

**COMMUNICATIONS RECEIVED AND REFERRED
BUTTE COUNTY WATER COMMISSION
MEETING OF JUNE 6, 2018**

Copies of all communications are available at the
Butte County Department of Water and Resource Conservation
308 Nelson Avenue
Oroville, CA 95965

1. *California Water Plan eNews, Wednesday's Update, April 25, 2018
2. *Email from Tony St. Amant, May 2, 2018, WC agenda item 5e, May 2, 2018
3. *California Water Plan eNews, Wednesday's Update, May 2, 2018
4. *Article from *Chico Enterprise Record*, May 4, 2018, Sites OK'd for \$1B in Prop. 1 funding
5. *Email from Kristin Cooper Carter, May 7, 2018, Important GSA Issue
6. *Article from *Chico Enterprise Record*, May 7, 2018, State has 'March Miracle' in water conservation
7. *California Water Plan eNews, Wednesday's Update, May 9, 2018
8. *California Water Plan eNews, Wednesday's Update, May 16, 2018
9. *Article from *Chico Enterprise Record*, May 20, 2018, Direction sought on groundwater management organization
10. *Article from *Chico Enterprise Record*, May 22, 2018, State Water Project increases deliveries
11. *Correspondence from NCWA

INTEGRATE

ALIGN

INVEST

Wednesday Update*April 25, 2018*

This weekly electronic newsletter is designed to keep you current on California Water Plan news. We welcome comments, suggestions, and any news tips that may be of interest to water planners.

WATER PLAN

CALENDAR

COMMENTS /
SUGGESTIONSSUBSCRIBE /
UNSUBSCRIBE

Water commission schedules three-day meeting to review water storage projects

The California Water Commission will hold a [three-day meeting](#) next month to determine the final public benefit ratios for proposed water storage projects. Commissioners will be looking at [11 proposals](#) submitted under the [Water Storage Investment Program](#). The meeting will be May 1-3, in Sacramento.

New groundwater resource available to help develop sustainability plans

A new [Groundwater Resource Hub](#) has been launched by the Nature Conservancy as a resource for developing groundwater sustainability plans. It includes a [guidance document](#) on preparing a plan under the [Sustainable Groundwater Management Act](#). A [webinar](#) to introduce the hub and its tools, will be held Wednesday, May 2.



Report recommends actions for improving groundwater recharge in California

The effort to recharge groundwater basins is the subject of a new report from the Public Policy Institute of California. [Replenishing Groundwater in the San Joaquin Valley](#) looks at the recharge action being taken in the state's largest farming region. The report lists several actions, including addressing regulatory barriers, that are needed to capitalize on recharge opportunities.

Issue brief explores strategy for encouraging managed aquifer recharge

Another idea for managed aquifer recharge (MAR) is a strategy called recharge net metering. It encourages MAR by offsetting the costs incurred by infiltration systems. The idea is examined in an [issue brief](#) released by UC Berkeley.

Land use viewer provides statewide data for groundwater sustainability agencies

Groundwater sustainability agencies can now find statewide and regional land use data on the [California DWR Land Use Viewer](#). The information will help agencies meet the requirements for developing groundwater sustainability plans. DWR has posted a [fact sheet](#) on the viewer.

Sections of the Mokelumne River receive recommendation for wild and scenic status

A report from the California Natural Resources Agency is [recommending](#) [that sections of the Mokelumne River](#) be added to the California Wild and Scenic Rivers System. The recommendation is for five segments of the river, covering 37 miles, between Salt Springs Dam and Pardee Reservoir. This is the first time since 1994 that a river has been assessed for addition to the system.



Launch of Envision v3 provides updated sustainability framework

The [Institute for Sustainable Infrastructure](#) has issued [Envision v3](#). The sustainability framework assesses the sustainable attributes of infrastructure projects. Envision uses 60 sustainability criteria that address the environmental, social, and economic impacts to sustainability in project design, construction, and operation.

Thomas, Autum

From: Tony St. Amant <tsainta@hotmail.com>
Sent: Monday, April 30, 2018 11:43 AM
To: BCWater
Subject: WC agenda item 5e, May 2, 2018

Dear Water Commissioners,

I urge you to vote yes on the proposed resolution.

I would suggest that your decision should not be based on whether or not you agree with BEC's views on environmental issues. It should be based on how the groundwater policy process could best benefit from BEC participation—which will happen no matter how you vote, be it through the relationship proposed in the resolution or through public comment periods and the media.

After more than 25 years of participating in and following water policy discussions in Butte County, I think the process would benefit greatly from the relationship proposed in the resolution. Consideration of environmental concerns early in policy development will be much less disruptive than formal public comment after policies have been drafted. BEC has evolved into a broad-based stakeholder organization trying to strengthen the process by integrating environmental considerations early in the policy cycle. It makes sense to give them a seat at the table.

Please excuse me for not attending your meeting as I did for so many years. Health issues won't allow it.

Sincerely,

Tony St. Amant
Chico

INTEGRATE

ALIGN

INVEST



Wednesday Update

May 2, 2018

This weekly electronic newsletter is designed to keep you current on California Water Plan news. We welcome comments, suggestions, and any news tips that may be of interest to water planners.

WATER PLAN

CALENDAR

COMMENTS /
SUGGESTIONS

SUBSCRIBE /
UNSUBSCRIBE



Preparing California for wild swings between droughts and major floods

A [new report](#) from [Nature.com](#) is among the first to estimate the likelihood of wild drought-to-flood swings in California during the coming decades. One of the suggestions for dealing with the situation is paying landowners to flood their property during wet years as a way to recharge groundwater basins. There is a fee to gain full access to the report.

Comment period on State hazard mitigation plans runs through May 16

The public review draft of the [2018 California State Hazard Mitigation Plan](#) has been posted and is available for comment. The plan covers natural and human-caused disasters. It provides current hazard analysis along with mitigation strategies and goals. The [comment deadline](#) is Wednesday, May 16.



Cal OES

Collaborative effort leads to new report on potable water reuse

Cities and utilities considering potable reuse can find helpful information in the new report, [Mainstreaming Potable Water Reuse in the United States: Strategies for Leveling the Playing Field](#). It includes a review of current projects that are effectively reusing wastewater. The collaborative effort involved the [U.S. Environmental Protection Agency](#), the [Johnson Foundation at Wingspread](#), and [Reinventing the Nation's Urban Water Infrastructure](#).

Guide helps building designers incorporate water reuse in their projects

There is also a new potable water reuse guide for building planners and designers. The [Design Professional's Practical Guide for Integrating Onsite Water Use and Reuse](#) from the William J. Worthen Foundation is designed to help understand and implement water reuse technology in building projects.

Webinar will explore improving coastal data to help address societal needs

Addressing societal needs by integrating coastal and ocean-monitoring programs will be discussed during a [webinar](#) on May 16. The National Water Quality Monitoring Council's webinar will provide an overview of the benefits of using a sound data-management program. The webinar is a free event, but [registration](#) is required.

