandfathered" in pre-existing rights (referred to as "Pre-1914" rights) that, if used continuously and beneficially, can still be valid to this day. Under the appropriative water rights system there is a hierarchy of water right priorities known as "first in time, first in right." It protects those with rights that came first and are therefore "senior" as against others who come after and are "junior."

In 1919, U.S. Geological Survey employee Robert Bradford Marshall published a pamphlet urging Californians to solve their water problems by shipping water from the Sacramento River to the San Joaquin Valley. His plan was met with great interest and during the 1920s the State developed a State Water Plan calling for a dam on the Sacramento River above Redding and pumps to send water from the Delta into the San Joaquin Valley. In 1927 a statute passed authorizing the State to file permits for any "unappropriated" water that might be needed to meet the State Water Plan. However, the counties from which the water would be transferred voiced concern that they would be deprived of the water necessary to meet their own future needs. In

response, in 1931, the "County of Origin" statute was adopted. It held that the State's water rights applications, permits, or licenses to implement the State Water Plan could not create a priority that would "deprive the county in which the water covered by the application originates of any such water necessary for the development of the county" and could not "authorize the use of any water outside the county of origin which is necessary for the development of the county."⁵ In 1933, the Legislature and voters approved the \$170 million State Water Plan, but because of the Depression, the state could not market the bonds needed to build it. The State then turned to the federal government, which built the facilities that would later be known as the CVP.

With the renewed prosperity that arrived toward the end of World War II, the State once again pursued full development of the State Water Plan. But approval did not come easy, partially due to fears in the north – even with the County of Origin statute. In response, additional statutory language, known as the Watershed of Origin statute, was adopted in 1943 that held, among other provisions, that the construction or operation by DWR of any water project could not deprive a watershed where the water originates, either directly or indirectly, "of the prior right to all water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein."⁶ The County of Origin and Watershed of Origin statutes were reaffirmed in the Burns-Porter Act, which passed on the November 1960 ballot and provided the authority and funding to construct the SWP.

Respect for historic area-of-origin and watershed-of-origin protections is reflected in AB 1331 which states, among other provisions, that it will "not diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed of origin, county of origin, or any other water rights protections, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law."⁷

Importance of North State Watersheds and Ecosystems

The watershed and ecosystems of the Sacramento Valley Region not only sustain the regional environment, population, and economy but, as noted before, much of the rest of California as well. Locally, water not only grows crops like rice and almonds and serves area businesses but it provides habitat for migratory Chinook salmon and irrigates the fields that are key stops for many birds travelling along the Pacific Flyway.

Winter-run and spring-run Chinook salmon are listed as endangered and threatened, respectively, under the state and federal Endangered Species Acts. Fall-run Chinook salmon are not listed and form the backbone of California's salmon fishing industry. Chinook salmon are anadromous, which means they live part of their lives in saltwater, but begin and end their lives in fresh water streams. Juvenile Chinook (called "fry") can spend anywhere between three months to two years of their development in fresh water. Likewise, they will remain at sea from one to six years before making the run back to their home rivers to spawn. Sacramento River Chinook salmon pass under the Golden Gate Bridge and make their way upstream as far as Shasta Dam which, like other dams, has blocked access to much of the historical spawning habitat for these fish.

⁵ Water Code §§ 10505, 10505.5

⁶ Water Code §§ 11460 and sequence

⁷ Proposed Water Code § 79713

The Pacific Flyway extends from Alaska to Patagonia and is a major north-south route for migratory birds in America. Every year, migratory birds cover some or all of this distance both in spring and in fall, following food sources, heading to breeding grounds, or travelling to overwintering sites. Between 1780 and 1980 California lost approximately 91% of its historic wetlands. Luckily, for many birds the rice fields of the Sacramento Valley have provided surrogate wetlands. Besides migratory waterfowl and species like the California listed and fully protected greater sandhill crane, many other birds such as raptors are associated with rice land. For example, the Raptor Survey, initiated in 2007 to quantify wintering habitats used by raptors and their densities and species richness in the Central Valley, found that 14 species were associated with rice fields in the Sacramento Valley including Bald Eagle, Northern Harrier, Red-shouldered Hawk, and Red-tailed Hawk.

Need for Increased Investment in Forest Management

The importance of north state forests to California's supply and quality of water cannot be overstated. As those who live in the Sierra Nevada and Cascade Ranges are fond of pointing out, water does not come "from the Delta," it originates in the mountains where the snowpack serves as the State's largest reservoir. Yet, there is a growing body of evidence that poor management has impaired the forest's ecosystem role, including in filtering and retaining water. Many decades ago, before fire's critical role was fully understood, the general reaction to all fires was to snuff them out. However, that eliminated the kind of frequent, low-intensity fires that kept the forest healthy. Now, overcrowded forests sporting an unhealthy mix of tree types and ages are experiencing steadily increasing temperatures due to climate change, which has in turn led to an unprecedented run of mega-fires like the Rim Fire and the Moonlight Fire. The Rim Fire was the largest in the history of the Sierra Nevada and burned at an extremely high intensity.

Besides the serious threat to life and property such fires pose, they destroy critical habitat and cascade into a series of other negative impacts including, but not limited to, a decline in the natural water storage capacity provided by forest meadows, increased sedimentation (and therefore loss of storage capacity) in reservoirs, and massive releases of greenhouse gasses (GHG). For example, it is estimated that the Moonlight fire emitted a level of GHG equivalent to the entire City of Los Angeles for a year.

