

TO: BOARD OF DIRECTORS
FROM: MICHAEL S. LEBRUN *MSL*
GENERAL MANAGER
DATE: FEBRUARY 7, 2014

**AGENDA ITEM
F
FEBRUARY 12, 2014**

GENERAL MANAGER'S REPORT

ITEM

Standing report to your Honorable Board -- *Period covered by this report is January 18, 2014 through February 7, 2014.*

DISTRICT BUSINESS

Administrative

- Drought continues throughout the State and region. The Nipomo Mesa Management Area groundwater basin levels are at their lowest recorded level in the forty-year record. District staff is working with other water purveyor managers in the Area to develop response actions should Severe water criterion be triggered this spring. Water use restrictions may be necessary next summer if winter rain fall levels remain low.
- The District continues to encourage all customers to conserve water in its newsletters and advertising. Average customer water use has declined steadily since the District implemented an inclining tiered water rate structure in 2011. However, District well production in the Spring and Fall of 2013 was higher than the same period in 2012. This increase is attributed to the lack of rainfall and ongoing drought.
- On January 21, the District issued a \$55,000 Task Order to Cannon for construction management services on the Standpipe Tank Modifications and Rehabilitation Project.
- On January 27, the District notified the Counties of San Luis Obispo and Santa Barbara and the City of Santa Maria regarding termination of the contract for Supplemental Water Project Bid Package 3.
- As of February 1, forty-three water meters are set in the Costa Pacifica development (formerly Maria Vista Estates). Eighteen of the meters accounts are with private owners and with the balance of meters still in the developer's name.
- On January 29, the District submitted annual monitoring reports for both the Blacklake and Southland Wastewater Treatment and Reclamation facilities to the CA Central Coast Regional Water Quality Control Board.
- San Luis Obispo County maintains two rain gauges in the area. One is located at the Southland Wastewater Plant (Nipomo South) and one at the Tefft Street water storage site (Nipomo East). Since February 2, each location has recorded approximately 1-inch of rain in two during two separate rain events (Gauge Reports are Attached). County rain gauges are reset on July 1 each year.

Safety Program

- No accidents or incidents to report

Connection Report

Nipomo Community Services District
Water and Sewer Connections

	END OF MONTH					
	AUG-13	SEPT-13	OCT-13	Nov-13	Dec-13	JAN-14
Water Connections (Total)	4290	4290	4293	4310	4312	4313
Sewer Connections (Total)	3084	3084	3086	3102	3104	3104
Meters turned off (Non-payment)	28	30	23	20	37	11
Meters off (Vacant)	48	45	45	44	32	44
Sewer Connections off (Vacant)	18	14	14	11	11	12
New Water Connections	1	0	3	17	2	1
New Sewer Connection	1	0	2	16	2	0
	0	0	0	0	0	0
Sewer Connections billed to the County	462	462	463	463	463	463

Public Outreach

The following Public Outreach Program materials are provided:

- A summary of outreach and education activities
- Recent outreach materials;
 - January 24 Adobe, water conservation message
- Recent press releases and press release log
- District related news articles

Other Items and News of Interest (Attachments to this Report)

- Groundwater assessment report for the south coast ranges- coastal study unit is released. The Report is a coordinate effort by the CA State Water Resource Control Board and US Geological Survey. The transmittal letter and Fact Sheet are attached. The full report is available at the District and on-line.
- In concert with the Governor's declaration of a state-wide drought emergency, the State has released the *California Water Action Plan*.
- CA Public Employees' Retirement System ("CalPers") announced a lowering of annual participation costs and summarized ongoing efforts to amend reporting requirements for post-employment benefits.
- A brief history of San Luis Obispo County's involvement in the State Water Project is provided.
- The Local Area Formation Commission completed the annexation of Carriage Homes (Tract 1747) street lights into the County's Nipomo Lighting District.
- Golden State Water Company Senior Vice President Denise Kruger offers assurances to Rural Water Company customers.
- Local State Water Project news regarding 2014 delivery of water.

Next Page

Meetings

Meetings Attended (telephonically or in person):

- January 21, County 4th District Supervisor Caren Ray
- January 21, SLO Superior Court, MCA Hearing
- January 22, Regular Board Meeting
- January 22, Counsel and Special Counsel
- January 23, NMMA Managers
- January 23, 30, and February 6, Management Coordination
- January 28, Utilities Director City of Santa Maria
- January 28, Science Discovery Classroom Conservation Program
- January 30, Board Officers
- January 31, NMMA Managers
- January 31, Operations and Administration coordination
- February 3, Strategic Plan Workshop
- February 4, NMMA Technical Group
- February 4, Strategic Plan consultant
- February 5, NCSD Water Resources Committee
- February 5, Public Outreach Assistant
- February 5, Special Counsel
- February 5, SLO County Water Resources Advisory Committee
- February 6, Los Osos CSD – Jon S. Seitz
- February 7, Information Technology Contractor

Meetings Scheduled:

- February 10, Personnel Policy Special Counsel
- February 12, Regular Board Meeting
- February 13, Quarterly All-Staff Safety Meeting
- February 13&20, Management Coordination
- February 14, NMMA Managers

RECOMMENDATION

Staff seeks direction and input from your Honorable Board

ATTACHMENTS

- A. SLO County Rain Gauge (Nipomo South and Nipomo East)
- B. District Outreach Program Summary
- C. CA Water Boards Groundwater Assessment Report
- D. CA Water Action Plan
- E. CalPers investment and legislative news
- F. SLO County State Water history and overview
- G. LAFCO Annexation
- H. Golden State Water Company letter to customers
- I. News on State Water deliveries in 2014

FEBRUARY 12, 2014

ITEM F

ATTACHMENT A

SLOCountyWater.org
San Luis Obispo County Water Resources
Division of Public Works

Home > Water Resources > Data > Precipitation > Active > Real Time > Nipomo East

Flood Control Major Projects Water Quality Lab Water Resources Real-Time Water Data

Site Information

**Nipomo East
(Sensor 728)**

Located

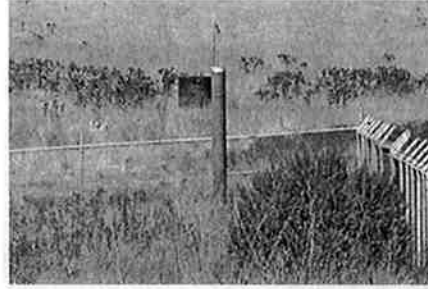
- Nipomo Community Service District (NCSD) water tanks, Nipomo, CA.

Established

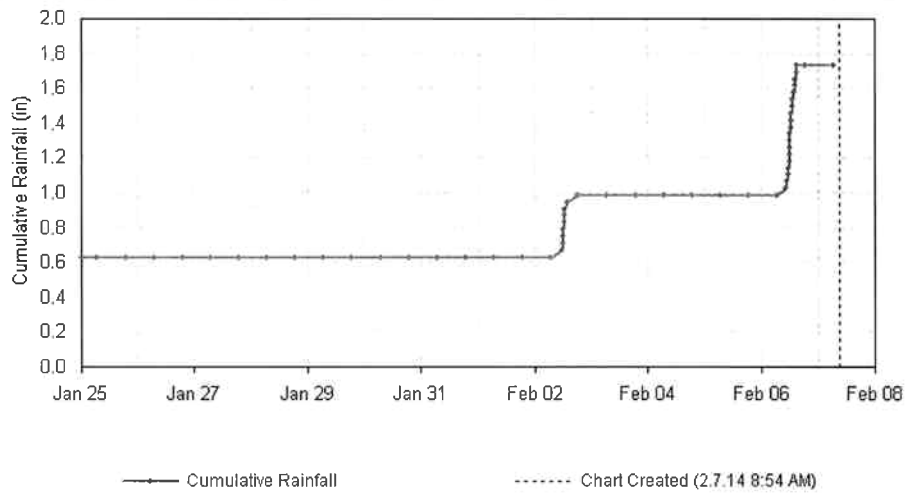
- November 18, 1999

Annual Average Rainfall

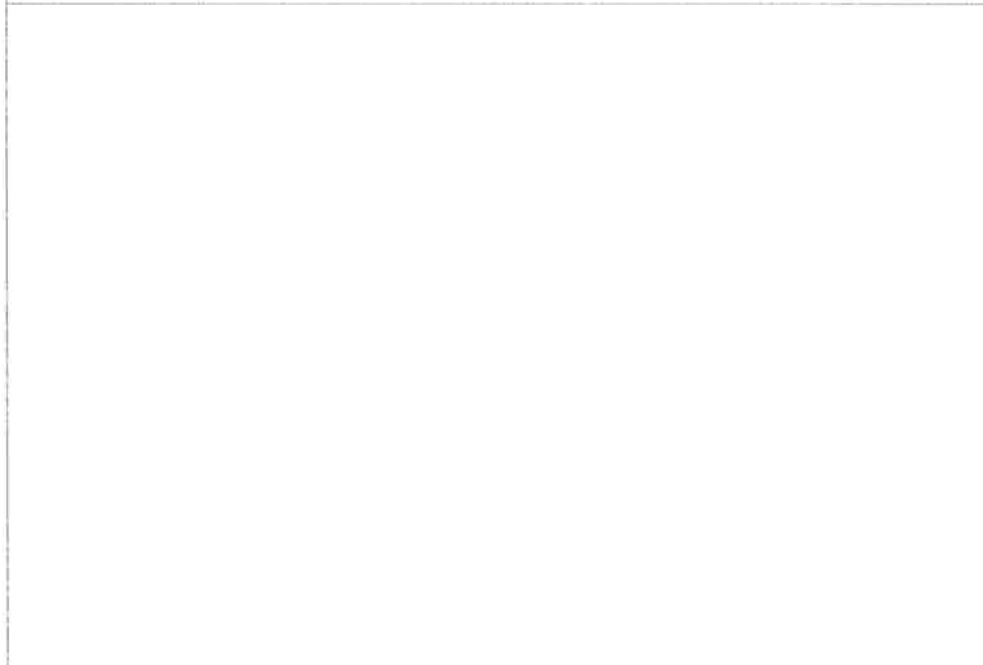
- 18 inches



Rainfall



Real-Time Rainfall Data



DIADvisor™ Web Reports

Nipomo East Precipitation (Sensor 728)

Period: 1/24/2014 8:50:08 AM to 2/7/2014 8:50:08 AM

Date/Time	In for Report	Accum Inch	Pd Accumulated Rain
02/07/14 06:52:10 AM	0.000	1.732	1.102
02/06/14 06:52:09 PM	0.000	1.732	1.102
02/06/14 03:23:19 PM	0.039	1.732	1.102
02/06/14 03:00:39 PM	0.039	1.693	1.063
02/06/14 02:49:49 PM	0.039	1.654	1.024
02/06/14 02:36:11 PM	0.039	1.614	0.984
02/06/14 02:03:12 PM	0.039	1.575	0.945
02/06/14 01:36:11 PM	0.039	1.535	0.906
02/06/14 01:16:01 PM	0.039	1.496	0.866
02/06/14 01:01:48 PM	0.039	1.457	0.827
02/06/14 12:48:15 PM	0.039	1.417	0.787
02/06/14 12:34:35 PM	0.039	1.378	0.748
02/06/14 12:27:14 PM	0.039	1.339	0.709
02/06/14 12:21:22 PM	0.039	1.299	0.669
02/06/14 12:17:23 PM	0.039	1.260	0.630
02/06/14 12:10:29 PM	0.039	1.220	0.591
02/06/14 12:01:58 PM	0.039	1.181	0.551
02/06/14 11:53:32 AM	0.039	1.142	0.512

Date/Time: Specifies the date and time the County Computer detected a transmission from the sensor.

In For Report: Specifies the incremental rainfall (in inches) reported between successive data transmissions.

Accum Inch: Specifies the accumulated rainfall (in inches) reported since July 1st.

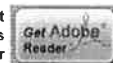
Pd Accumulated Rain: Specifies the accumulated rainfall (in inches) reported in the last fourteen (14) days.