Two weeks to go before the opening of water association's conference

The [California Water Association's Spring Conference](#) is two weeks away. It begins May 16, in Sacramento. This year's theme is "Making the Choice Between Easy and Right." The agenda includes seminars and presentations on several topics including drinking water, small system consolidations, and the 2018 Legislative session.



Getting the most from games that examine environmental and sustainability issues

A [webinar](#) to discuss the usefulness of realistic, environment games is set for Wednesday, May 16. The American Water Resources Association is sponsoring the webinar that looks at board games and virtual reality games that ask players to juggle environmental issues while growing food, growing cities, and maintaining sustainability.

Sites OK'd for \$1B in Prop. 1 funding

By: Steve Schoonover, May 4, 2018

Sites Reservoir is in line for a billion bucks.

The State Water Commission, meeting this week in Sacramento to decide the public benefits of projects seeking the water storage bond money included in Proposition 1, declared the off-stream reservoir west of Maxwell to be eligible for \$1.008 billion dollars of the roughly \$2.6 billion that is available.

That doesn't mean the Colusa County reservoir will actually get that much money, as the commission OK'd a bit over \$2.8 billion for nine projects. Three others proposals were deemed ineligible for funding.

There is also another level of review before final allocations are made.

The money approved by voters in November 2014 can't be used simply for increasing water storage, under the language included in the ballot measure.

Instead it has to pay for five public benefits: ecosystem benefits, water quality, flood control, emergency response and recreation.

The money also has to achieve measurable improvements to the ecosystem of the Sacramento-San Joaquin Delta.

Sites would be a 1.8 million acre-foot lake, and would cost \$5.2 billion to build in total. Proponents say they have secured enough financial backing to complete the project with or without the state funds.

They had been seeking \$1.388 billion, but Water Commission staff initially put the public benefit at \$662.3 million. After an appeals process, that recommendation increased to \$933.3 million, and the commission raised the amount further this week.

The other big reservoir project that many voters thought they were approving money for in Proposition 1, didn't fare as well. Temperance Flat was only approved for \$171.3 million, though \$1.055 billion had been sought.

Proponents said the small amount might kill the \$2.7 billion plan to build a new 319-foot high dam with a 1.33 million acre-foot reservoir on the San Joaquin River, upstream from the existing Friant Dam.

The rest of the projects, and the amount approved were:

- Pacheco Reservoir expansion in Santa Clara County: \$484.5 million
- Los Vaqueros Reservoir expansion in Contra Costa County: \$459 million.
- A groundwater bank in southern Sacramento County: \$280.5 million.
- A groundwater bank in the Chino Basin in Riverside County: \$206.9 million.
- A groundwater bank in southeastern Kern County, \$123.3 million.
- A groundwater bank in western Kern County: \$85.7 million .

The only other project north of the delta — the Centennial Dam on the Bear River — was originally deemed to have no public benefit, and proponents did not appeal.

Two other projects were deemed ineligible for the funding: a reservoir in San Diego and a groundwater bank in Kings County.

The action this week is not the final step. It's just the determination of the public benefit of the projects.

They are now being reviewed by commission staff for three other components: relative environmental value, resiliency and implementation risk.

Those rankings will be released May 25.

The Commission will make final decisions on those scores at its June 27-29 meeting, and preliminary award decisions will be made at the July meeting.

Reach City Editor Steve Schoonover at 896-7750.

Thomas, Autum

From: kcooper@northstatewatertreatment.com
Sent: Monday, May 7, 2018 4:54 PM
To: BCWater
Cc: LDechter@actionnewsnow.com; BOS District 4; Kirk, Maureen; Connelly, Bill; Wahl, Larry; Teeter, Doug; Lambert, Steve; Clerk of the Board
Subject: Important GSA Issue

Paul and BOS Members,
It is my understanding that tomorrow the Butte County Board of Supervisors will consider their advisory committee recommendations. I am likely to be unable to attend this meeting given that it is held during working hours. I know I have expressed to Paul my concerns about these appointments. I have also expressed them to Steve Lambert, my Supervisor at a Durham Town Hall Meeting.

From what I understand the BOS is likely to appoint two groundwater dependent farmers but only one private domestic well owner to the governing board for the new groundwater management program. I have met with several of our neighbors and other concerned home owners. We would like to see more PRIVATE DOMESTIC WELL DEPENDENT PEOPLE at the decision-making table. There needs to be equal representation.

The shallow, domestic wells will be the first to feel impacts. Many of us have not only homes, but businesses that rely on our water resources. The County needs to ensure that we have representation on the governing board and in each District. Residential well owners do not have the significant financial considerations and resources that agricultural interests have when considering use. Their unique perspective and voice should be valued equally to those with distinctly different interest.

You have the power to configure this governing board and these districts however they need to be in order to best serve the County. Other Counties throughout the State are looking at similar configurations. Embrace stakeholder involvement now to avoid problems down the line. Support the outreach networks that we have developed by allowing us to keep people informed. The best way to do this is with a seat at the table and an ability to actively share information as it is being developed and contemplated.

Thank you,
Kristin Cooper Carter

North State Water Treatment Services
Kristin Cooper Carter / Kevin McGrath
www.northstatewatertreatment.com
Office - 530-228-9235
Operator – 530-514-6123

State has 'March Miracle' in water conservation

By: Steve Schoonover, May 7, 2018

Sacramento >> There may not have been a "March Miracle" when it came to the snowpack in the state, but there was sure one when it came to water conservation.

The State Water Resources Control reported that in March urban Californians used 24.8 percent less water than in March 2013, the benchmark year considered to be before the drought.

That's a dramatic turnaround from conservation numbers that have been dropping fairly steadily since June 2016, culminating in February with the state using more water than during the same month in 2013.

The conservation rate hasn't topped 20 percent since April 2017.

The state dropped mandatory conservation targets in May 2016, instead letting water agencies set their own goals.

Almost all the agencies set the bar at zero savings, and in February, 176 of the 381 agencies reporting hit that target, using more water than in February 2013.

But in March, only 10 of the 366 agencies reporting said they used more water than in 2013. Savings of greater than 20 percent were reported by 242 agencies.

It was a month with a lot of rainfall, which probably made much of the difference as landscape watering needs were minimal.

Locally, Chico led the way with a 38.9 percent conservation rate compared to 2013. Oroville saved 36.3 percent, Paradise 33.8 percent, Del Oro 7.3 percent and Willows, 31.3 percent.

Elsewhere in the north valley, Yuba City had savings of 29.9 percent, Marysville was 26.7 percent, Red Bluff had 19.5 percent and Redding saved 28.5 percent.

Savings weren't limited to any one region. While the Sacramento River watershed led with 33.1 percent savings, the South Coast saved 24.2 percent and the Bay Area saved 21.3 percent.

Per capita water use per day averaged 64.8 gallons statewide. Locally, Chicoans used 73 gallons, Oroville residents used 55 gallons and Paradise residents used 72 gallons.

