TO: BOARD OF DIRECTORS

FROM: MICHAEL S. LEBRUN MICHAEL S. LEBRUN



DATE: FEBRUARY 22, 2013

GENERAL MANAGER'S REPORT

ITEM

Standing report to your Honorable Board -- Period covered by this report is February 8, 2013 through February 22, 2013.

DISTRICT BUSINESS

Administrative

- Second Interviews for the Assistant Engineer conducted February 19-21
- 2012 District Employee Compensation Report updated

Safety Program

• No accidents or injuries to report.

Public Outreach

- Press Releases and Advertisements released and ran during the period covered by the report are attached along with a Press Release Log for the year.
- District website statistics are being tracked as a measure of outreach and education effort impact. A summary of website activity is attached.
- 2013 1st Quarter Newsletter mailed to District property owners the week of February 11.
- The inaugural monthly Manager's column within Adobe Press debuted on February 22, 2013.
- o A summary of outreach and education activities is attached.

Monthly Connection Report

No change from previous report

Nipomo Community Services District Water and Sewer Connections	End of I	2013		
	DEC-12	JAN-13	FEB-13	MAR-13
Water Connections (Total)	4259	4268		
Sewer Connections (Total)	3055	3064		
Meters turned off (Non-payment)	20	18		
Meters off (Vacant)	52	55		
Sewer Connections off (Vacant)	20	22		
New Water Connections	12	9		
New Sewer Connection	12	9		
Galaxy & PSHH at Orchard and Division Sewer Connections billed to the County	462	462		

Meetings

Meetings attended:

- February 12, Intertie Pipeline Design, Construction Mgmt, Right-of-Way, Legal, Finance
- February 12, Blacklake HOA regarding Blacklake Wastewater System Master Plan
- February 13, Regular Board Meeting
- February 14, Quarterly All Staff Safety Meeting
- February 14, Management Coordination
- February 15, SWAEC
- February 15, South County Sanitary regarding lien process
- February 19,20, 21, Assistant Engineer Candidate 2nd Interviews
- February 19, Board Officer Coordination
- February 20, Operations Transitions Coordination
- February 21, Supplemental Water Project Phase 1, Financing Team
- February 22, SWAEC
- February 22, Annual Meeting SLO County Chapter of CA Special District

Meetings Scheduled:

- February 27, Regular Board Meeting
- February 28, Management Coordination
- Supplemental Water Project Phase 1, Financing Team
- March 1, Board Officers
- March 1, SLO County Supervisor Mecham
- March 5, Finance and Audit Committee
- March 6, SLO County Water Resources Advisory
- March 7, SLO County Supervisor Hill
- March 7, SLO County Supervisor Gibson
- March 7, SLO County Supervisor Arnold

News of Interest

- County rain gauge reports for area gauges are provided
- 2/17/13 LA Times; Desalinization may just be a (expensive) drop in the bucket.
- 2/21/13 LA Times; Drought forecast to persist, especially in West

RECOMMENDATION

Staff seeks direction and input from your Honorable Board

ATTACHMENTS

- A. Press release log and releases issued during reporting period.
- B. District Website Activity Report
- C. Summary of District Outreach and Education accomplishments
- D. SLO County Nipomo Area rain gauge data
- E. 2/17/13 LA Times; Desalinization may just be a (expensive) drop in the bucket.
- F. 2/21/13 LA Times; Drought forecast to persist, especially in West