Interval Rain: Specifies the accumulated rainfall (in inches) reported in the last ten (10) minutes.

Hour Rain: Specifies the accumulated rainfall (in inches) reported in the last one (1) hour, three (3) hours, six (6) hours, etc.

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SLOCountyWater.org
San Luis Obispo County Water Resources
Division of Public Works

Home > **Water Resources** > Data > Precipitation > Active > Real Time > Nipomo South

Flood Control Major Projects Water Quality Lab Water Resources Real-Time Water Data

Site Information

**Nipomo South
(Sensor 730)**

Located

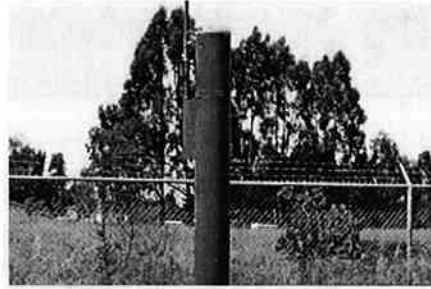
- Nipomo Coummunity Service District (NCSD) equipment yard, Nipomo, CA.

Established

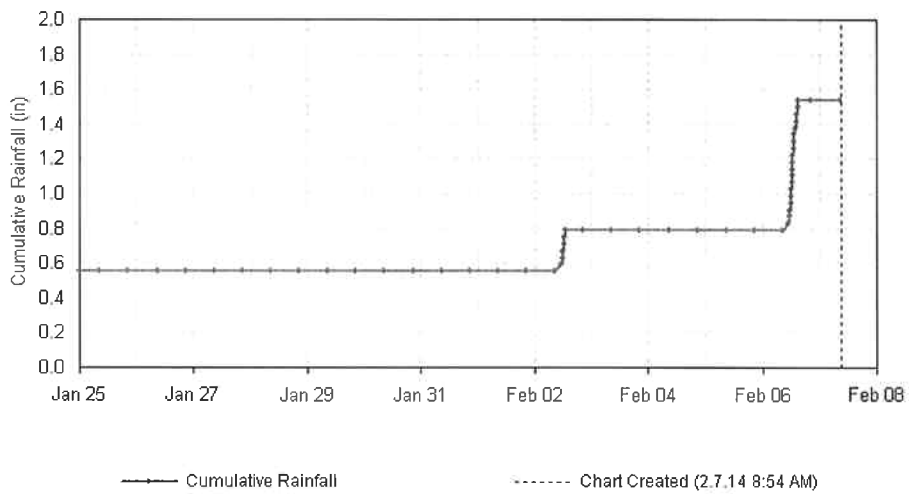
- July 1992

Annual Average Rainfall

- 16 inches



Rainfall



Real-Time Rainfall Data

DIADvisor™ Web Reports

Nipomo South Precipitation (Sensor 730)

Period: 1/24/2014 8:50:08 AM to 2/7/2014 8:50:08 AM

Date/Time	In for Report	Accum Inch	Pd Accumulated Rain
02/07/14 08:35:37 AM	0.000	1.535	0.984
02/06/14 08:35:36 PM	0.000	1.535	0.984
02/06/14 03:10:07 PM	0.039	1.535	0.984
02/06/14 02:55:33 PM	0.039	1.496	0.945
02/06/14 02:43:18 PM	0.039	1.457	0.906
02/06/14 02:20:10 PM	0.039	1.417	0.866
02/06/14 01:55:51 PM	0.039	1.378	0.827
02/06/14 01:33:15 PM	0.039	1.339	0.787
02/06/14 01:14:52 PM	0.039	1.299	0.748
02/06/14 01:06:08 PM	0.039	1.260	0.709
02/06/14 01:02:05 PM	0.039	1.220	0.669
02/06/14 12:57:42 PM	0.039	1.181	0.630
02/06/14 12:52:02 PM	0.039	1.142	0.591
02/06/14 12:46:20 PM	0.039	1.102	0.551
02/06/14 12:40:58 PM	0.039	1.063	0.512
02/06/14 12:28:16 PM	0.039	1.024	0.472
02/06/14 12:11:15 PM	0.039	0.984	0.433
02/06/14 12:02:14 PM	0.039	0.945	0.394

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FEBRUARY 12, 2014

ITEM F

ATTACHMENT B

**NCSO Outreach Summary
February 2014**

Date Started	Outreach	Description	Status	Date Completed
11/25/2013	Report	Design/Update of SWP Narrative Report	In Progress	
8/19/2013	Brochure	Update of "Reading Your Water Meter" and "Detecting Leaks" brochures	2nd Draft in Review	
10/16/2013	Website Upgrade	"Design Phase" with website consultant	In Progress	
1/9/2014	District Newsletter	2014 1st quarter newsletter for February distribution	Final Review In Progress	
1/20/2014	Ad	Drought 1/4 page ad in Adobe, pub date 1/24	Complete	1/21/2014
1/22/2014	Press Release	NCSO Board of Directors Review SLO County Resource Management System	Complete	1/24/2014
1/22/2014	Press Release	NCSO Director of Engineering and Operations Summarizes a Busy Year	Complete	1/24/2014
1/22/2014	Press Release	NCSO Board of Directors Accept Completion of Supplemental Water Project Phase 1	Complete	1/24/2014
1/24/2014	Manager's Column	Article 11 for Manager's Column in Adobe Press, pub date 2/7	Complete	1/27/2014
1/27/2014	Postcard	Conservation postcard to high users regarding drought conditions and conserving	In Progress	
1/28/2014	Conservation Education	Meeting with Science Discovery instructors regarding drought conditions in Nipomo	Complete	1/28/2014
1/31/2014	Website Upgrade	New website host for upgraded website	Complete	1/31/2014
1/31/2014	Bulletin Board	Update of lobby and Board room bulletin boards	Complete; Ongoing	1/31/2014
1/24/2014	Website Updates	Press Releases, drought information	Complete; Ongoing	2/3/2014
2/4/2014	Sign	SWP "Piece of Nipomo's water lifeline" sign for piece of pipe display	Complete	2/5/2014

MINOR MADNESS

YOUTH BRIEFS

Students to compete in Poetry Out Loud

Student champions from nine San Luis Obispo County high schools — including Arroyo Grande and Nipomo — will compete Thursday, Feb. 6, for a chance to move on to the state level of Poetry Out Loud. The county-wide contest is scheduled for 7 to 9 p.m. in Room 12 at San Luis Coastal Adult School, 1500 Linzie St., San Luis Obispo.

Spectators are welcome, and admission is free, an event spokeswoman said.

Whoever wins will represent the county at the statewide competition March 10 and 11 in Sacramento.

The winner at the state level will move on to the national finals in Washington, D.C., the spokeswoman said.

The San Luis Obispo County competition is sponsored by ARTS Obispo, 800 Boo Records, Palm Theatre, the SLO County Poetry Out Loud Team, the California Arts Council, the National Endowment for the Arts and the Poetry Foundation.

For more information, call ARTS Obispo at 544-9251 or visit www.artsobispo.org.

New season of singing classes set

Singer and vocal teacher Natasha Yule will offer another season of singing classes for children ages 6 to 12 in association with Nipomo Area Recreation Association.

Yule said the new season follows another successful initial featuring her students from previous classes.

Traditional American folk and musical theater songs will be used to teach children to sing correctly, a skill that will last them a lifetime, Yule said.

For information on class times, costs and registration, call 931-0301.

Children learn how to fish at Lopez Lake

• Clinic held at Nature Center

Arroyo Grande

Kids of all ages learned the ins and outs of casting lines and reeling in fish during a free fishing clinic at Lopez Lake.

The fishing clinic was held at the Nature Center, where participants were given lessons from experienced fishermen on fishing ethics and conservation, knot tying, reel and tackle care and types of fish and ecology.

Yet, he, 16 and younger, also learned how to cast a line during the fishing clinic, which is held at Lopez and Santa Margarita lakes a couple times a year, and were shown special tricks for hooking trout, bass, catfish, carp and bluegill.

Everyone who participated in the free fishing clinic also got a chance to cast their lines into the lake. All the equipment the youths needed for the lessons was provided for free.

Individuals who didn't make it out to the lake Jan. 18 for the fishing clinic have schemes to get out onto the water during a two-hour, ranger-led ponoon boat tour planned for 10:15 a.m. to 12:15 p.m. Saturday, Jan. 25.

Participants will learn about the natural and cultural history, flora and fauna and operational practices at Lopez Lake



Don Kallman/Contributor

Aiden Silverstein, 8, of Grover Beach takes a lesson from Harry Walls, volunteer at the Kids Fishing Clinic, at the Nature Center of Lopez Lake on Saturday, Jan. 18.

during the boat tour, or gardeners said.

Cost to attend the nature boat cruise is \$6 for adults and \$3 for youths ages 16 and younger.

There's a 16-seat limit on the cruise and pre-registration is encouraged. Call 788-2381 to register.

The Friends of Lopez Lake and San Luis Obispo

County Parks sponsor monthly events, such as the kids fishing clinic, at Lopez Lake throughout the year.

For more information about upcoming events planned, call the ranger's station at 788-2381 or visit www.stonycove.com/information_events_calendar_lopez.htm.

Nipomo High drama students to stage 'Our Town' at Clark Center

• Production in partnership with AGHS tech students

Arroyo Grande

Nipomo High School drama students will stage a Pulitzer Prize-winning play about small-town life in America when "Our Town" opens next week at the Clark Center for the Performing Arts in Arroyo Grande.

The Thornton Wilder play will be presented weekends from Thursday, Jan. 30, through Saturday, Feb. 8, in the "black box" Studio Theatre.

Directed by NPS performance teacher Nathan Brown, the play will star Nipomo students Jillian Mackey, David Cantor, Harrison Webbington, Abby Colton and Taylor Chambers.

The cast will include 20 of her students to the school's drama program.

Usually performed without a set or any props, "Our Town" is being produced in partnership with Arroyo Grande High School's technical theater students.

"With live Foley sounds and light operation by AG High students, this production promises to leave audiences speechless," Emmons said.

He described Wilder's and light operation by AG High students, this production promises to leave audiences speechless," Emmons said.

Set in the small fictional American town of Grover's Corners, the play follows the

daily life of its various citizens.

They include teenagers George and Emily, who meet, fall in love and — despite the misgivings they both have — get married, an event that changes the courses they had set for themselves in life.

In the end, some of the town's residents have died — including Emily, whose spirit floats in hard to leave life behind and who discovers, too late, how precious life really is.


Wilder has transformed the townspeople's ordinary stories into a poignant exploration of human mortality and how interconnected we all are.

Performances are set for 7 p.m. Thursday and Friday, Jan. 30 and 31; 1:30 p.m. Saturday, Feb. 1; and 7 p.m. Thursday, Friday and Saturday, Feb. 6, 7 and 8.

Advance tickets at \$12 for general admission and \$8 for students are available at the Clark Center box office, 487 Fair Oaks Ave., from noon to 6 p.m. Monday through Friday and noon to 4 p.m. Saturday.

The box office operates one hour before student performances, but tickets at the door will be \$2 more.


Advance tickets also are available by calling 469-9444 or visiting www.clarkcenter.org.



Community Health Centers
Healthcare For Life

CHC Nipomo expands services

Your new home for vision care




Frank Giardina, OD

CHC is pleased to welcome **Frank Giardina, OD** to the team at our new state of the art CHC Nipomo Health Center!

(805) 931-2680
for optometry appointments

- Adjunct professor of optometry with Western University
- Certified in glaucoma and ocular disease
- Services now offered include routine eye exams, eyeglasses and contact lenses, and diagnosis and treatment of ocular disease



Also new at CHC Nipomo - Women's Health services
For more information or to make an appointment:

CHC Nipomo
150 Tejas Place, Nipomo
Main Phone: (805) 929-3211
Se habla español.

www.communityhealthcenters.org
Serving the Central Coast since 1978.

WATER SUPPLIES ARE LOW!

State and Local officials are asking for water conservation. Here are some tips.