The full data set is available at <http://tinyurl.com/mar18wateruse>.

Reach City Editor Steve Schoonover at 896-7750.

INTEGRATE

ALIGN

INVEST

Wednesday Update**May 9, 2018**

This weekly electronic newsletter is designed to keep you current on California Water Plan news. We welcome comments, suggestions, and any news tips that may be of interest to water planners.

WATER PLAN

CALENDAR

COMMENTS /
SUGGESTIONSSUBSCRIBE /
UNSUBSCRIBE

Summit for groundwater sustainability agencies set for next month in Sacramento

The Groundwater Resources Association will hold its inaugural [groundwater sustainability agency \(GSA\) summit](#) on June 6 and 7, in Sacramento. It will give GSA members an opportunity to discuss technical and policy issues related to complying with the [Sustainable Groundwater Management Act](#). A [preliminary agenda](#) has been posted.



Working lands workshop will explore ways to reduce emissions in California

A [workshop](#) to discuss the development of the Natural and Working Lands Implementation Plan will be held Friday, May 18, in Sacramento. The implementation plan will be used to incorporate lands, including forests, farmlands, and wetlands, into the State's climate strategy. The goal would be to use the lands to achieve net zero, or negative, total emissions. A [webcast](#) will be available.

Groundwater Resource Hub adds database for groundwater dependent ecosystems

California's [Groundwater Resource Hub](#) has added a database of [indicators of groundwater dependent ecosystems](#) (GDEs). This new data and mapping tool provides a starting point to identify GDEs, which is a required element in groundwater sustainability plans. The database was developed by DWR, the California Department of Fish and Wildlife, and The Nature Conservancy.

There is still time to register for Sierra Meadows Partnership's three-day workshop

The Sierra Meadows Partnership has set its [2018 workshop](#) for May 29–June 1, in Tahoe City. It will include a review of efforts to quantify meadow greenhouse gas storage, and discussion of current meadow conservation efforts. [Registration](#) is required.

Headwaters in peril? Auburn symposium will look at the question

A [symposium](#) hosted by the Mountain Counties Water Resources Association will look at the developments that have put California headwaters in peril. The symposium will be Wednesday, May 30, in Auburn. [Registration](#) closes on May 25.



California Invasive Species Action Week activities get started on June 2

This year's [California Invasive Species Action Week](#) will run June 2–June 10. It is an opportunity to learn about the problems caused by invasive species and how their progress can be stopped. The [schedule of events](#) includes activities throughout the state.

Summary posted for workshop on California's small water system consolidations

The University of California, Berkeley's Center for Law, Energy & the Environment has posted a [summary of a March workshop](#) on small water system consolidations. The consolidation of water systems can help small or disadvantaged communities improve the reliability of their water service. The workshop looked at the consolidation results to date, and ways to improve future efforts.

INTEGRATE

ALIGN

INVEST

Wednesday Update

May 16, 2018

This weekly electronic newsletter is designed to keep you current on California Water Plan news. We welcome comments, suggestions, and any news tips that may be of interest to water planners.

WATER PLAN

CALENDAR

COMMENTS /
SUGGESTIONSSUBSCRIBE /
UNSUBSCRIBE

Paleoclimatology will be the focus of this year's extreme precipitation symposium

This year's [California Extreme Precipitation Symposium](#) will look at the way paleoclimatology studies can help improve flood risk management planning. There will be presentations on how the latest science applies to the hydrology of California, including the management of water and forests. The symposium will be Monday, July 9, in Davis.



Discussing the lessons learned from last year's California wildfires

Some of the lessons learned from last year's California wildfires will be discussed during a [webinar](#) tomorrow, May 17. It will include a panel discussion on the effects of the fires on public health and water supplies. The webinar is being hosted by [Carpe Diem West](#).

OEHHA report examines dozens of climate change indicators in California

A report on [Indicators of Climate Change in California](#) has been released by the Office of Environmental Health Hazard Assessment (OEHHA). The 36 indicators are divided into categories including physical and biological systems. The report is intended to promote scientific analysis to help with decisions on mitigating and adapting to climate change.



Remote attendance is still an option for those interested in science symposium

The [California Water Boards Science Symposium](#) has sold out the allotment of in-person attendance. But, it is still [accepting registration](#) from those who would like to attend remotely. The annual event promotes the use of water quality monitoring to generate data that can be used to make water quality management decisions. It will be June 20 and 21, in West Sacramento.

Grant applications being accepted for large-scale restoration projects

Grant applications for [ecosystem restoration projects](#) are being accepted by the California Department of Fish and Wildlife. The funding is for large-scale projects, including restoration of watersheds damaged by recent wildfires. An application [webinar](#) will be held May 30. The application deadline is Wednesday, June 13.

East vs. West: webinar will examine various instream flow policies

How lessons learned back east may apply to western states will be discussed during a [webinar](#) on Wednesday, June 13. The [American Water Resources Association](#) will present information on the way eastern states manage rivers for successful instream flow policies.

July workshop will take aim at strengthening coastal resilience

Save the dates for a Southern California [workshop](#) on improving coastal resiliency. Participants will learn about resources available to help with planning decisions that maintain a resilient coastline, and about green infrastructure options for reducing the effects of coastal hazards. It will be July 18 and 19, in Irvine.

Direction sought on groundwater management organization

By: Staff Reports, May 20, 2018

Oroville >> The process of managing the groundwater beneath Butte County may take another step forward Tuesday, as the Board of Supervisors are being asked to provide direction on how to set up the agency that would actually do the managing.

The "groundwater sustainability agency" in question is for the Vina Sub-Basin, which covers the valley floor from Big Chico Creek north to the Tehama County line.

The official boundaries currently extend farther north to Deer Creek, but Tehama County has applied to the Department of Water Resources to have its territory detached. Similarly, Butte County has applied to extend the boundary southward to encompass all the Chico city limits.

The new sub-basin will include three elected authorities — Butte County, Chico, and the Rock Creek Reclamation District — all of which have indicated an interest in having a voice in the management of the groundwater.

County staff is recommending a joint powers authority be set up, which would be governed by a five-member board. There would be a representative from each of the three agencies, plus one independent agricultural groundwater pumper and one domestic well user.

The JPA will be charged with developing a plan by Jan. 30, 2022, that will assure the aquifer is not used to a degree that depletes it.

The meeting begins at 9 a.m. in the Supervisors Chambers in the county Administration Building, 25 County Center Drive in Oroville.

Automatic disaster relief

The supervisors are also being asked to finalize the ordinance that allows the Assessor's Office to automatically reduce the taxes on property that has been damaged by wildfire, if the governor has issued a disaster proclamation.

In the past, someone suffering a fire loss had to apply for the tax relief, and not everyone did.

The tax will return to its previous level once burned structures have been rebuilt.

Although it is called a "second reading" of the ordinance, the item is on the consent agenda, a list of actions deemed non-controversial and approved on a single vote, without discussion.