Potential for Surface Storage

Since the 1970's an unincorporated area of Colusa County at and around the town of Sites has been investigated as the location of a new potential surface water reservoir (Sites Reservoir). Those investigations included work by Reclamation and DWR, together with other federal, state, and local agencies, to study different alternatives for increased surface storage in California.

Between 1987-1992, California's water "wars" came to a head when a six-year drought slowed water deliveries, water quality deteriorated and two fish species unique to the Delta – the Delta smelt and winter-run Chinook salmon – were pushed to the brink of extinction. Two years after the drought ended, the State and Federal governments signed an agreement to coordinate activities in the Delta and initiate the CALFED Bay-Delta Program, a long-term planning process to improve the Delta and increase the reliability of California's water supply. The

CALFED Record of Decision (CALFED ROD) initiated implementation of that program in 2000 and included five potential surface storage locations statewide for further consideration and analysis. The North-of-the-Delta Offstream Storage (NODOS) investigation, also known as Sites Reservoir, was included for its potential to support restoration of ecological health and improve water management for beneficial uses in the Bay-Delta system.

Ten years later, following the collapse of the CALFED Bay-Delta Program, Glenn County, Colusa County, Reclamation District No. 108, the Glenn-Colusa Irrigation District, the Tehama-Colusa Canal Authority, the Maxwell Irrigation District, and the Yolo County Flood Control & Water Conservation District executed the Sites Project Joint Powers Authority (Sites JPA). The Sites JPA seeks to continue to pursue the development and construction of a Sites Reservoir Project, which the Sites JPA partners believe will be critical to providing water for the environment while improving statewide water reliability and regional sustainability in Northern California.

Chapter 9 of AB 1331 provides \$1.5 billion to fund the public benefits of water storage projects. Sites Reservoir could receive consideration as AB 1331 includes among its eligibility criteria those surface storage projects identified in the CALFED ROD, with the exception of a raise of Shasta Dam.⁸ The California Wild and Scenic Rivers Act states that the McCloud River above Shasta Dam possesses extraordinary resources in that it supports one of the finest wild trout fisheries in the state and that maintaining a free-flowing condition to protect its fishery is the highest and most beneficial use of the waters of the McCloud River. Except for participation by DWR in studies involving the technical and economic feasibility of enlargement of Shasta Dam, state departments and agencies are prohibited, whether by loan, grant, license, or otherwise, from cooperating with any agency of the federal, state, or local government in the planning or construction of any dam, reservoir, diversion, or other water impoundment facility that could have an adverse effect on the free-flowing condition of the McCloud River, or on its wild trout fishery.⁹

Groundwater

There are three basic methods available for managing groundwater resources in California: management by local agencies under authority granted in the California Water Code or other applicable State statutes; local government groundwater ordinances or joint powers agreements; and, court adjudications.

AB 3030 (Costa), the California Groundwater Management Act, was passed by the Legislature in 1992.¹⁰ It was a significant addition to the groundwater management authorities granted under the Water Code in that it greatly increased the number of local agencies authorized to develop a groundwater management plan (GMP) and set forth a common framework for management by local agencies throughout California. Though adoption of a GMP is encouraged under AB 3030 and not required, subsequent bond initiatives and statutes have made an adopted GMP an eligibility criterion for receiving groundwater project and program funds. Since its passage, 149

⁸ Proposed Water Code § 79762

⁹ Public Resources Code §§ 5093.50 and sequence; specifically § 5093.542

¹⁰ Water Code §§ 10750 and sequence

agencies have adopted GMPs in accordance with AB 3030. Other agencies have begun the process. As mentioned above, in some basins, groundwater is managed under other statutory or judicial authority.

AB 3030 provides a systematic procedure to develop a GMA and requires the inclusion of certain minimum components. These include basin management objectives and monitoring and management of groundwater levels, inelastic surface subsidence, and changes in surface flow and surface quality that directly affect groundwater levels or quality or are caused by groundwater pumping. AB 3030 also requires a description of how recharge areas identified in the plan substantially contribute to the replenishment of the groundwater basin. In addition, suggested optional components that might be relevant for a particular groundwater basin are listed.

In the Sacramento River Region, one example of groundwater management is that on August 2003 the Butte County Board of Supervisors approved a resolution to proceed with the development of a county-wide GMP.¹¹ The Butte County GMP supports the long-term maintenance of high quality groundwater resources within the Plan Area for agricultural, environmental, rural domestic and urban needs.

Governor's Water Action Plan

On Thursday, October 31, the California Natural Resources Agency, the California Department of Food and Agriculture, and the California Environmental Protection Agency, jointly released a public review draft of the California Water Action Plan (Action Plan).

The Action Plan identifies multiple water-related challenges that the State currently faces including drought, flood, declining groundwater basins, poor water quality, and loss of fish and wildlife habitat. The Action Plan states that it is "based on three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably managed water system and environment that can better withstand inevitable pressures in the coming decades."

The Action Plan sets out an ambitious set of strategies to be implemented in the next five years including, but not limited to:

- Making conservation a way of life;
- Investing in integrated water management and increasing regional self-reliance;
- Protecting and restoring important ecosystems, including in the Delta;
- Managing and preparing for dry periods;
- Expanding water storage capacity; and,
- Providing safe drinking water

All of these essential actions would be critically advanced by the funding provided in AB 1331 – the Climate Change Response for Clean and Safe Drinking Water Act of 2014.

¹¹Resolution 03-134