Water only when necessary. More plants die from over-watering than under-watering.

TIP #1

Governor Brown's January 17, 2014 Drought Declaration calls for all Californians to reduce water usage by 20%. A full copy of the Declaration can be found on www.ncsd.ca.gov

TIP #2

Leaky toilets are often silent! Ask the District how you can easily test your toilets for leaks.


The District's elected Board of Directors, recognizing that the District's groundwater supply was being depleted prior to the current drought and that supplemental supply is at least 1.5 years away, is asking all residents and water users throughout Nipomo and across the Nipomo Mesa, to take personal actions to reduce water usage by 20%.

Collect running water while waiting for it to heat and use to water plants.

The District General Manager is continuing to work with other area water company managers and the court appointed groundwater management group to establish drought triggers and response actions should the current drought conditions continue. The District is asking all to USE WATER WISELY.

TIP #3

For more tips and resources, visit the District's website at www.ncsd.ca.gov



Nipomo Community Services District
148 S. Wilson St., Nipomo 93444
(805) 929-1133 | info@ncsd.ca.gov

FOR IMMEDIATE RELEASE

Date: January 22, 2014
Contact: Michael S. LeBrun, General Manager
Nipomo Community Services District
148 S. Wilson St., Nipomo, CA 93444
Phone: (805) 929-1133 – Email: mlebrun@ncsd.ca.gov



NCSD Board of Directors Review SLO County Resource Management System

On Wednesday, January 22nd, the District's Board held its regular meeting at 9AM and reviewed the County's proposed changes to the Resource Management System.

The San Luis Obispo County Board of Supervisors and the Planning and Building Department are proposing changes to the County's Resource Management System which may impact how development and new water demand are permitted in the Nipomo Mesa area. County Planning staff has circulated a draft of the proposed changes and the District's Board of Directors made an initial review of the changes at Wednesday's meeting.

The County Board of Supervisors certified the Nipomo Mesa groundwater resources as a Level of Severity III (Severe) on June 26, 2006 and this Certification and Level of Severity remains in place under the current RMS system. Continued development across the area would add demand to the area's already stressed groundwater basin. Proposed changes to the Resource Management System could allow the County to put a hold on issuing building permits until new water resources are developed to water planned development.

General Manager, Michael S. LeBrun, stated "Strengthening the 'RMS' could play a crucial role in establishing a sustainable water policy for the Nipomo Mesa".

Board President Craig Armstrong assigned Director Larry Vierheilig to work with members of the public to review the County's proposed changes in more depth and return to the Board with recommendations. The County Planning Commission is scheduled to review the proposed RMS changes in Spring of this year.

Next Scheduled Regular Board Meeting: Wednesday, February 12th, 2014, 9AM, District Board Room 148 South Wilson, Nipomo.

For more information, please contact the Nipomo Community Services District at 929-1133 or visit www.ncsd.ca.gov.

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Established in 1965 to meet the health and sanitation needs of the local community, Nipomo Community Services is pleased to provide a wide variety of services throughout its district including the provision of water, sewer, and waste management services as well as lighting and drainage in limited areas. The mission of Nipomo Community Services District is to provide its customers with reliable, quality, and cost-effective services now and in the future.

FOR IMMEDIATE RELEASE

Date: January 24, 2014
Contact: Michael S. LeBrun, General Manager
Nipomo Community Services District
148 S. Wilson St., Nipomo, CA 93444
Phone: (805) 929-1133 – Email: mlebrun@ncsd.ca.gov



NCSD Director of Engineering and Operations Summarizes a Busy Year

On Wednesday, January 22nd, the District's Board held its regular meeting at 9AM and heard a review of 2013 operational highlights and capital project accomplishments from the Director of Engineering and Operations, Peter Sevcik.

Mr. Sevcik reported that the District completed two major capital projects with nearly \$7M in combined value – an overhaul of the Districts remote facilities monitoring and control system and the installation of a pipeline under the Santa Maria river – on schedule and under budget by nearly \$400K.

Mr. Sevcik reported the District pumped 2,646 acre-feet of water (862 million gallons) in 2013. This is about 180 gallons of water each day for each customer of the District. As well, in 2013, the District collected, treated, and disposed of over 250 million gallons of wastewater (sewage).

Mr. Sevcik noted the District had no loss of water pressure or sewage spills during the year and completed more than seventy regulatory reports through the year with no violation notices.

Finally, Mr. Sevcik summarized progress on the five construction contracts the District has in progress. The \$13M sewer plant upgrade is 84% complete and scheduled to be on-line in mid-2014. The other three projects, supplemental water pipeline, well and tank refurbishment, total over \$7M and are proceeding on schedule.

Next Scheduled Regular Board Meeting: Wednesday, February 12th, 2014, 9AM, District Board Room 148 South Wilson, Nipomo.

For more information, please contact the Nipomo Community Services District at 929-1133 or visit www.ncsd.ca.gov.

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FOR IMMEDIATE RELEASE

Date: January 22, 2014
Contact: Michael S. LeBrun, General Manager
Nipomo Community Services District
148 S. Wilson St., Nipomo, CA 93444
Phone: (805) 929-1133 – Email: mlebrun@ncsd.ca.gov



NCSD Board of Directors Accept Completion of Supplemental Water Project Phase 1

On Wednesday, January 22nd, the District's Board held its regular meeting at 9AM and with a unanimous vote accepted the work performed by ARB, Inc. for the Supplemental Water Project Phase 1 Bid Package 1 – Santa Maria River Crossing. Authorization was given for staff to file a Notice of Completion on this phase of the Project.

The \$6.5M project contract was awarded on June 20, 2013. The project was completed on December 18, 2013, on schedule and 6% UNDER budget.

Director of Engineering and Operations Peter Sevcik stated; "The construction of this pipeline under the Santa Maria River was the most technically demanding phase of the Supplemental Water Project. ARB's people were outstanding to work with and showed great ingenuity in overcoming project challenges."

Next Scheduled Regular Board Meeting: Wednesday, February 12th, 2014, 9AM, District Board Room 148 South Wilson, Nipomo.

For more information, please contact the Nipomo Community Services District at 929-1133 or visit www.ncsd.ca.gov.

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Established in 1965 to meet the health and sanitation needs of the local community, Nipomo Community Services is pleased to provide a wide variety of services throughout its district including the provision of water, sewer, and waste management services as well as lighting and drainage in limited areas. The mission of Nipomo Community Services District is to provide its customers with reliable, quality, and cost-effective services now and in the future.

Judge rejects petition to block pipeline funds

By Mike Hodgson/mhodgson@theadobepress.com

A petition seeking to bar Nipomo Community Services District from using a specific fund to pay for a supplemental water pipeline was rejected this week by a judge.

San Luis Obispo Superior Court Judge Martin Tangeman denied a petition for a peremptory writ of mandate filed by Mesa Community Alliance.

He noted that since NCSO has found other means to finance the project, the issue is probably moot, but MCA wanted a judicial review anyway.

His decision Tuesday, Jan. 21, upheld a tentative ruling issued the week before. Once the final decision is recorded, MCA will have 60 days to file an appeal.

Bill Petrick, secretary for Mesa Community Alliance, said it's doubtful an appeal will be filed.

"I guess it's over," he said. "I'm certainly disappointed the judge essentially found the statute that prohibited doing what they did didn't apply.

"That's all we wanted, was for a judge to look at it," he said, adding the group would have to consult with its attorney, Babak Naficy, to make a final decision on an appeal.

Naficy couldn't be reached by press time Wednesday.

If the group does not pursue an appeal, NCSO likely will commit the disputed funds to expanding the capacity of the pipeline project that's already under construction, said Michael LeBrun, district general manager.

"With every passing day adding to the severity of the current drought, the board (of directors) is anxious to get the future phases of the project scheduled," LeBrun said after the final decision was issued.

He said he expects the second phase of the project to go out to bid in late spring or early summer, with financing to come from the disputed Fund 805 or another as-yet unidentified source.

Phase two will boost the project capacity from the current 650 acre-feet a year to 1,600 acre-feet a year.

An acre-foot is about 326,000 gallons, or the amount of water generally considered necessary to supply four to 10 people a year.

NCSO issued \$4 million in certificates of participation to pay for the first phase after Mesa Community Alliance filed the petition to block the district from using money in Fund 805 as initially planned.

Fund 805 holds reserve funds for short-term and long-term replacement of the district's water distribution system.

The MCA petition noted the state Government Code prohibits funds designated for specific purposes from being used for a different purpose.

MCA contended that using the Fund 805 money to build the supplemental water pipeline would violate that code.

But in his ruling, Tangeman noted the resolution NCS D directors approved to allocate Fund 805 to the project made a finding that the money would help prolong the useful life of the existing system and, thus, was no longer needed for the original purpose.

While MCA contended that decision was an administrative act and therefore subject to judicial review under one Government Code section, NCS D asserted it was a legislative act subject to review under a different code section.

NCS D also contended the decision was part of the budgeting process, thus limiting the court to reviewing only whether the district exceeded its scope of authority.

MCA asserted the district had exceeded its authority because the finding that using Fund 805 to pay for the supplemental pipeline was consistent with the fund's purpose violated the intent of the law.

But Tangeman said the petition did not cite any authority that holds a finding of consistency doesn't comply with the Government Code.

He also noted the district's resolution to allocate funds relied not only on Fund 805 but also Fund 500, which contained money set aside to reduce NCS D's reliance on groundwater.

"In making this finding, it does not appear that the district exceeded its authority or acted capriciously and arbitrarily," Tangeman wrote.

The judge also rejected MCA's assertion that using Fund 805 revenues from an 11-percent rate increase violated the California Constitution barring fees raised for one purpose from being used for another purpose.

Tangeman said that, as pointed out by the district, rates customers pay for services cover operational, maintenance, financial and capital expenditures.

Posted Friday January 24, 2014



Nipomo CSD completed \$7 million in projects last year

No violations, pressure loss or sewage spills reported in 2013

JANUARY 29, 2014 12:50 AM • STAFF REPORT

Installing a pipeline under the Santa Maria River to deliver supplemental water was one of two projects worth \$7 million completed by Nipomo Community Services District in 2013, according to a report delivered to the board of directors last week.

During that time, the district experienced no loss of water pressure or sewage spills, completed more than 70 regulatory reports and received no violation notices from regulatory agencies, the report said.

At their meeting Jan. 22, directors authorized the staff to file a notice of completion for the 2,700 feet of 30-inch pipeline installed by ARB Inc.

NCSD awarded the \$6.5M contract for that portion of the supplemental water project's first phase on June 20.

The work was completed Dec. 18, on schedule and nearly \$400,000, or 6 percent, under budget, said Peter Sevcik, director of engineering and operations.

"The construction of this pipeline under the Santa Maria River was the most technically demanding phase of the supplemental water project," Sevcik said.

"ARB's people were outstanding to work with and showed great ingenuity in overcoming project challenges," he added.

Work on the second and third parts of the first phase are currently underway.

In Santa Maria, Specialty Construction of San Luis Obispo is installing a pipeline along North Blosser Road to connect the under-river pipe to the city's water system at Taylor Street.

On the north side of the river, Spiess Construction Co. of Santa Maria is building a pump station and holding tank near Orchard and Joshua roads and installing pipelines to connect them to the under-river pipe and NCSD's system.

When complete, the \$17.5 million first phase will be capable of delivering 650 acre-feet of water per year, starting in mid-2015.

An acre-foot is about 326,000 gallons, or the amount generally considered necessary to supply four to 10 people a year.

The second phase of the project will boost the capacity to 1,600 acre-feet per year, and contracts for that work could be awarded this spring, NCSD General Manager Michael LeBrun said.

A third phase, not yet scheduled, would boost the total capacity to 3,000 acre-feet a year and the total cost to about \$21 million.

Sevcik said a \$500,000 overhaul of the district's remote facilities monitoring and control system last year brought the total spent on capital projects to \$7 million.