In a separate consent item, supervisors will be asked to extend the state of emergency relating to the La Porte and Cherokee fires last October.

Bridge impacts

The board is also being asked to purchase required environmental impact credits to allow the project to replace the Midway bridge over Butte Creek to move forward.

The new bridge will remove habitat used by the giant garter snake and the valley elderberry longhorn beetle, both of which are classified as threatened species.

To build the new bridge the county will have to buy \$133,000 worth of beetle mitigation credits, and \$99,000 worth for the snake. It will also have to spend \$15,200 to move an elderberry bush at the site into a conservation bank.

The federal government is paying almost 89 percent of the \$16.4 million cost to replace the bridge.

The full agenda is available at <http://tinyurl.com/bosbutte0522>.

State Water Project increases deliveries

By: Staff Reports, May 22, 2018

Sacramento >> Allocations to State Water Project water contractors were increased Monday to 35 percent of what they would like.

The Department of Water Resources announced the slight increase from the 30 percent allocation announced in April.

An initial 15 percent allocation was announced in December, and it was raised to 20 percent in January.

"Late-season rain and snow in March and April salvaged what would have been a severely dry year, which allows us to make this slight increase in allocation," said DWR Director Karla Nemeth in a press release.

The statewide snow water content, however, has dropped to 15 percent of average over the past month.

In addition Lake Oroville, the main supply for the State Water Project, has just 69 percent of the amount of water that would be normal for this time of year.

The lake was kept lower than usual this winter to avoid having to use the main spillway, which had been partially repaired last summer.

As of Tuesday afternoon, the lake surface level was at 821.5 feet above sea level, which is above the gates on the spillway, where this year's repair work has already begun.

There were 2.44 million acre-feet of water in storage at the lake. The 35 percent allocation amounts to about 1.48 million acre-feet.

WATER BRIEFINGS

BAY DELTA

CORRESPONDENCE

11

A publication from the Northern California Water Association

MAY 2018

The various Bay-Delta processes continue with the State Water Board moving forward with the Water Quality Control Plan (WQCP) update; the state administration is advancing CalWaterFix (tunnels); and the federal agencies are consulting on new biological opinions for the operation of the Central Valley Project and the State Water Project. These processes are all looking in some fashion to redirect water from the Sacramento River Basin to serve various water needs in the Bay-Delta. For context, these processes appear to be looking to redirect 500,000 acre-feet (af) to 1,000,000 af away from the region.

In Northern California, we all know [What's at Stake](#) in these various processes. The NCWA Bay-Delta Task Force continues to meet monthly to coordinate

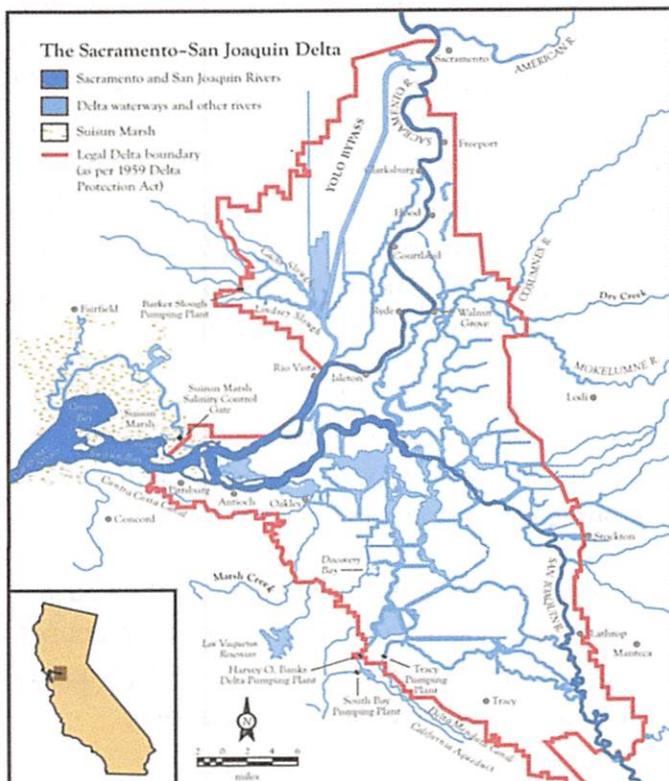
all the various efforts in the Sacramento River Basin surrounding the Delta and to bring our team of directors, water resources managers, attorneys, biologists, and engineers together to strategize and take action to protect Northern California water rights and supplies and to help manage the water resources in our region for [multiple beneficial uses](#). The following is an update on these various processes and the actions that NCWA and the Sacramento Valley Water Users are taking as part of this unified and concerted strategy.

SWRCB – Water Quality Control Plan

1) Regulatory Process

The State Water Board continues to move forward with the phased review and update of the 2006 Water Quality Control Plan for the Bay-Delta ([2006 Bay-Delta Plan](#)) and flow objectives for priority tributaries to the Delta to protect beneficial uses in the Bay-Delta watershed. The update to this plan continues to be the primary focus for Northern California water right holders and suppliers, as many people want to use this process to redirect water rights and supplies away from the Sacramento Valley to the Delta. The Bay-Delta Plan identifies beneficial uses of water in the Bay-Delta, water quality objectives for the reasonable protection of those beneficial uses, and a program of implementation for achieving the water quality objectives.

- **Phase I** of this work involves updating San Joaquin River flow and southern Delta water quality requirements included in the Bay-Delta Plan. The Phase I plan has relied upon additional unimpaired flows from the San Joaquin River—



*Please note that the electronic version of this document contains various links, where you can click on either the link or the documents shown to see more detailed information.

approximately 40% of unimpaired flows from February through June as the preferred alternative (a range of 30-50%). The State Water Board is currently reviewing the comments it received on its Substitute Environmental Document (SED) for the San Joaquin River (Phase I) and will likely issue a final SED soon. NCWA and the Sacramento Valley Water Users are concerned about the approach in this process and commented on the SED on March 17, 2017. The comments provided that: the unimpaired flow approach is not supported by the best available science; by proposing to amend the wrong water quality control plan, the State Water Board fails to undertake the statutorily mandated balancing of the public interest on the affected streams; complex delta systems require a coordinated approach to management; and the unimpaired flow approach would impose significant costs, without evidence of significant benefits. In July 2015, a broad group of water suppliers from throughout the state sent a letter to the State Water Board encouraging it to abandon the unimpaired flow approach, which also raises concerns that a similar approach will take place in Phase II with respect to the Sacramento River and its tributaries.



- **Phase II** involves other comprehensive changes to the Bay-Delta Plan to protect beneficial uses not addressed in Phase I, which includes the Sacramento River Basin. Phase II focuses on the following issues: (1) Delta outflow objectives, (2) export/inflow objectives, (3) Delta Cross Channel Gate closure objectives, (4) Suisun Marsh objectives; (5) potential new reverse flow objectives for Old and Middle Rivers; (6) potential new floodplain habitat flow objectives; (7) potential changes to the monitoring

and special studies program, and (8) other potential changes to the program of implementation. The State Water Board will also consider other potential changes to the Bay-Delta Plan during this phase, including issues identified through the scoping process, and information that is produced as part of the Cal WaterFix.