ITEM F

ATTACHMENT A

Press Release Log

2013

Date of PR	Title	Date Sent to Media	Date Placed On Website	Media Published	Date PR Published						
1/10/2013	Board Authorizes Purchase of New Service Truck	1/10/2013	1/10/2013	Times Press	1/18/2013						
1/10/2013	Board Ratifies Committee Assignments for 2013	1/10/2013	1/10/2013								
1/10/2013	Board to Consider Revision of District's Bill Payment Policy	1/10/2013	1/10/2013	SM Times	1/18/2013	Adobe	1/18/2013	Times Press	1/25/2013	Univision	1/18/2013
1/10/2013	Board Authorizes Representation for Nipomo Mesa Management Area Technical Group	1/10/2013	1/10/2013								
1/24/2013	Board Commends District's Finance Director for Twenty Years of Outstanding Service	1/24/2013	1/25/2013	Adobe	2/1/2013						
1/24/2013	Board Awards Contract for Blacklake Sewer Master Plan to Michael K. Nunley & Associates	1/24/2013	1/25/2013	Adobe	2/1/2013						
1/24/2013	Board Considers Requests for New Water Service at Jim Miller Park and New Development	1/24/2013	1/25/2013	Tribune	1/31/2013	Adobe	2/1/2013	SM Times	2/4/2013		

Press Release Log

2013

Date of PR	Title	Date Sent to Media	Date Placed On Website	Media Published	Date PR Published						
2/5/2013	Committee Develops Initial Ranking of Supplemental Water Alternatives	2/5/2013	2/6/2013	Adobe	2/8/2013	SM Times	2/10/2013	KCOY On Air	2/13/2013		
2/14/2013	Board Authorizes Bidding for Supplemental Water Project Phase 1	2/15/2013	2/15/2013	SM Times	2/16/2013	Tribune	2/18/2013				
2/14/2013	Board Approves Financing Plan for Supplemental Water Pipeline Project	2/15/2013	2/15/2013	SM Times	2/16/2013	Tribune	2/18/2013				
2/14/2013	Committee Presents Preliminary Findings on Supplemental Water Alternatives	2/15/2013	2/15/2013	SM Times	2/16/2013	Tribune	2/18/2013				
2/14/2013	Board Approves an Increase to District Trash Rates	2/15/2013	2/15/2013								
2/14/2013	Board Awards Contract for Auditing Services to The Crosby Company	2/15/2013	2/15/2013								
2/14/2013	Board Considers Revising Policy on New Water Service Applications	2/15/2013	2/15/2013	Tribune	2/18/2013						



Date: February 14, 2013 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

Board Authorizes Bidding for Supplemental Water Project Phase 1

On Wednesday, February 13th, the District's Board held their regular meeting at 9AM and authorized staff to advertise the Supplemental Water Project Phase 1 for bidding.

Bidding the project will provide the District with actual cost for project construction by late March. This will allow a final review of the project funding plan and keep the District on track for considering award of the project contract in late April 2013.

The project will deliver supplemental water to be delivered to the District from the City of Santa Maria and will allow the District to reduce pumping from existing wells to slow the depletion of groundwater and reduce the potential for seawater intrusion on the Nipomo Mesa. The project will also increase the reliability of the District water supply by providing an additional source other than groundwater.

Should the project receive final approval in April, hundreds of good paying construction jobs would be employed beginning this summer through the fall of 2014 when water deliveries are scheduled to begin. Additionally, a viable means for future development in the area to obtain additional water resources would be available.

Next Scheduled Board Meeting: Wednesday, February 27, 2013, 9AM, District Board Room 148 South Wilson, Nipomo

For more information or to view the minutes, please contact the Nipomo Community Services District at 929-1133 or visit <u>www.ncsd.ca.gov</u>.

###



Date: February 14, 2013 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

Board Approves Financing Plan for Supplemental Water Pipeline Project

On Wednesday, February 13th, the District's Board held their regular meeting at 9AM and approved a financing plan for a \$14.1M project to build a pipeline between the District and the City of Santa Maria.

The pipeline would deliver water and bolster the reliability of the District's groundwater only supply. The project would also partially meet the Groundwater Courts requirement that the District import water. Project funding would come from District reserves and 'bond' sales secured by existing District income stream.

No rate increases or property tax increases are required to fund the proposed project construction.

County Public Works Director Paavo Ogren addressed the Board regarding the County's concern for District commitment to the project and \$2.2M in grant funds that are part of a larger grant the County was awarded from State Department of Water Resources.