In his report to the board, Sevcik also noted NCSD pumped 2,646 acre-feet — 862 million gallons — from the groundwater basin in 2013.

That represented about 180 gallons of water per day for each NCSD customer.

During the same time period, the district collected, treated and disposed of more than 250 million gallons of sewage through the Southland Wastewater Treatment Plant, Sevcik said.

A \$13 million upgrade to improve the quality of effluent produced by the treatment plant is now 84 percent complete, he said.

The new system is scheduled to go on line midyear.

NCSD completed \$7 million in projects last year

By Adobe Staff

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Posted Friday January 31, 2014

FEBRUARY 12, 2014

ITEM F

ATTACHMENT C



EDMUND G. BROWN JR.
GOVERNOR

MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

January 10, 2014

Bruce Buel
Nipomo Community Services District
P.O. Box 326
Nipomo, CA 93444

GROUNDWATER AMBIENT MONITORING AND ASSESSMENT PROGRAM (GAMA): ASSESSMENT REPORT (SIR) AND FACT SHEET FOR THE SOUTH COAST RANGES- COASTAL STUDY UNIT

The State Water Resources Control Board, in partnership with the U.S. Geological Survey (USGS), thanks you for your participation in the GAMA Priority Basin Project South Coast Ranges- Coastal study unit. The assessment report (SIR) is titled, *Status and understanding of groundwater quality in the South Coast Range-Coastal study unit, 2008—California GAMA Priority Basin Project*, and is enclosed. The accompanying fact sheet is also enclosed.

Your well has a unique GAMA ID that is used in all publications to maintain confidentiality and is listed below. Your local well ID is provided in parenthesis to aide in correlating your well(s).

SCRC-B23 (Sundale Well) | SCRC-B29 (Church Well)

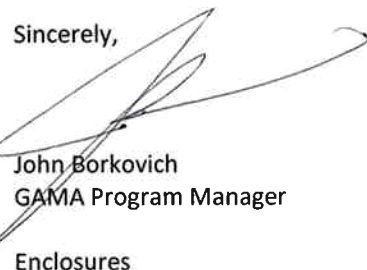
The SIR is an assessment of the status of groundwater quality, which includes data from study unit grid wells (a randomized, spatially distributed representation of the study unit), understanding wells (to evaluate water chemistry along flow paths), and additional well data compiled by the California Department of Public Health (CDPH). The assessment of status characterizes the quality of untreated groundwater resources within the primary aquifer system, not the treated drinking water typically delivered to consumers by local water purveyors.

Reports and fact sheets are available online at the State Water Board and USGS web sites:

<http://www.waterboards.ca.gov/gama/> and <http://ca.water.usgs.gov/gama/>

The primary goals of the GAMA Program are to improve comprehensive groundwater quality monitoring and increase public availability of groundwater quality information. If you have any questions regarding the GAMA Program, please contact me at (916) 341-5779 or (jborkovich@waterboards.ca.gov).

Sincerely,



John Borkovich
GAMA Program Manager

Enclosures

cc: Carmen Burton, USGS Study Unit Hydrologist

U.S. Geological Survey and the California State Water Resources Control Board

Groundwater Quality in the South Coast Range Coastal Groundwater Basins, California

Groundwater provides more than 40 percent of California's drinking water. To protect this vital resource, the State of California created the Groundwater Ambient Monitoring and Assessment (GAMA) Program. The Priority Basin Project (PBP) of the GAMA Program provides a comprehensive assessment of the State's untreated groundwater quality and increases public access to groundwater-quality information. The coastal basins in the Southern Coast Ranges constitute one of the study units being evaluated.

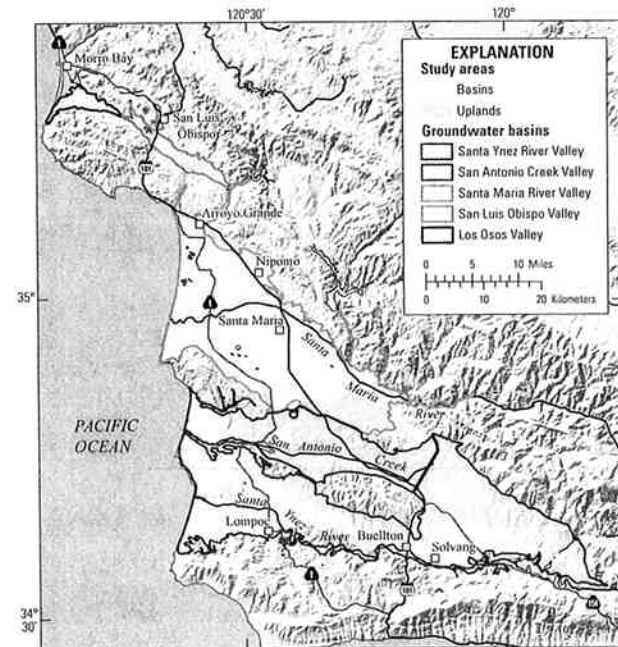


The South Coast Range–Coastal Study Unit

The South Coast Range–Coastal (SCRC) study unit is located in California's Southern Coast Ranges hydrogeologic province and includes parts of Santa Barbara and San Luis Obispo Counties (Mathany and others, 2010). The SCRC study unit includes five groundwater basins—Los Osos Valley, San Luis Obispo Valley, Santa Maria River Valley, San Antonio Creek Valley, and Santa Ynez River Valley (California Department of Water Resources, 2003)—as well as upland areas of Pliocene–Pleistocene non-marine and Pliocene marine sediments that are adjacent to the groundwater basins. The 766-square-mile study unit was separated into the two study areas (Basins and

Uplands) on the basis of alluvial and terrace deposits found in the five groundwater basins.

The climate in the SCRC study unit is influenced in large part by the Pacific Ocean as well as by the topography of the surrounding areas. The coastal lowlands and valleys near the Pacific Ocean have a coastal climate, with warm, dry summers and cool, wet winters. The slopes of the coastal valleys and within the upland areas have a Mediterranean climate with hot, dry summers and cool, wet winters. Average annual rainfall ranges from 13 inches in the coastal lowlands to 20 inches in the uplands. The Santa Maria and Santa Ynez Rivers and San Antonio Creek are the major streams in the SCRC study unit.

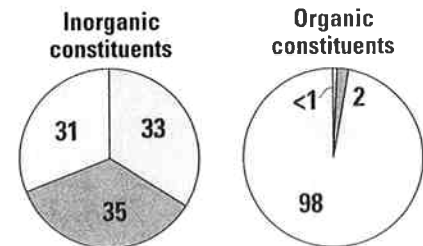


The primary aquifer system consists of alluvial sediments (mixture of gravel, clay, silt, and sand), the Paso Robles Formation (unconsolidated to poorly consolidated coarse sand and gravel), and the Careaga Sand (unconsolidated fine- to medium-grained marine sand). The primary aquifer system is defined as that part of the aquifer corresponding to the perforated depth intervals of wells listed in the California Department of Public Health (CDPH) database. CDPH wells are typically drilled to depths between 265 and 630 feet below land surface and are perforated or screened at depths below 115–350 feet (Burton and others, 2013). Water quality in the primary aquifer system may differ from that in the shallower and deeper parts of the aquifers.

Land use in the study unit is approximately 61 percent (%) natural, 29% agricultural, and 10% urban. The primary agricultural uses are for vegetables and flowers, vineyards, and pasture and hay. The largest urban areas are the cities of Lompoc, Santa Maria, Arroyo Grande, and San Luis Obispo (Burton and others, 2013).

The primary source of recharge to the groundwater flow system is from percolation of precipitation, irrigation waters, seepage from streams and rivers, subsurface inflow, and engineered recharge (California Department of Water Resources, 2003). The primary sources of groundwater discharge are water pumped for irrigation and municipal supply.

Overview of Water Quality



CONSTITUENT CONCENTRATIONS
 ○ High ● Moderate ○ Low or not detected
 Values are a percentage of the area of the primary aquifer system with concentrations in the three specified categories. Values on pie chart may not equal 100 due to rounding of percentages.

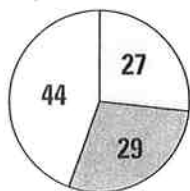
GAMA's Priority Basin Project evaluates the quality of untreated groundwater. However, for context, groundwater quality was compared to benchmarks established for drinking-water quality. Benchmarks and definitions of *high*, *moderate*, and *low* concentrations are discussed in the inset box on page 3.

Many inorganic constituents occur naturally in groundwater. The concentrations of inorganic constituents can be affected by natural processes as well as by human activities. In the SCRC study unit, one or more inorganic constituents with human-health benchmarks were present at high concentrations in 33% of the primary aquifer system and at moderate concentrations in 35%.

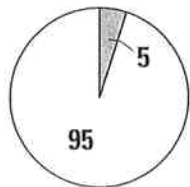
Organic constituents are found in products used in the home, business, industry, and agriculture. Organic constituents can enter the environment through normal usage, spills, or improper disposal. In the SCRC study unit, one or more organic constituents were present at high concentrations in less than (<) 1% of the primary aquifer system and at moderate concentrations in 2%.

RESULTS: Groundwater Quality in the South Coast Range–Coastal Study Unit

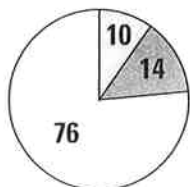
INORGANIC CONSTITUENTS



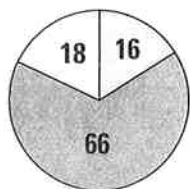
Trace and minor elements



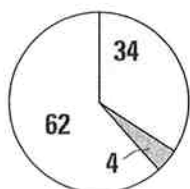
Uranium and radioactive constituents



Nutrients (nitrate plus nitrite)



Total dissolved solids



Iron or manganese

Inorganic Constituents with Human-Health Benchmarks

Trace and minor elements are naturally present in the minerals in rocks and soils and in the water that comes into contact with those materials. In the SCRC study unit, trace elements were present at high concentrations in 27% of the primary aquifer system and at moderate concentrations in 29%. Arsenic and molybdenum were present at high concentrations in 7% and 25% of the primary aquifer system, respectively. Barium, copper, and selenium also were detected at high concentrations, but in <1% of the primary aquifer system.

Radioactivity is the release of energy or energetic particles during structural changes in the nucleus of an atom. Most of the radioactivity in groundwater comes from decay of naturally occurring isotopes of uranium and thorium in minerals in the aquifer sediments. Radioactive constituents were not present at high concentrations in the primary aquifer system, but were present at moderate concentrations in 5%.

Nutrients, such as nitrate and nitrite, are naturally present at low concentrations in groundwater. High and moderate concentrations generally occur as a result of human activities, such as applying fertilizer to crops. Livestock, when in concentrated numbers, and septic systems also produce nitrogenous waste that can leach into groundwater. Nitrate plus nitrite was present at high concentrations in 10% of the primary aquifer system and at moderate concentrations in 14%.

Inorganic Constituents with Non-Health Benchmarks

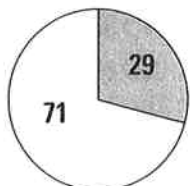
(Not included in water-quality overview charts shown on the front page)

Some constituents, such as total dissolved solids (TDS), can affect the aesthetic properties of water, such as taste, color, and odor. Other constituents, such as iron and manganese, can create nuisance problems, such as scaling and staining.

The State of California has a recommended and an upper limit for TDS in drinking water. TDS is a naturally occurring constituent that results from the weathering and dissolution of minerals in soils and rocks. In the SCRC study unit, TDS was present at high concentrations (above the upper limit) in 16% of the primary aquifer system and at moderate concentrations (between the recommended and upper limit) in 66% of the primary aquifer system.

Iron and manganese are naturally occurring elements that may be released from minerals in soils and rocks under very low dissolved oxygen conditions. Iron, manganese, or both were present at high concentrations in 34% of the primary aquifer system and at moderate concentrations in 4%.