- **Phase III** involves changes to water rights and other measures to implement changes to the Bay-Delta Plan from Phases I and II. Importantly, the State Water Board staff are now preparing curtailment regulations rather than a water rights proceeding as an option to avoid a full Phase III process.
- **Phase IV** involves developing and implementing flow objectives for priority Delta tributaries outside of the Bay-Delta Plan updates, i.e. smaller tributaries in the Central Valley, see [here](#).

The State Water Board in October 2017 issued its scientific basis report for [Phase II](#), essentially proposing that it will consider a range of 35 to 70 percent unimpaired flows. NCWA and many others commented on the document on December 16, 2016 (see below), basically saying the unimpaired flow approach does not work for California and instead the SWRCB should focus on a functional flow approach for the Sacramento River Basin. As part of these comments, MBK Engineers has estimated that a 40% unimpaired flow for Delta outflow would redirect 480,000 af of water and a 50% unimpaired flow 1.1 maf away from storage and beneficial uses in the Sacramento River Basin.

The State Water Board had its scientific basis report peer reviewed and on October 4, 2017 issued its final scientific basis report. It also posted several documents with respect to Phase II:

- a [Fact Sheet](#) on the current status of the Phase II process, including a description of the proposed changes to the Bay-Delta Plan's water quality objectives and implementation approach;

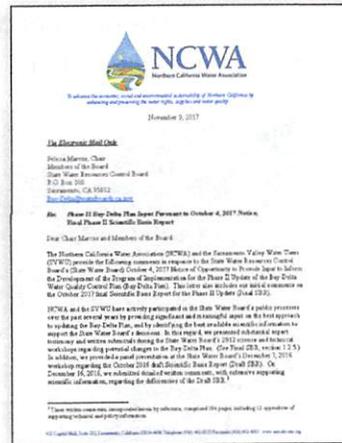
- a **notice** informing interested persons how to stay updated on the Phase II process (this notice was also mailed to water users and others);
- the final **Scientific Basis Report** supporting potential Phase II changes to the Bay-Delta Plan and information on peer review of the report, including responses to peer review comments; and
- **hydrologic modeling information** (the Sacramento Water Allocation Model or SacWAM) in support of Phase II, including an updated model and model output and responses to peer review comments on the model.

flow” approach. This outdated approach is at the core of the Final Scientific Base Report and is reflected in the premature questions in the October 4, 2017 notice. The “unimpaired flow” approach, if implemented, would negatively affect numerous beneficial uses of water to the detriment of the state’s environment and economy.”

On November 13, 2017, water suppliers in every part of the state made the following statement: “California needs new and modern approaches to supply water for cities and rural communities, farms, fish, birds and recreation in the 21st century.” “Water suppliers in every part of California call on the Governor and both the state and federal administrations to embrace a coordinated and modern 21st century approach to water management for the Bay-Delta by protecting all beneficial uses of water.”

Importantly, since the State Water Board’s last major WQCP update in 2000, there has been a serious and concerted effort to implement the following types of programs and projects in the Sacramento River Basin:

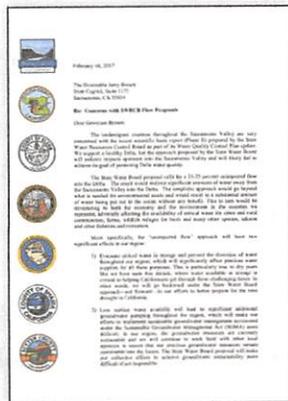
- flow arrangements;
- habitat enhancements;
- fish passage improvements;
- fish-food production projects; and
- studies to advance the science that informs management decisions.



NCWA and its Task Force have reviewed the documents and have engaged with the State Water Board in various ways. On November 9, 2017, NCWA and the SWWU submitted comments to the SWRCB on its scientific basis report. The comments summarized that we “remain opposed to the State Water Board staff’s efforts to pursue a rigid and scientifically outdated “unimpaired



NCWA/SWWU



Counties



Growers



Ducks Unlimited



These actions are described in comprehensive detail in the following document.



2) Voluntary Agreement Process

The Governor in his California Water Action Plan calls for “state entities to encourage **negotiated agreements** among interested parties to implement flow and non-flow actions to meet regulatory standards and support all beneficial uses of water.”

The Governor has called upon former Secretary of Interior Bruce Babbitt to convene parties and to help facilitate these voluntary agreements.

The Governor’s office has worked with the Resources Agency to encourage the voluntary agreements. This document summarizes the voluntary agreement process.

This process provides a good opportunity for the Sacramento River Basin to shape its future water management in a way that serves water for multiple beneficial uses. Discussions are underway on five rivers in the Sacramento River Basin, including the American, Feather, Mokelumne,



Sacramento, and Yuba Rivers. The water resources managers involved in the process sent a letter to Secretary Babbitt initially outlining their perspectives on a successful voluntary agreement process.

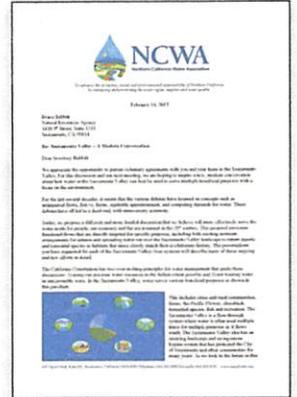
In sum, instead of a proposal that focuses on unimpaired flows, as proposed by the State Water Board, we believe an alternative approach with modern functional and targeted flows will work better for all beneficial purposes.

The parties are working to have initial agreements by May 31, 2018 with final agreements by the end of 2018.

3) Multibenefit Management

In addition to the Water Action Plan, the California Budget that was passed in 2017 contained the following chapter to encourage the voluntary agreement process.

“The Bay Delta Water Quality Control Plan establishes water quality control measures needed to protect municipal, industrial, agricultural, and environmental uses of water in the watershed of the Sacramento San Joaquin Delta and San Francisco Bay. This watershed, comprising millions of acres of farmland, is a source of drinking water for two thirds of the state’s population. The waterways of the Bay Delta estuary and its tributaries also provide critical habitat for numerous threatened and endangered species and recreationally and commercially important species. The Water Board is currently in the process of updating the Plan. The Water Board relies on a regulatory approach



to balance competing demands for water in the Delta. As directed by the Governor, the Natural Resources Agency is leading negotiations with water districts and environmental groups to develop voluntary agreements to achieve similar goals. These agreements would improve ecological flows and habitat for species, create water supply and regulatory certainty for water users, and facilitate a collaborative approach to the Water Board's update to the Plan. If sufficient, voluntary agreements could be accepted by the Water Board in lieu of a regulatory proceeding to amend water right permits and licenses."