The Board is scheduled to consider awarding the project construction bid in April 2013. Should the project receive final approval, the project would bring hundreds of good paying construction jobs to the local economy. Additionally, a viable means for future area development to obtain additional water resources would be available.

Next Scheduled Board Meeting: Wednesday, February 27, 2013, 9AM, District Board Room 148 South Wilson, Nipomo

For more information or to view the minutes, please contact the Nipomo Community Services District at 929-1133 or visit <u>www.ncsd.ca.gov</u>.

###



Date: February 14, 2013 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

Committee Presents Preliminary Findings on Supplemental Water Alternatives

In a follow-up from the February 5th press release "Committee Develops Initial Ranking of Supplemental Water Alternatives," the Supplemental Water Alternatives Evaluation Committee presented their preliminary recommendations and initial ranking of alternatives at the regular Board meeting on Wednesday, February 13th at 9AM.

The Supplemental Water Alternatives Evaluation Committee is a volunteer citizens' committee tasked with researching possible sources of water to supplement the District's groundwater-only supply and reports to the District's Board of Directors. The Evaluation Committee has seven voting members, a non-voting Chair, and Vice Chair, as follows:

VOTING MEMBERS	SEAT			
Saltoun, Sam	Finance			
Garson, Dan	Citizen-at-Large			
Graue, Dennis	Engineering			
Matsuyama, Kathie	Environmental			
Miller, Robert	Engineering			
Watson, Dave	Finance			
Woodson, Dan	Environmental			
NON-VOTING MEMBERS				
Nunley, Michael	Chair			
Sevcik, Peter	Vice-Chair			

At the District Board of Directors February 13, 2013 meeting, Committee member Sam Saltoun discussed the citizens' committee evaluation process and presented preliminary findings and 'raw' ranking of the project. The committee found that an intertie pipeline project with the City of SM is a viable project for delivering supplemental water to Nipomo Mesa in the near-term. The Committee noted that importation of water (supplemental water) is just one of the necessary pieces of a long-term water resources management approach. The Committee also wants to see the District lead and/or take part in further study of the groundwater basin, pursuing regional partnerships, increasing public education, reducing household water demand across the basin, and enjoining a larger fraction of the area's water users in the long-term solution.

The committee expects to finalize their finding and deliver a written report to the NCSD Board of Directors at its next meeting.

The Board of Directors thanked the volunteer committee members for their ongoing commitment and dedicated service to the community. Board President Jim Harrison stated: "I have attended a number of the Committee's meetings. Each of the volunteers deserves great thanks for the service they are providing to the entire Nipomo community and Mesa area."

Next Evaluation Committee meeting is scheduled for Friday, February 15, 2013, 9AM in the District's Board Room.

Next Scheduled Board Meeting: Wednesday, February 27, 2013, 9AM, District Board Room 148 South Wilson, Nipomo

For more information or to view the minutes, please contact the Nipomo Community Services District at 929-1133 or visit <u>www.ncsd.ca.gov</u>.

###



Date: February 14, 2013 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

Board Approves an Increase to District Trash Rates

In a follow-up from the December 14th, 2012 press release "Trash Rates for Residential Customers May Increase in 2013," the Board closed a 45-day protest period with a hearing at the regular Board meeting on Wednesday, February 13th at 9AM and, in a 4-1 vote, approved the increase of solid waste (trash) rates.

In late December, the District mailed notice of the proposed solid waste rate increase to all owners and customers of record inviting them to protest the rate increase by sending or delivering a written statement to the District office.

Since there was not a majority protest, the Board adopted the resolution and approved an increase of residential trash rates. General Manager Michael S. Lebrun stated: "This is the first increase in solid waste fees to District customers since 2005". Starting March 1st, residents who currently pay \$15 for a 32-gallon garbage wheeler will see their rate increase to \$16.74 per month. Likewise, residents who currently pay \$28.16 for a 96-gallon wheeler will see their rate increase to \$31.43 per month.