SPECIAL-INTEREST CONSTITUENT



Perchlorate

Constituent of Special Interest: Perchlorate

(Not included in water-quality overview charts shown on the front page)

Perchlorate is an inorganic constituent that has been regulated in California drinking water since 2007. It is an ingredient in rocket fuels, fireworks, and other products, may be present in some fertilizers, and can occur naturally at low concentrations in groundwater. In the SCRC study unit, perchlorate was not present at high concentrations in the primary aquifer system, but was present at moderate concentrations in about 29%.

RESULTS: Groundwater Quality in the South Coast Range–Coastal Study Unit

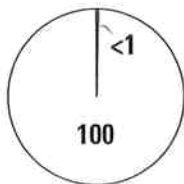
ORGANIC CONSTITUENTS



Solvents

Organic Constituents

The Priority Basin Project uses laboratory methods that can detect low concentrations of volatile organic compounds (VOCs) and pesticides, far below human-health benchmarks. The presence of VOCs and pesticides detected at these low concentrations can be used to trace water from the landscape into the aquifer system.

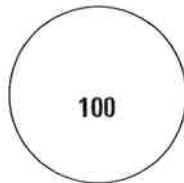


Trihalomethanes

Volatile Organic Compounds with Human-Health Benchmarks

VOCs are used in many household, commercial, industrial, and agricultural products and are characterized by their tendency to volatilize (evaporate) into the air.

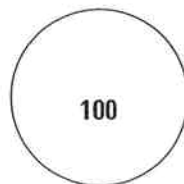
Solvents are used for a number of purposes, including manufacturing and cleaning. In the SCRC study unit, solvents were present at high concentrations in <1% of the primary aquifer system. The solvent detected at high concentrations was perchloroethene (PCE). Solvents were present at moderate concentrations in about 2% of the primary aquifer system and were low or not detected in 98%.



Other volatile organic compounds

Trihalomethanes may form during water purification and can enter groundwater by the infiltration of landscape irrigation water. Trihalomethanes were present at moderate concentrations in <1% of the primary aquifer system and at low concentrations or not detected in about 100%.

Other VOCs include organic synthesis reagents, refrigerants, and gasoline hydrocarbons. Other VOCs were not detected or were present at low concentrations in 100% of the primary aquifer system.



Pesticides

Pesticides with Human-Health Benchmarks

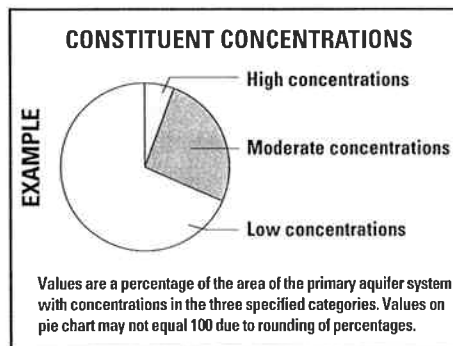
Pesticides are applied to crops, gardens, lawns, around buildings, and along roads to help control unwanted vegetation, insects, fungi, and other pests. In the SCRC study unit, pesticides were not detected or were present at low concentrations in 100% of the primary aquifer system.

BENCHMARKS FOR EVALUATING GROUNDWATER QUALITY

GAMA's Priority Basin Project uses benchmarks established for drinking water to provide context for evaluating the quality of untreated groundwater. After withdrawal, groundwater may be disinfected, filtered, mixed, and exposed to the atmosphere before being delivered to consumers. Federal and California regulatory benchmarks for protecting human health (Maximum Contaminant Level, MCL) were used when available. Non-regulatory benchmarks for protecting aesthetic properties such as taste and odor (Secondary Maximum Contaminant Level, SMCL) and non-regulatory benchmarks for protecting human health (Notification Level, NL, and Lifetime Health Advisory, HAL) were used when Federal or California regulatory benchmarks were not available.

High, moderate, and low concentrations are defined relative to benchmarks

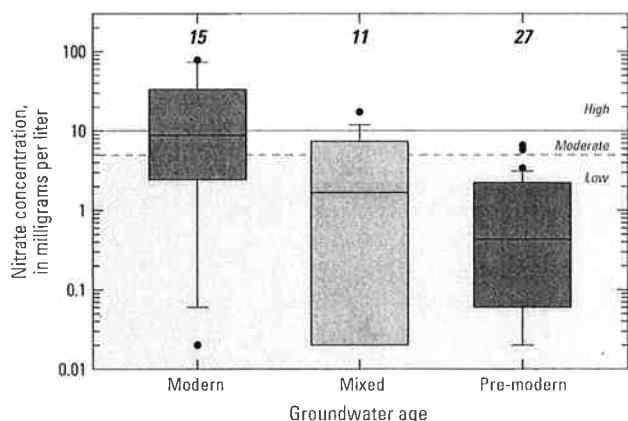
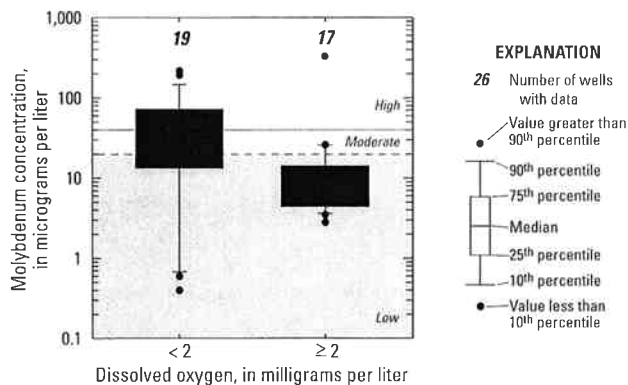
Concentrations are considered *high* if they are greater than a benchmark. For inorganic constituents, concentrations are *moderate* if they are greater than one-half of a benchmark. For organic and special-interest constituents, concentrations are *moderate* if they are greater than one-tenth of a benchmark; this lower threshold was used because organic constituents generally are less prevalent and have smaller concentrations relative to benchmarks than inorganic constituents. *Low* includes nondetections and values less than moderate concentrations. Methods for evaluating water quality are discussed in Burton and others (2013).



Factors that Affect Groundwater Quality

In the SCRC study unit, molybdenum and nitrate are two constituents that were detected at high concentrations in the primary aquifer system (Burton and others, 2013). The non-regulatory U.S. Environmental Protection Agency (USEPA) HAL for molybdenum is 40 micrograms per liter ($\mu\text{g/L}$), and the regulatory USEPA MCL for nitrate is 10 milligrams per liter (mg/L) as nitrogen.

Molybdenum is a trace element that occurs naturally in aquifer sediments. Molybdenum can be mobilized under geochemical conditions indicated by low dissolved oxygen (DO) or high pH (Goldberg, 2009). High and moderate concentrations of molybdenum in the SCRC study unit were prevalent when DO was <2 mg/L . Molybdenum concentrations also tended to increase as pH increased when DO was >2 mg/L , likely the result of pH-dependent desorption from aquifer sediments (Burton and others, 2013).



groundwater of pre-modern age (groundwater recharged before 1952). Nitrate concentrations also can be affected by geochemical conditions indicated by DO concentration. In contrast to molybdenum, nitrate concentrations generally were low in groundwater having DO <2 mg/L , likely because nitrate can be degraded in low DO conditions (Kendall, 1998).

By Carmen A. Burton and Kenneth Belitz

SELECTED REFERENCES

- Burton, C.A., Land, M.T., and Belitz, Kenneth, 2013, Status and understanding of groundwater quality in the South Coast Range—Coastal study unit, 2008—California GAMA Priority Basin Project: U.S. Geological Survey Scientific Investigations Report 2013-5053, 85 p. Available at <http://pubs.usgs.gov/sir/2013/5053>.
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- Kendall, C., 1998, Tracing nitrogen sources and cycling in catchments, in Kendall, C., and McDonnell, J.J., eds., Isotope tracers in catchment hydrology: Amsterdam, Elsevier Science, chapter 16, p. 519–576.
- Mathany, T.M., Burton, C.A., Land, Michael, and Belitz, Kenneth, 2010, Groundwater-quality data in the South Coast Range—Coastal study unit, 2008—Results from the California GAMA Program: U.S. Geological Survey Data Series 504, 106 p. Available at <http://pubs.usgs.gov/ds/504/>.

Priority Basin Assessments

GAMA's Priority Basin Project (PBP) assesses water quality in that part of the aquifer system used for drinking water, primarily public supply. Water quality in the primary aquifer system, assessed by the PBP, may differ from water quality in the shallower and deeper parts of the aquifers. GAMA's Domestic Well Project assesses water quality in the shallower parts of the aquifer system. Ongoing PBP assessments are being conducted in more than 120 basins throughout California.

The PBP assessments are based on a comparison of constituent concentrations in untreated groundwater with benchmarks established for the protection of human health and for aesthetic concerns for drinking water. The PBP does not evaluate the quality of drinking water delivered to consumers.

The PBP uses two scientific approaches for assessing groundwater quality. The first approach uses a network of wells to statistically assess the status of groundwater quality. The second approach combines water-quality, hydrologic, geographic, and other data to help assess the factors that affect water quality. In the SCRC study unit, data were collected by the PBP in 2008 and compiled from the CDPH database for 2005–2008. The PBP includes chemical analyses not generally required as part of regulatory compliance monitoring, including measurements at concentrations much lower than human-health benchmarks, and measurement of constituents that can be used to trace the sources and movement of groundwater.

For more information

Technical reports and hydrologic data collected for the GAMA Program may be obtained from

GAMA Project Chief

U.S. Geological Survey
California Water Science Center
6000 J Street, Placer Hall
Sacramento, CA 95819
Telephone number: (916) 278-3000
WEB: <http://ca.water.usgs.gov/gama>

GAMA Program Unit Chief

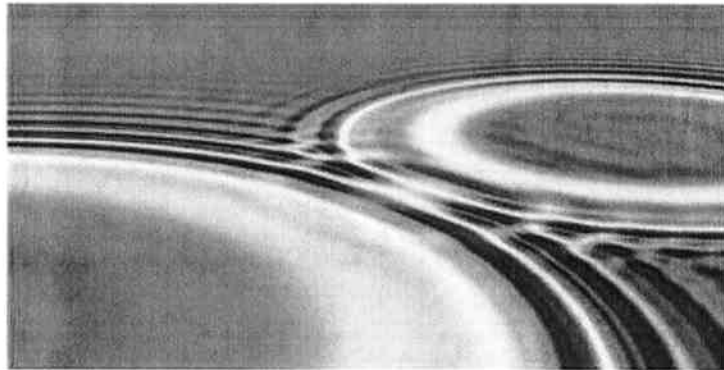
State Water Resources Control Board
Division of Water Quality
PO Box 2231, Sacramento, CA 95812
Telephone number: (916) 341-5779
WEB: <http://www.waterboards.ca.gov/gama>

FEBRUARY 12, 2014

ITEM F

ATTACHMENT D

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.

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 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, in consultation with the Delta Protection Commission and the Department of Water Resources, 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.

FEBRUARY 12, 2014

ITEM F

ATTACHMENT E

Lisa Bognuda

From: CERBT4U <CERBT4U_CERBT4U@CalPERS.CA.GOV>
Sent: Wednesday, February 05, 2014 2:20 PM
To: Lisa Bognuda
Subject: CalPERS-CERBT Update



California Public Employees' Retirement System
Affiliate Program Services Division
CERBT (OPEB)
P.O. Box 1494
Sacramento, CA 95812-1494
TTY: (877) 249-7442
(888) 225-7377 phone • (916) 795-0032 fax
www.calpers.ca.gov

February 5, 2014

Lisa Bognuda
Finance Director/Assistant General Manager
Nipomo Community Services District

Dear Lisa,

I hope the start of 2014 has been a good one for you. I want to take this opportunity to share some important information with you.

I am pleased to announce the total annual cost for participation in the CERBT has been lowered to 14 basis points beginning February 1, 2014.