The budget also contained "an increase of \$40 million Proposition 1 to support Central Valley multi benefit flood management projects that include, but are not limited to, actions identified by voluntary agreements. State funding would incentivize and complement additional contributions from local public agencies, federal agencies, and others."

Additionally, the Legislature on September 15 passed SB 5, which will be on the June 2018 ballot as Proposition 68. This proposition has the following provisions in Public Resources Code §80114 to encourage and fund voluntary agreements:

"(a) Of the amount made available pursuant to Section 80110, two hundred million dollars (\$200,000,000) shall be available to the Natural Resources Agency for implementation of voluntary agreements that provide multi-benefit water quality, water supply, and watershed protection and restoration for the watersheds of the state to achieve the objectives of integrating regulatory and voluntary efforts, implementing an updated State Water Resources Control Boards' San Francisco Bay/Sacramento-San Joaquin Delta Estuary Water Quality Control Plan, and ensuring ecological benefits. Expenditure of funds provided in this section shall be in accordance with the following:

(1) For the purposes of this section, watershed restoration includes activities to fund wetland

habitat, salmon, steelhead, and fishery benefits, improve and restore river health, modernize stream crossings, culverts, and bridges, connect historical flood plains, install or improve fish screens, provide fish passages, restore river channels, restore or enhance riparian, aquatic, and terrestrial habitat, improve ecological functions, acquire from willing sellers conservation easements for riparian buffer strips, improve local watershed management, predation management, hatchery management, and remove sediment or trash.



(2) For purposes of this section, funds may be used for projects that measurably enhance stream flows at a time and location necessary to provide fisheries or ecosystem benefits or improvements that improve upon existing flow conditions. Project types that may be eligible include, but are not limited to, water transactions such as lease, purchase, or exchange, change of use petitions to benefit fish and wildlife, surface storage to be used to enhance streamflow, forbearance of water rights, changes in water management, groundwater storage and conjunctive use, habitat restoration projects that reshape the stream hydrograph, water efficiency generally, irrigation efficiency and water infrastructure improvements that save water and enable reshaping of the stream hydrograph, reconnecting flood flows with restored flood plains, and reservoir reoperations both at existing and new storage sites.

(b) The funds authorized by this section shall be available for direct expenditures and local assistance grants by the Natural Resources Agency, in consultation with the Department of Fish and Wildlife, that satisfy all of the following:

(1) Implement voluntary agreements executed by the Department of Fish and Wildlife with federal and state agencies, local government, water districts and agencies, and nongovernmental organizations that improve ecological flows and habitat for species, create water supply and regulatory certainty for water users, and foster a collaborative approach to facilitate implementation of the State Water Resources Control Board's Bay-Delta Water Quality Control Plan.

(2) Implement a voluntary agreement submitted by the Department of Fish and Wildlife to the State Water Resources Control Board on or before June 1, 2018, for consideration.

(3) Implement a voluntary agreement that is of statewide significance, restores natural aquatic or riparian functions or wetlands habitat for birds and aquatic species, protects or promotes the restoration of endangered or threatened species, enhances the reliability of water supplies on a regional or interregional basis, and provides significant regional or statewide economic benefits.

(c) Funds provided by this section shall not be expended to pay the costs of the design, construction, operation, mitigation, or maintenance of Delta conveyance facilities.

(d) If the Department of Fish and Wildlife submits



a voluntary agreement that satisfies paragraph (2) of subdivision (b), unencumbered funds available pursuant to this section to implement that voluntary agreement shall no longer be available 15 years after the date the State Water Resources Control Board approves the submitted agreement, at which point funds remaining available pursuant to this section shall become available to the Natural Resources Agency for the purposes of Sections 79732 and 79736 of the Water Code. If no voluntary agreements are submitted on or before June 1, 2018, any remaining funds shall be available to the Natural Resources Agency for the purposes of Sections 79732 and 79736 of the Water Code. The Secretary of the Natural Resources Agency shall ensure an annual reporting of the funds pursuant to Section 80012."

The NCWA Board of Directors supports Proposition 68.

4) Delta Dynamic

With respect to functional flows in the Delta, NCWA has joined water suppliers in other parts of the state to offer a different approach to the Delta that fully integrates flows with habitat. The current approach that focuses on outflow has not worked for either co-equal goal—ecosystem health or water supply reliability. A new approach to flows in the Delta is clearly needed to meet the co-equal goals.

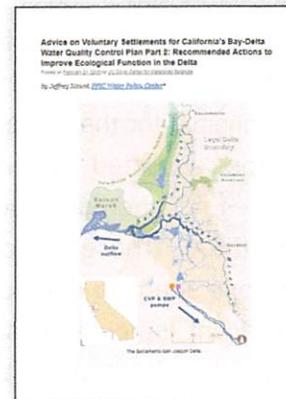


On November 13, 2017, water suppliers in every part of the state offered a new vision for the Delta with the following statement that "California needs new and modern approaches to supply water for cities and rural communities, farms, fish, birds and recreation in the 21st century." The statement adds that "we share the current interest to improve fisheries and our agencies have made substantial investments and advanced

programs for the benefit of fish. Furthermore, water suppliers acknowledge flow as an important component of habitat and encourage a new approach where every drop of water serves a specific and targeted beneficial use or multiple uses. However, a flow only approach that fails to take steps to incorporate flow with habitat and other important species functions, such as proposed by the State Water Board in the Water Quality Control Planning process, will not improve species. Continuing on the path set by the State Water Board will not help the environment, it will not help water supplies throughout the State, and it will not help California successfully implement groundwater management. It could lead to an adjudication of the entire Bay-Delta watershed, which would threaten progress on ecosystem restoration and other priority water issues in the California Water Action Plan.

We offer this statement to set a new path. We support California's co-equal goals of protecting, restoring and enhancing the Delta ecosystem and providing more reliable water supplies for California. We believe these goals can be achieved by holistically planning for ecosystem functions to ensure the most efficient use of water for all beneficial uses, by using the interaction of flow with other habitat aspects to create the type of conditions that allow us to meet our objectives. This requires us to take into account the altered physical landscape in California and our highly managed water system, which must be addressed in combination with appropriate hydrology to protect and balance all beneficial uses of water."

The Public Policy Institute of California (PPIC) in early 2018 prepared a four-part blog series fashioned as "Advice on Voluntary Agreements for California's Bay-Delta Water Quality Control Plan." This blog series together has posed a new approach for the Bay-Delta over the next several decades.



California WaterFix (Delta Tunnels)

1) Agency Approvals

On July 21, 2017 the Department of Water Resources (DWR) approved and certified the environmental documents for California WaterFix, which is the Delta tunnel proposal. "The Notice of Determination and decision documents signed by the DWR Acting Director approve WaterFix as the proposed project under the California Environmental Quality Act (CEQA).



For more information on the DWR approval, see [here](#).

On June 26, 2017 the National Marine Fisheries Service (NOAA Fisheries) and U.S. Fish and Wildlife Service (USFWS) released their biological opinions for

the proposed construction and operation of California WaterFix. These agencies are responsible for the protection of species listed under the U.S. Endangered Species Act (ESA). These biological opinions seem to rely upon a significant increase of spring outflow of approximately 44,500cfs.



Additionally, on July 28, 2017 the California Department of Fish and Wildlife issued an incidental take permit for the construction and operation of California WaterFix in compliance with Section 2081(b) of the California Endangered Species Act. This permit authorizes the incidental take of state-listed species associated with future operation of the State Water Project (SWP) with the addition of the California WaterFix, which includes construction of the proposed water conveyance facilities within the Sacramento-San Joaquin River Delta. A copy of the permit and more details are [here](#).

Various conservation groups on September 22, 2017 filed suit in Sacramento Superior Court challenging the California Fish and Wildlife's (CDFW) July 2017 issuance of a "take" permit for the tunnel operations. The suit claims that CDFW improperly authorized the California Department Water Resources to kill and harm state-protected fish species, including winter-run and spring-run chinook salmon, longfin smelt and Delta smelt. The groups include the: Bay Institute, Center for Biological Diversity, Natural Resources Defense Council and San Francisco Baykeeper; all represented by Earthjustice.

The details for the California WaterFix and California EcoRestore are available [here](#).

2) Legal Actions

With DWR approving the Cal WaterFix and the related environmental documents described above, various parties in the Sacramento River Basin filed legal action

challenging the environmental review process. For the past five years, NCWA working with the North State Water Alliance assembled a team of experts to provide detailed comments on the proposed California WaterFix. These comments were largely ignored by DWR and the proponents. These statements and correspondence are available [here](#). The parties that filed suit in the Sacramento River Basin include:

- Anderson-Cottonwood Irrigation District
- City of Folsom, City of Roseville, Sacramento Suburban Water District, San Juan Water District
- City of Sacramento
- County of Butte
- County of Sacramento, Sacramento County Water Agency
- Glenn-Colusa Irrigation District, Reclamation District No. 108, Carter Mutual Water Company, El Dorado Irrigation District, El Dorado Water & Power Authority, Maxwell Irrigation District, Natomas Central Mutual Water Company, Meridian Farms Water Company, Oji Brothers Farm, Inc., Oji Family Partnership, Pelger Mutual Water Company, Pleasant-Grove Verona Mutual Water Company, Princeton-Codora-Glenn Irrigation District, Provident Irrigation District, Henry D. Richter, et al., Richter Bros., Inc., River Garden Farms Company, South Sutter Water District, Sutter Extension Water District, Sutter Mutual Water Company, Tisdale Irrigation & Drainage Company, Windswept Lands & Livestock Company, Biggs-West Gridley Irrigation District
- North Delta Water Agency, California Central Valley Flood Control Association, Brannan Andrus Levee Maintenance District, Reclamation District No. 3, Reclamation District No. 150, Reclamation District No. 349, Reclamation District No. 551, Reclamation District No. 554, Reclamation District No. 563, Reclamation District No. 800 (Byron

water near Courtland and route it around the Delta through two tunnels to the existing State and federal pumping facilities in Tracy.

The State Water Board finished Part 1 (water rights and supplies) and is now on Part 2 (fish and wildlife). [Part 1](#), focused on impacts to water rights and supplies. Nearly every water right holder upstream of the Delta filed a protest with the State Water Board claiming injury to their water rights and supplies. Under the Water Code, the agencies (DWR, Reclamation) must “demonstrate a reasonable likelihood that the proposed change will not injure any other legal user of water” and provide “a statement of any measures proposed to be taken for the protection of fish and wildlife in connection with the change.” The issue before the State Water Board is primarily focused upon the operations of the projects in conjunction with the conveyance through the Delta. DWR on September 8, 2017 provided a letter to the State Water Board with a summary and tables of operating criteria for the project approved by DWR (see section 1).

NCWA and the Sacramento Valley Water Users presented a detailed case in Part 1, with various expert witnesses, questioning the lack of a meaningful operations plan to show that the project will not impact water rights and supplies. This testimony builds upon the work the past several years by the North State Water Alliance to assemble a team of experts to provide detailed analysis and comments on the proposed California Water Fix. More details on these recent statements and correspondence are available [here](#).

[Part 2](#), which focuses on fish and wildlife, is now underway. More detailed information is posted on the State Water Board’s website [here](#).

4) Project Proponents

The primary proponent for CalWaterFix is Metropolitan Water District. On April 10, 2018, the Metropolitan Water District’s Board of Directors voted 61 percent to 39 percent to provide additional financing necessary to allow for the construction of the full California

WaterFix project. The MWD news release is shown below:



The Governor also made a statement and sent a letter to the MWD Board of Directors urging them to support the project.

For more information on MWD’s interest in California WaterFix, see [here](#).

Santa Clara Valley Water District has also voted to invest in the project. It is not clear at this time whether the Bureau of Reclamation or other Central Valley Project contractors will participate in the California WaterFix.

Biological Opinions (BiOps)

With the decade-long legal wrangling over the Biological Opinions for the CVP and SWP (BiOps) barely resolved, on August 2, 2016, Reclamation requested re-initiation of Endangered Species Act (ESA) Section 7 consultation with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) on the Coordinated Long-Term Operation (LTO) of the Central Valley Project (CVP) and State Water Project (SWP). Reclamation requested re-initiation of consultation under the ESA based on the apparent decline in the status of several listed species (i.e. smelt, salmon), new information related to recent multiple years of drought, and the evolution of best available science. The overall goal of the re-initiation of consultation (ROC) on the LTO is to achieve a durable and sustainable Biological Opinion(s) issued by the USFWS and NMFS that accounts for the updated status of the species and species’ needs as developed through ongoing collaborative

science processes, operation of CVP and SWP facilities, existing operations of the CVP and SWP, and operation of potentially new components of the CVP and SWP. On December 30, 2016, an MOU was signed by all these parties and the state Department of Water Resources and Department of Fish and Wildlife outlining the tasks, processes and schedules to complete the BiOps over the next three years.

Reclamation is proceeding on three parallel tracks for the ROC:

- 1) evaluate a modification to restrictions on Delta exports to increase water supply;
- 2) prepare a programmatic environmental impact statement (EIS) for analyzing potential modifications to the continued long-term operation of the federal CVP, for its authorized purposes, in a coordinated manner with the SWP, for its authorized purposes. Reclamation proposes to evaluate alternatives that maximize water deliveries and optimize marketable power generation consistent with applicable laws, contractual obligations, and agreements; and to augment operational flexibility by addressing the status of listed species;
- 3) tier one or more additional projects-specific NEPA and ESA efforts off the Track 2 programmatic EIS.

For more information, see [here](#).