Here are the reasons why the cost is lower now. The California Employers' Retiree Benefit Trust (CERBT) program continues to experience strong trust growth. At calendar year end 2013 the trust had grown to 386 contracted employers with \$3.2 billion of assets under management. The aggregated investment returns for all three strategies the trust offers for calendar year 2013 was 13.16%. The employer contributions and investment returns have been higher than projected. The program costs have been at or below budget. The CERBT program will continue to adjust without advance notice the cost charged to employers whenever it is appropriate to do so.

We hope that your 6/30/2013 (or 7/1/2013) OPEB actuarial valuation is completed or nearly so. Fiscal year end comprehensive annual financial reports (CAFR) will be on us before we know it. The OPEB valuation reports are required to complete those CAFRs.

As you probably know, the Governmental Accounting Standards Board (GASB) is deliberating changes to accounting standards (GASB 43, 45, and 57) of other post-employment benefits (OPEB). The GASB expects to issue their Exposure Draft in April 2014. We are preparing a brief description of possible important changes which we will share with you soon.

The CERBT has applied to the Internal Revenue Service for a Private Letter Ruling (PLR). We expect the IRS to deliver a favorable ruling within the next 18 months. The establishment and administration practice of the CERBT is guided by advice from highly qualified tax counsel. The design and administrative compliance of the CERBT plan with Internal Revenue Code (IRC) Section 115 requirements is simple.

Thank you for participating in the CERBT. We are pleased to serve you.

Regards,

A handwritten signature in black ink that reads "John Swedensky". The signature is written in a cursive style with a long, sweeping underline.

John Swedensky
CERBT Program Manager
Affiliate Program Services Division
CalPERS

FEBRUARY 12, 2014

ITEM F

ATTACHMENT F

San Luis Obispo County State Water Project

Brief History

1963: San Luis Obispo County Flood Control and Water Conservation District (SLO County) enters into agreement with Department of Water Resources (DWR) for 25,000 Acre-Feet per Year State Water Allocation

1992-3: 4,830 Acre-Feet of State Water allotted to various SLO County Sub-contractors

1994-8: Polonio Pass Water Treatment Plant and pipeline design and construction; SLO County contracts for 4,830 acre feet per year capacity right with CCWA for water treatment plant and pipeline operation and maintenance

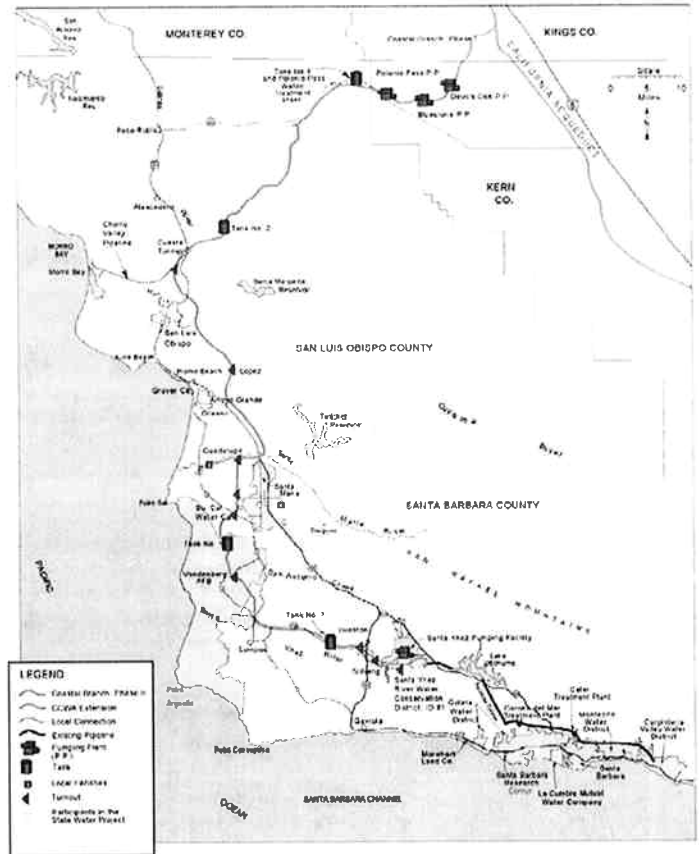
1997: Drought buffer agreements established as ‘insurance’ for dry years: 3,657 Acre-Feet total drought buffer allocated.

July 18, 1997: Water Flows

Sub-contractor	Water Service Amount	Drought Buffer	Total Reserved
Chorro Valley Turnout $\approx \$1,100$ per AF			
City of Morro Bay	1,313	2,290	3,603
Ca Mens Colony	400	400	800
Co Operations Center	425	425	850
Cuesta College	200	200	400
Lopez Turnout $\approx \$1,000$ per AF			
City of Pismo Beach	1,240	0	1,240
Oceano CSD	750	0	750
San Miguelito MWC	275	275	550
Avila Beach CSD	100	0	100
Avila Valley MWC	20	60	80
San Luis Coastal USD	7	7	14
Shandon	100	0	100
TOTAL	4,830	3,657	8,487

Relations with CCWA

- Exploring options to maximize use of facilities and allocations
- Protecting the contractual rights of existing sub-contractor pipeline capacity is critical while exploring options for future use
- Any new sub-contractor would need to “buy in” through negotiations – in addition to addressing other operational issues



Excess Allocation:

25,000 Acre-Feet
 -4,830 (allocation to sub-contractors)
 -3,657 (drought buffer)
 = 16,513 “excess allocation”

Can be used:

- to ensure achievement of full allocation in years of low delivery from State (<100%)
- for groundwater banking in and out of County (currently evaluating in-County)
- turnback pools (sell to the state or other contractors)
- permanent sale
- yearly/multi-year sale
- after expansion of facilities and/or contract negotiation

FEBRUARY 12, 2014

ITEM F

ATTACHMENT G



LAFCO - San Luis Obispo - Local Agency Formation Commission
SLO LAFCO - Serving the Area of San Luis Obispo County

RECEIVED
FEB 14 2014
NIPOMO COMMUNITY
SERVICES DISTRICT

COMMISSIONERS

Chair

Roberta Fonzi
City Member

Vice-Chairman
TOM MURRAY
Public Member

MURIL CLIFT
Special District Member

BRUCE GIBSON
County Member

FRANK MECHAM
County Member

MARSHALL OCHYLSKI
Special District Member

DUANE PICANCO
City Member

ALTERNATES

DAVID BROOKS
Public Member

ROBERT ENNS
Special District Member

ADAM HILL
County Member

KRIS VARDAS
City Member

STAFF

DAVID CHURCH
Executive Officer

RAYMOND A. BIERING
Legal Counsel

MIKE PRATER
Analyst

DONNA J. BLOYD
Commission Clerk

**TO: PAAVO OGREN, COUNTY OF SAN LUIS OBISPO
GLENN MARSHALL, COUNTY PLANNING
MICHAEL LEBRUN, NIPOMO CSD
MAPPING SUPPORT SUPERVISOR, S. CALIFORNIA GAS CO.
PG&E PUBLIC AFFAIRS MANAGER
CHUCK SIEK, U.S. DEPT OF THE INTERIOR, BUREAU OF RECLAMATION
TOMMY GONG, COUNTY ELECTIONS DEPARTMENT
COUNTY FIRE DEPARTMENT
COUNTY SHERIFF'S OFFICE
CALIFORNIA HIGHWAY PATROL
ALYSON STANTON, AUTO CLUB OF SO CALIFORNIA
AL GASTELUM, THOMAS BROTHERS MAPS
BARBARA GODWIN, SLO COUNTY AUDITOR**

FROM: DAVID CHURCH, AICP, EXECUTIVE OFFICER

DATE: FEBRUARY 3, 2014

**RE: Annexation No. 1 to NIPOMO LIGHTING DISTRICT
(TRACT 1747)**

Filings for the above-named boundary change have been completed.
Attached are the following documents:

1. Materials, including the Certificate of Completion and LAFCO Resolution No. 2013-02, filed with the County Recorder;
2. One copy of the acknowledgement receipt received from the State Board of Equalization; and
3. One copy of notification of filing received from the County Assessor.

If you have any questions, please call me at 805-781-5795.

Recorded at the request of
Public

Recording requested by and mail to:

DOC#: 2013065914

Titles: 1 Pages: 6



Fees 0.00
Taxes 0.00
Others 0.00
PAID \$0.00

Executive Officer
Local Agency Formation Commission
1042 Pacific Street
San Luis Obispo, CA 93401

CORRECTING PREVIOUSLY RECORDED DOC# 2013-004898

CERTIFICATE OF COMPLETION

REMOVING # 7 FROM PREVIOUS RECORDING

Pursuant to Government Codes Section 57200 and 57201 this Certificate of Completion is hereby issued by the Executive Officer of the Local Agency Formation Commission of San Luis Obispo County, California.

1. The short-form designation by LAFCO is the Tract 1747 Annexation - No. 1 to the Nipomo Lighting District
2. The name of the city involved in this action and the kind or type of action ordered for the city is as follows:

Entity	Change of Organization
Nipomo Lighting District	Annexation

3. The above-listed property is located within San Luis Obispo County.
4. A description of the boundaries of the above-cited change is shown in the attached resolution, map and legal description and by reference incorporated herein.
5. The territory involved in this action is inhabited.
6. A Protest Hearing was conducted on May 16, 2013. Insufficient written protests were filed by Registered Voters residing in the area to cause a vote of the Registered Voters within the annexation area to be conducted.
7. This Change of Organization has been approved subject to the conditions stated in Resolution No. 2013-02 attached hereto and made a part hereof. The date of adoption of the Resolution ordering this action was May 16, 2013.
8. The effective date of this change of organization is upon the date of recordation of this certificate at the Office of the San Luis Obispo County Clerk Recorder.

I hereby certify that I have examined the above-cited ordinance or resolution for this action and have found this document to be in compliance with Resolution No. 2013-02 approving said action and adopted by the Local Agency Formation Commission of the County of San Luis Obispo on May 16, 2013.

Date: 11/29/13

David Church
LAFCO Executive Officer

LAFCO File No: 1-R-12

IN THE LOCAL AGENCY FORMATION COMMISSION
COUNTY OF SAN LUIS OBISPO, STATE OF CALIFORNIA

Thursday, March 21, 2013

PRESENT: Chairman Muril Clift, Vice Chairman Kris Vardas, Commissioners Bruce Gibson, Frank Mecham, Tom Murray, Duane Picanco, and Alternate Commissioners David Brooks, Roberta Fonzi, and Marshall Ochylski

ABSENT: Alternate Commissioner Paul Teixeira

RESOLUTION NO. 2013-02
RESOLUTION APPROVING THE SPHERE OF INFLUENCE AMENDMENT AND ANNEXATION NO. 1 TO THE NIPOMO LIGHTING DISTRICT - TRACT 1747

The following resolution is now offered and read:

WHEREAS, an application was filed with this Commission to consider a proposal by the Nipomo Lighting District (County of San Luis Obispo) to; 1)amend the Sphere of Influence of the District, and 2) Annex to Nipomo Lighting District Tract 1747; and

WHEREAS, the Executive Officer has issued a Certificate of Filing on March 11, 2013, given the notices required by law and forwarded copies of his report to officers, affected agencies, persons and public agencies as prescribed by law; and

WHEREAS, this proposal includes an amendment to the Sphere of Influence based on the information and determinations found in the Staff Report considered by the Commission; and

WHEREAS, the matter was set for public hearing at 9:00 a.m. on Thursday, March 21, 2013, and the public hearing was duly conducted and a decision was made on Thursday, March 21, 2013; and

WHEREAS, at said hearing this Commission heard and received all oral and written protests, objections and evidence, which were made, presented or filed, and all persons present were given the opportunity to hear and be heard in respect to any matter relating to the proposal and report; and

WHEREAS the Commission, acting as a Responsible Agency, determined that the environmental review documentation adopted by the County of San Luis Obispo meets the requirements of the California Environmental Quality Act (CEQA); and

WHEREAS, the Commission has considered the factors required to be considered by Government Code Sections 56668 et seq. and other information found in the Staff Report dated March 21, 2013; and

WHEREAS, the Sphere of Influence is hereby amended for Nipomo Lighting District to include Tract 1747 as recommended in the Staff Report; and

WHEREAS, the Commission duly considered the proposal and finds that the proposal to annex this territory to Nipomo Lighting District is hereby approved.

WHEREAS, a Conducting Authority (Protest) hearing was held on May 16, 2013 and pursuant to Government Code Section 57075(a)(3) the change of organization is hereby ordered without an election since protests have been filed and not withdrawn by less than 25 percent of the registered voters or less than 25 percent of the number of landowners owning less than 25 percent of the assessed value of land within the affected territory.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the Local Agency Formation Commission of the County of San Luis Obispo, State of California, as follows:

1. That the recitals set forth hereinabove are true, correct, and valid.
2. That the map and legal description approved by this Commission is attached to this resolution, marked as Exhibits A & B and incorporated by reference herein as though set forth in full.
3. That the Executive Officer of this Commission is authorized and directed to mail copies of this resolution in the manner provided by law.
4. That the Sphere of Influence Amendment and Annexation No. 1 to Nipomo Lighting District is hereby approved with the following condition:
 - a. Prior to filing the Certificate of Completion with the County Clerk, the County of San Luis Obispo shall complete a successful Proposition 218 process for funding the operation and maintenance of the streetlights.

Upon a motion of Vice Chairman Vardas, seconded by Commissioner Mecham, and on the

and on the following roll call vote:


AYES: Vice Chairman Vardas, Commissioners Mecham, Gibson, Murray, Picanco, and
Chairman Clift

NAYS: None

ABSTAIN: None

ABSENT: Commissioner Ochylski

The foregoing resolution is hereby adopted.



Muriel Clift, Chairman Date
Local Agency Formation Commission

ATTEST:



David Church Date
LAFCO Executive Officer 11/22/13

APPROVED AS TO FORM AND LEGAL EFFECT:



Raymond A. Biering Date
LAFCO Legal Counsel

FEB 03 2014



STATE OF CALIFORNIA

STATE BOARD OF EQUALIZATION
PROPERTY AND SPECIAL TAXES DEPARTMENT
TAX AREA SERVICES SECTION, MIC: 59
PO BOX 942879, SACRAMENTO CALIFORNIA, 94279-0059
916 274-3250 - FAX 916 285-0130
http://www.boe.ca.gov/
TASS@boe.ca.gov

BETTY T. YEE
First District, San Francisco

SEN. GEORGE RUNNER (Ret.)
Second District, Lancaster

MICHELLE STEEL
Third District, Orange County

JEROME HORTON
Fourth District, Los Angeles

JOHN CHAING
Controller, Sacramento

CYNTHIA BRIDGES
Executive Director

Mr. David Church, Deputy Executive Officer
LAFCo
1042 Pacific Street, Suite A
San Luis Obispo CA. 93401

This is to acknowledge receipt of the statement(s) required by Section 54900, et seq., of the Government Code for the action described below. Copies of your documents will be forwarded by us to other agencies. You are required by Section 54902 of the Government Code to file a complete set of documents, except for the processing fee, with the County Assessor and Auditor affected by this action.

Tax rate area boundaries and property tax allocations will become effective for the assesment roll indicated below.

Assessment Roll: **2015/16**

County: **40 San Luis Obispo**

District: **39 [0062] HWY. LIGHTING - NIPOMO**

Conducting Authority: **LAFCO**

Short Title: **ANNEXATION N O. 1 TO NIPOMO LIGHTING**

Type of Action: **01 District - Annexation**

Resolution/Ord. No.:

LAFCo No.: **2013-02**

Effective Date: **11/27/2013**

Fee: **\$1,200.00**

Acreage: **50**

City Boundary Change

Estimated Population: **0**

Total assessed value of all property in subject territory: **0**

BOE File No.: **2015-001**
Received at BOE: **01/27/2014**
Date of Acknowledgement: **01/29/2014**
Distribution: **4**

Ric Schwarting
Research Manager (GIS)
State-Assessed Properties Division
Tax Area Services Section

cc: County Assessor, County Auditor



Office of Tom J. Bordonaro, Jr., County Assessor

County Government Center, 1055 Monterey St., Ste. D360, SLO, CA 93408
(805) 781-5643 Fax: (805) 781-5641 Web Site: slocounty.ca.gov/assessor

December 20, 2013

David Church, AICP
Executive Officer
San Luis Obispo County LAFCO
1042 Pacific Street, Suite A
San Luis Obispo, CA 93401

RE: Acknowledgement of Annexation No. 1 to the Nipomo Lighting District (Tract 1747)

Dear Mr. Church:

This is to acknowledge receipt of the following items pursuant to Section 54902 of the Government Code:

1. Resolution No. 2013-02
2. Recorded Map and Legal Description
3. Certificate of Completion

Changes to the local assessment roll will occur after you file with the State Board of Equalization and we are notified by them of the resultant tax rate areas.

Sincerely,

Tom J. Bordonaro, Jr.
County Assessor

Mark Herbst
Deputy County Assessor

c: Ralph Davis
State Board of Equalization, Tax Area Services Section

MH:pa

FEBRUARY 12, 2014

ITEM F

ATTACHMENT H

Water company will deliver

To the Editor:

Golden State Water Co. is in the process of purchasing Rural Water Co., pending approval from the California Public Utilities Commission.

The transition will benefit current Rural Water customers, because Golden State Water has been providing water service for more than 80 years, and has a team of more than 550 professionals committed to delivering reliable, quality water and service.

Customers will have access to local offices in Los Osos and Santa Maria, and a 24-hour customer-service center with representatives available to answer questions and take action with service issues, day or night.

Golden State Water has the technical, financial and managerial resources to maintain the local system and ensure that water quality meets federal and state drinking water standards. The company is equipped to invest in necessary capital improvements to update Rural Water's aging infrastructure.

Golden State Water is familiar with the area's unique needs, having served the region since 1976, and worked with several local water providers on the Nipomo Supplemental Water Project to bring water to the Nipomo Mesa, as required under the stipulated judgment in the Santa Maria Groundwater Basin Adjudication. Golden State Water, Rural Water and other purveyors on the Mesa have agreed to participate in the project, sharing a percentage of the pipeline costs.

Golden State Water is looking forward to serving the Arroyo Grande community and hopes to hear from residents if they have any concerns or questions about the transition. Rural Water customers are encouraged to reach out to Golden State Water's customer-service representatives at 1-800-999-4033, or review information about the utility's water service online at: gswater.com.

Denise Kruger

Senior vice president

Golden State Water Co.

Posted Friday January 31, 2014

FEBRUARY 12, 2014

ITEM F

ATTACHMENT I

In Time of Drought, State Water in Serious Doubt

Central Coast Water Authority Issues Bombshell Warning

Thursday, January 23, 2014

By Nick Welsh

With much of the country recently seized by a freakish arctic vortex, Santa Barbara's record-breaking temperatures and perpetual blue skies must seem nothing short of miraculous. But as the county enters its third consecutive dry year, the chief miracle its residents are praying for is rain. Based on long-term weather forecasts, they're not praying nearly hard enough.

The problem, obviously, is of statewide scope, and this Friday, California Governor Jerry Brown responded by officially dropping the D-bomb on all of California, declaring a drought emergency. Last year was the state's driest in recorded weather history — 119 years — and this year's snowpack in the Sierras is less than 20 percent of what it needs to be. Brown's declaration calls on customers and water districts alike to cut back by 20 percent. It loosens the regulatory shackles on water agencies seeking to buy emergency supplies from other jurisdictions or water-rich rice farmers. And it relaxes environmental requirements that water be diverted for endangered fish species.

In similar fashion, the County of Santa Barbara declared a water emergency of its own the same day. But almost a week before, the City of Solvang beat both the governor and the board of supervisors to the punch — declaring a Stage 1 drought alert and calling for a 15 percent cutback in water use by its customers. Daytime irrigation has been outlawed, as has car washing and sidewalk hosing. Violators will be given two warnings and then socked with a \$30 fine.

Solvang's problems stem from the fact it relies almost exclusively on supplies delivered by the state-water system. This year, the Department of Water Resources (DWR) announced it could deliver only 5 percent of the state water the system's member agencies are contractually allocated. That means Solvang — which relies almost entirely on state water to deliver 1,500 acre-feet a year to its customers — would get only 75 acre-feet.

BIG SPLASH: Ray Stokes of the Central Coast Water Agency quietly dropped a bombshell last week, notifying every water district manager in the county they may not get a single drop of state water this year. If that happens, it would be a first. For agencies like Montecito's and Solvang's, it would be a catastrophe.

In the 60-year history of the state-water system, deliveries have been this low only once before.

But late Friday afternoon, the problems of Solvang — and every water agency reliant upon state water — got a lot worse. In Santa Barbara County, that's every community with the sole exception of Lompoc, whose voters rejected state water in 1991.

Ray Stokes, head of the Central Coast Water Authority (CCWA) — the joint powers agency responsible for importing state water into Santa Barbara County — quietly dropped a bombshell of his own, sending

out a memo to county water managers that there may not be a single drop of new state water available this coming year. Zero deliveries. Not once has that happened before.

Citing the record-low rainfall and negligible snowpack, Stokes wrote, "There is a very real possibility that DWR may decrease the 2014 delivery allocation from the current 5 percent amount to zero percent." And because of possible salt-water intrusion in the Sacramento–San Joaquin River Delta — the pinch point through which all northern California waters must flow on their way south — Stokes said the delta may now be off-limits as a transfer point for potential water deals from north to south. That's huge.

The only "good" news in Stokes's bombshell is that the Department of Water Resources has about 800,000 acre-feet of water in storage reservoirs throughout the state. Of that, 14,000 acre-feet is carryover water "owned" by CCWA in the San Luis Reservoir. That's water bought and paid for in previous years and put in storage rather than down the drain. Because the San Luis Reservoir is located south of the delta pinch point, those supplies should be safely available for Santa Barbara consumers. But Stokes isn't taking any chances. "Essentially DWR stated we are in uncharted territory," Stokes wrote. "I don't want to sound overly alarming, but it would be very prudent for each CCWA project participant to carefully consider accelerating the requested delivery of water currently available."

In other words, run, don't walk.

At maximum pumping rates, all that water could be safely parked in Lake Cachuma sometime this June. Of the 14,000 acre-feet, 7,600 acre-feet would be set aside for South Coast agencies, and the rest would be allocated to North County consumers, the City of Santa Maria and Vandenberg Air Force Base being the largest. With this supply, Stokes estimates CCWA would have the capacity to deliver to 35 percent the agencies' contractual allocations in the next year.

But would it be wiser to cut back now just in case?

Droughts, like fires, floods, and earthquakes, are integral to Santa Barbara's ambient disaster-scape. They are inevitable, somewhat predictable, but — strangely — always a fresh revelation in how violent they can be. Superficially, droughts mean brown lawns, yellow toilets, short showers, and withered plants. They mean smaller fruit, dead trees, and wild animals encroaching into the urban zone and domesticated critters mysteriously disappearing. One water district manager described a drought as a slow-motion earthquake. Those most obviously shaken are those living immediately off the land. And along the way, droughts provide us all a very harsh lesson in humility.

In Montecito, home to some of the most lavishly landscaped estates ever imagined, the Montecito Water District board went beyond mere drought declaration, announcing it was facing a bona fide, right-here, right-now water shortage. If customers don't cut back consumption by 25 percent, the district announced it could actually go dry sometime this fall. But in a place where some customers spend up to \$8,000 a month on water, high prices and higher fines have little impact on water use. If cuts aren't forthcoming, district manager Tom Mosby said he's ready to attach flow restrictors to the water pipes of noncooperative customers.

Not all water districts on the South Coast are similarly afflicted. Carpinteria, for example, is endowed with a bountiful groundwater basin, unlike Montecito. Thanks to a decision made 23 years ago, Carpinteria signed up for far more state water than it ever needed or could hope to afford. Still, in the current pinch, state water — even now a hot-button issue in Carpinteria's most recent water board election — has come in very handy. Despite such seemingly solid supplies, water boardmember Matt Roberts said he's scanning the skies for storm clouds. "There's not even a threat of rain," he lamented.