Specifically, with respect to Sacramento River operations, Reclamation has a separate process underway to amend the RPAs for short-term operations. On January 19, 2016 (the last day of the previous federal administration), NMFS proposed an amendment to the Reasonable and Prudent Alternative (RPA) of the 2009 NMFS Biological Opinion for the long-term operation of the Central Valley and State Water Projects related to Shasta Reservoir operations. The proposal would have major impacts on the operations of Lake Shasta and the Settlement Contractors, wildlife refuges and water service

contractors. Reclamation responded to the NMFS proposal on both January 25 and March 22, 2017 and the Sacramento River Settlement Contractors sent a letter on January 11, 2017 providing concerns with the proposed RPA and recommendations on a better RPA process.

In early 2018, NMFS, Reclamation, and the State Water Board have exchanged letters revealing some difference of opinion on the Sacramento River and its operations. The focus is largely on temperature management of Lake Shasta and the river below the dam.

On March 14, 2018, the State Water Board, at the behest of the Natural Resources Defense Council, sent a letter to Reclamation requesting a Sacramento River Temperature Plan for its approval this spring. Reclamation responded on April 2, 2018 and April 16, 2018 describing the process to better analyze temperature based on current hydrology. The link to this information is [here](#). The State Water Board's website has the various letters [here](#).

On April 20, 2018 Reclamation announced updated allocations as follows:

"Thanks to late March and April precipitation and the positive results of the California Department of Water Resources April snow survey, Reclamation is pleased to announce this increased allocation for CVP water contractors," said Mid-Pacific Regional Director David Murillo. "Even with the recent gains in water supply, the year as a whole has still been relatively dry. We will continue to monitor our ability to manage temperature in the Sacramento River and meet other regulatory requirements throughout the system and may need to adjust our plans as the year evolves. We urge our contractors to continue to exercise conservative use of the resource."

For agricultural water service contractors and municipal and industrial service contractors north of the Delta, in-Delta and on the American River, Reclamation has

increased the allocation to 100 percent. This includes contractors throughout the Trinity, Shasta, Sacramento River, American River and Delta divisions of the CVP.' For more information see [here](#).

With the past three years having good storage levels in Lake Shasta, Reclamation has developed temperature management plans that have been concurred to by NMFS. The process to address temperature on the Sacramento River appears to be folding into the larger process for revising the BiOps for the CVP and SWP. The Sacramento River Settlement Contractors are working with Reclamation and NMFS to improve modeling, monitoring and to develop a rationale temperature plan, potentially through a charter.

NCWA and the SVWU continue to encourage agencies to focus on recovery planning efforts for salmon and smelt under section 4 of the Endangered Species Act (ESA) rather than the acrimony-laden section process under the ESA. As the following document shows, section 4 focuses directly on the objective of the ESA (recovery), it fosters collaboration rather than acrimony and it advances the fix it rather than fight mindset that is and will continue to improve conditions for fish in the Sacramento Valley. The Natural Resources Agency's Delta Smelt Resiliency Strategy and the Sacramento Valley Salmon Resiliency Strategy embody this approach and are being implemented.

Delta Stewardship Council

The Delta Stewardship Council (DSC) continues to provide a forum and integrating policy venue for the various actions in the Delta. The DSC on May 16, 2013 adopted the [Delta Plan](#) as required by the 2009 Delta Reform Act. The Delta Plan is a comprehensive, long-term management plan for the Delta designed per the

Delta Reform Act to further the state's co-equal goals for the Delta.

In the legal arena, the Sacramento Superior Court last year issued a ruling on the seven suits filed challenging the 2013 Delta Plan approved by the DSC. According to the DSC's news release, "The Sacramento Superior Court...ruled in favor of the Delta Stewardship Council on the vast majority of issues regarding the adequacy of its master plan for the Delta. The court ruled that the Council did have the authority to develop a legally enforceable management plan for the Delta – one that requires reduced reliance on the Delta as a source of water, sets aside zones to help restore the Delta ecosystem and preserves and enhances the unique character of the largely agricultural collection of islands and waterways east of the San Francisco Bay. The Court did cite two instances in which it concluded that the Council's Delta Plan fell short of requirements included in the 2009 Delta Reform Act that created the Council and directed it to develop the plan. The Court said the Delta Plan did not contain sufficiently quantifiable performance measures and also did not adequately "promote options" to improve the way water projects move water across the Delta." The Council and other parties have appealed the Court's ruling, which means the invalidation of the Plan has been stayed (placed on hold) pending further action by the Appellate Court. Thus, the Delta Plan remains in force and project proponents with covered actions remain legally required to file consistency certifications with the Council.

To address the legal deficiencies cited by the court, the DSC on April 26, 2018 adopted Delta Plan amendments and certified the Programmatic EIR. This included amendments to three components of the Delta Plan:

- Delta Levee Investment and Risk Reduction Strategy (DLIS) - The proposed DLIS Amendment identifies State interests in the Sacramento-San Joaquin Delta (Delta) that are vulnerable to flooding; defines principles to guide the development and



refinement of potential Delta Plan policies and recommendations; and evaluates risks to State interests due to potential levee failure, all for the purposes of attempting to reduce risks to people, property, and State interests in the Delta; and to recommend priorities for State investment in levee operation, maintenance, and improvements in the Delta.

- Delta Conveyance, Storage Systems, and the Operation of Both (CSO) - The CSO Amendment promotes options for design, implementation and operation of the following to achieve the coequal goals: (i) new and improved Delta water conveyance, (ii) new and improved Delta water storage, and (iii) improved operations of both.
- Performance Measures (PM) - The proposed PM Amendment would amend Appendix E of the Delta Plan to include revised output and outcome performance measures. The proposed performance measures contain quantified or otherwise measurable targets to be used as indicators of whether the Delta Plan is meeting 2 its objectives.

Three synthesis papers to inform the amendment of [Chapter 4 of the Delta Plan: Restore, Protect, and Enhance the Delta Ecosystems](#) have been released and are now online.

[Climate Change and the Delta](#)

[Delta Ecosystem Stressors](#)

[Towards the Protection, Restoration, and Enhancement of the Delta Ecosystem](#) and [Appendix A](#)

These papers are intended to provide context and information. The synthesis papers (also referred to as white papers) are produced by Council staff or consultants for the Council's use as it explores the various issues facing the intersection of science and policy. Each synthesis paper concludes with implications and considerations for recommendations, policies, and performance measures for the amendment of Chapter 4.

An important part of the DSC, the Delta Independent Science Board continues to perform valuable work regarding the science surrounding the Delta. The various reports are available [here](#). The Council appointed Dr. John Callaway as [the Lead Scientist for the Delta Independent Science Board](#), replacing Cliff Dahm.

As part of this process, the Science Action Agenda (SAA) is a four-year science agenda for the Sacramento-San Joaquin Delta that prioritizes and aligns science actions to inform management decisions, fill gaps in knowledge, promote collaborative science, build the science infrastructure, and achieve the objectives of the [Delta Science Plan](#). A [new interactive webpage](#) provides more information on this program.

The NCWA Bay-Delta Task Force, chaired by Roger Cornwell, meets monthly. For more information or to join the Task Force, please call 916.442.8333 or email: info@nrcwa.org.