Calling the current drought "epic" and "Dust Bowl dry," Roberts — a longtime avocado rancher — is facing tough decisions about the fate of his trees. Without the customary winter rains, he's been forced to irrigate his crops with water from the district on which he serves. That costs more but isn't as good. "Rain is much more efficient, complete, and nourishing," Roberts said. "It's much higher quality." With the drought, Roberts said his avocados will be significantly smaller. Smaller fruits also draw lower prices per weight, meaning he could lose money. "If this keeps up, I'll be subsidizing my operation this year," he lamented.

For the cattle ranchers, it's tougher yet. Jim Poett, a longtime rancher from the Lompoc area, said he's been forced to sell off his calves early for the past two years. "It's very ugly," he said. "Not locusts and that stuff, but very ugly." Without the rains, fields that would normally be winter green are now fall brown. He and other ranchers have been forced to buy hay to feed their livestock, and the price of hay has been going nowhere but up. "If it's still brown in March, then everything is gone," Poett stated. "There won't be any cattle. Some guys might keep a few head, but everything will be sold. This is it. Kaput. But we're not there yet. It could still rain."

Water managers with the Goleta Water District say their customers have spent millions securing a diverse supply and drastically reduced per capita consumption to half the City of Santa Barbara's and one-quarter of Montecito's. Because of this, said district manager John McGinnis, Goleta should be able to squeak through the next two years without having to declare a drought of any kind. And though Santa Barbara water managers are confident they can make normal deliveries throughout the coming year, they announced they'd declare a Stage 1 drought in March. That's mostly a gesture designed to promote greater public awareness and voluntary reductions. But still, it's a year sooner than city drought-response plans are calibrated. In 2011, city water managers synchronized their alarm clocks to the South Coast's six-year water cycle. Typically, Stage 1 alerts are called for only after three dry years. In this case, the declaration will come after just two.

Even so, that's not soon enough for Councilmember Bendy White, who served as chair of the city's Water Commission during the crushing drought of 1986-1991. That's when Santa Barbarans famously painted their lawns green and "water cops" were dispatched by City Hall to crack down on violators. Back then, City Hall entertained all kinds of crackpot schemes, like transporting water from Alaska via tanker or hauling icebergs down to Santa Barbara.

For White, lack of rainfall is only part of the problem. The scorching heat is another, baking the ground hard and dry, the backcountry vegetation into crispy kindling. If Santa Barbara gets no rain this month, it will be only the fourth time in recorded history that's ever happened. "It's scary-ass dry," exclaimed

White, who suggested that Santa Barbara's natural cycle of floods and droughts might be accelerating. "I'm having the hair-on-the-back-of-my-neck sense that something's not right," he said.

Lake Cachuma, he noted, has plunged faster in this drought than it did in the same time 23 years ago. In response to unseasonably hot weather — and rains less than 20 percent of normal — dam operators are pumping water out of the lake as fast as they typically do in August, not January, while customers scramble to keep their outdoor plants alive. Lake Cachuma — by far the biggest source of water for Goleta, Carpinteria, Montecito, and Santa Barbara — has just dipped below 40 percent of its capacity this week.

If it dips below 30 percent — as it will by September, should present trends continue — Lake Cachuma's water level will fall below two of the five portals into which the water is pumped on its way to South Coast customers. In that case, dam operators will find themselves forced to pump the water from a barge on the lake into the portals. The question is at what maximum capacity to calibrate the pumps. Currently, dam operators are looking at a pumping capacity of 44 million gallons a day. What makes that number striking is that the last time this happened — 1990 — the pumps had a capacity of about 17 million gallons a day. Although Randall Ward of the Cachuma Operations and Maintenance Board had no explanation for this leap, he acknowledged it was dramatic. "That's not a jump," he said. "It's a crescendo."

Lake Cachuma currently provides 27,500 acre-feet of water a year to its member agencies. White expressed concern at a recent city council meeting that this amount could be largely reduced for several reasons. At some point, it appears likely that Cachuma operators could be ordered to divert a significant flow downstream to help maintain viable habitat for the federally endangered steelhead trout that once claimed the Santa Ynez River and its tributaries in prodigious numbers. Rebecca Bjork, Santa Barbara's new public works director and former water director, cautioned there's no way to know how much water the city could lose as a result of the steelhead preservation efforts and that any final decision remains a long way off.

A more immediate threat may be an apparent shift in professional etiquette among the water managers of the member agencies. In droughts past, there was an understanding among managers that when the dam dipped below 100,000 acre-feet storage, they'd voluntarily reduce their draw by 20 percent. This practice helped stretch limited resources and bought time for agencies as they sought to ratchet back consumption. But with Cachuma now well below the 100,000 acre-foot mark, this cutback has not occurred. "The level of perceived cooperation among member agencies is not as strong," said Carpinteria's Roberts. "There's more of an every-man-for-himself attitude," he said. In this case, the Goleta district balked. When Goleta declined to participate, the other agencies declined, as well.

According to McGinnis, Lake Cachuma provides his customers the cheapest glass of water they can buy. "If you have two glasses of water side by side, and you're thirsty, you're going to drink the cheaper one first," he explained. "After that, if you're still thirsty, you'd pay the extra money." McGinnis added that the Goleta district will pump about 3,000 acre-feet of state water — much more expensive — into Lake Cachuma this year, and that contribution will provide the same net effect as if the district had observed

the voluntary cutback tradition. Carpinteria's Roberts noted, "Whenever water becomes scarce, there'll be more arguments."

Fluid Solutions

What saved Southern California from the last major drought was the Miracle March rain of 1991. Rarely has so massively messy an inundation been the cause of such mass jubilation. But between 1986 and 1991, South Coast water agencies and residents made major changes. Low-flow toilets and showerheads became ubiquitous, and drip irrigation more broadly embraced. Local governments invested in a new reclaimed-water-distribution system so treated sewage water, rather than drinking water, could be used to irrigate soccer fields and parks. Santa Barbara city residents cut their consumption in half, successfully spurred on by new punitive water prices. Prices stayed the same for the daily minimum needed for indoor use; after that, prices increased 16-fold. It worked.

Farmers embraced more efficient irrigation methods. Water districts adopted drought-management plans and hired conservation officers to show customers how to make every drop count. And local governments invested millions upon millions on new water supplies. In 1991, Santa Barbara County voters approved hooking into the state-water system for the first time, locking themselves — collectively — into annual payments of \$50 million, whether they got any water or not. Likewise, South Coast voters approved the construction of a desalination plant — with a maximum capacity of 10,000 acre-feet a year. Upon completion, the desal plant stayed up and operating long enough to fill a few hundred plastic bottles with slightly salty-tasting water, but it has been offline ever since.

The desal plant currently exists more in popular imagination than in real life. Its components have long been mothballed; some were sold off, and many need to be replaced. In a best-case scenario, it would take two years and \$18 million to get that plant up and running. In a worst-case world, the coastal commission would object that the plant relies on antiquated technology that inflicts undue harm to the marine environment and would require something other than what City Hall owns.

In this drought, the *deus ex machina* that will be invoked as the long-term fix to our chronic water woes is Governor Brown's much-debated Twin Tunnels project. Brown has proposed building two massive pipes underneath the delta that would carry Northern California's water safely — and with little environmental detriment — to southern customers. Proponents contend the Twin Tunnels will enable the state-water project to avoid the environmental pitfall of sending water through the delta, home of the famously endangered delta smelt, and thus increase the reliable delivery of an additional 800,000 acre-feet a year. The price tag for this project — depending upon the source — ranges from \$25 billion to \$60 billion. There's no shortage of opponents lined up to fight this project tooth and nail, claiming the costs have been grossly minimized while the benefits have been vastly exaggerated. The current crisis will be seized upon by proponents, but under even the most accelerated timetable, there's no possibility such a colossal project could be built in time to provide relief now.

The good news is that Goleta, Santa Barbara, and Carpinteria have solid groundwater supplies, though Carpinteria's pumping infrastructure needs serious work. Solvang and Montecito have shallow aquifers with limited storage. In the past, well-heeled Montecitans, put off by past conservation campaigns or

district interference, have drilled their own wells. According to Montecito district director Mosby, at least two dozen wells have failed in recent months. Others are encroaching on groundwater supplies upon which the district depends. Thanks to the importation of state water years ago, the Montecito district issued about 500 new meters to customers it otherwise could not serve. But for Montecito and Solvang to make it, they'll need other water agencies — less reliant upon state water — to sell some of theirs. In a less cooperative landscape, that may prove easier said than done.

Santa Barbara's reclaimed-water system, it turns out, has barely functioned for the past seven years. It's now being taken offline for major repairs. When that work is completed two years hence, it will replace 1,300 acre-feet of potable water that could more directly meet human needs. In the meantime, that extra demand places additional drain on limited supplies.

When Santa Barbara's first dam — Gibraltar Dam — was built in 1920, it was billed as the ultimate solution to the region's water-supply challenges, capable of delivering about 3,000 acre-feet a year. (The city's total demand is 14,000 acre-feet.) Today, Gibraltar — located a few miles upstream from Lake Cachuma — is all but bone dry. "This is the first time in my life Gibraltar has been this dry," said Russell Ruiz, a longtime water warrior and member of the city's water commission. The dam has been rendered effectively inoperable by the vast buildup of silt caused by years of operation and severely exacerbated by deposits of ash and soil erosion caused by the recent Zaca Fire. At a recent City Council meeting, Santa Barbara Mayor Helene Schneider asked the cost of dredging Gibraltar. Sometime later, her colleague Councilmember White calculated it would take 1.6 million truckloads to haul.

For the time being, city public works chief Bjork is maintaining a posture of vigilant confidence, even with the recent revelations about state-water deliveries. "Am I nervous?" she asked. "As a water manager, I have to be nervous. But we still have a diverse supply, our groundwater's in good shape, and we're still on track to make normal deliveries this year."

In the meantime, Councilmember White hasn't shaken that feeling that's caused the hair on the back of his neck to stand at perpetual attention. He remains spooked. In the meantime, he intends to play the role of Cassandra, warning his fellow councilmembers on a weekly basis how dry things are. "The only rain to fall at all in the whole state of California for the month of January was just a smidgen in Eureka," he said. "That's it! And January is traditionally when we feast."

White recognizes all his hyperventilation could be for naught. He sincerely hopes it is. Intoning what's become the de facto universal prayer for those seeking to ward off drought, White noted, "It could always rain in February."

State Water's Double-Edged Sword

Critics of state water have long contended that the system won't be able to deliver when it's most needed, because droughts tend to be statewide in scope. Certainly this is a case in point. But supporters of the system — and Santa Barbara County's decision to hook into the state-water project at an annual cost of \$50 million — contend that even when the system can't deliver water, the pipes and infrastructure will give the regions the capacity to buy water from other purveyors Santa Barbara would

not otherwise have. And they point out that the South Coast would be in far worse shape right now if it hadn't banked previous year's allotments in nearby reservoirs. It's a complicated picture.

Montecito, for example, would be in a deeper hole than it currently is were it not for its ability to import state water. Since voters approved the hookup, Montecito took on about 500 additional customers — and the additional demand they put on the system. That would not have happened were it not for state water. At the same time, without state water, the district would lack the tools needed to secure additional supplies. Carpinteria's picture is complicated in a different way. For years, state water has placed an intense financial burden on the small district that opted for an allotment of 2,000 acre-feet at a cost of \$3 million annually.

Because there's no guaranteed quantity of water delivered under the state-water system, water districts say they're really paying for the pipes. So if Carpinteria were to get 100 acre-feet this year — as it would under the 5 percent delivery scenario — it would be at a cost of \$3 million. The pipes, however, have allowed the cash-strapped district, which once boasted the highest rates in the county, to sell water in previous years to other districts. And with the onset of the drought, the Carpinteria district — once eager to unload its state-water obligation — is less anxious to sell.