The District solid waste franchise is operated as a separate enterprise. The revenues derived from the solid waste rate increase do not exceed the funds required to provide solid waste service because the rates are calculated to:

- Provide sufficient funds for on-going operation and maintenance.
- Rehabilitate, replace and upgrade facilities needed to provide services for the District solid waste customers.
- Establish reserves to reduce risk and prudently manage the District's solid waste services.

Next Scheduled Board Meeting: Wednesday, February 27, 2013, 9AM, District Board Room 148 South Wilson, Nipomo

For more information or to view the minutes, please contact the Nipomo Community Services District at 929-1133 or visit <u>www.ncsd.ca.gov</u>.

###



Date: February 14, 2013 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

Board Awards Contract for Auditing Services to The Crosby Company

On Wednesday, February 13th, the District's Board held their regular meeting at 9AM and approved the Finance and Audit Committee's recommendation to award a three-year contract for auditing services to The Crosby Company in the amount of \$7,800 per year.

In compliance with Special District Law, the Board of Directors provides for yearly audits of the District's accounts and records by an independent Certified Public Accountant (CPA). District staff circulated a Request for Proposal to seven firms and received three proposals. The Crosby Company provided the lowest responsible and responsive bid.

General Manager Michael S. LeBrun stated; "The District has performed an annual independent audit for twenty-six years running. Without exception, auditors have issued 'clean' audit reports over the entire period".

Next Scheduled Board Meeting: Wednesday, February 27, 2013, 9AM, District Board Room 148 South Wilson, Nipomo

For more information or to view the minutes, please contact the Nipomo Community Services District at 929-1133 or visit <u>www.ncsd.ca.gov</u>.

###



Date: February 14, 2013 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

Board Considers Revising Policy on New Water Service Applications

On Wednesday, February 13th, the District's Board held their regular meeting at 9AM and considered revising policy to reactivate processing of applications for new District water service.

The Board had previously denied similar requests at its regular Board meeting on January 23, 2013. The Board discussed timing of the supplemental water project and process for revising District Code on water policy. The Board directed staff to bring back draft language that would reactivate District processing of applications for new water service at its next meeting.

The process for enacting revised District Water Code will take approximately 8-weeks and thereby coincides with the Board's schedule for consideration of awarding a construction bid for supplemental water pipeline. Board President Jim Harrison stated; "We want to be responsible stewards of our limited water resources and at the same time get our local development community back to work building our community as soon as possible".

Next Scheduled Board Meeting: Wednesday, February 27, 2013, 9AM, District Board Room 148 South Wilson, Nipomo

For more information or to view the minutes, please contact the Nipomo Community Services District at 929-1133 or visit <u>www.ncsd.ca.gov</u>.

###

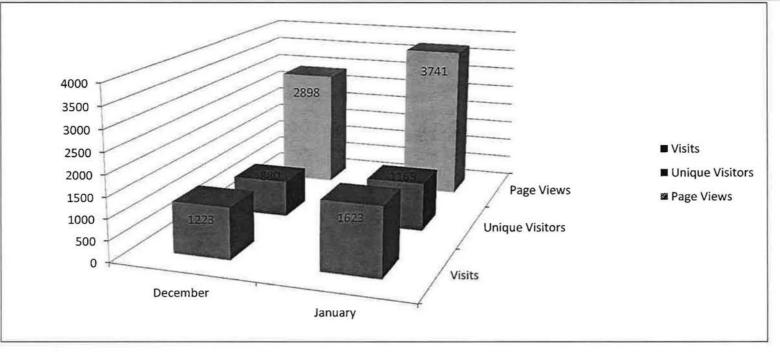
.

ITEM F

ATTACHMENT B

Website Traffic Summary 2013 Monthly Comparisons

2013	Visits	Chg from Prev Mo	Unique Visitors	Chg from Prev Mo	Page views	Chg from Prev Mo	Pages/ Visit	Chg from Prev Mo	Avg. Visit Duration	Chg from Prev Mo	Bounce Rate	Chg from Prev Mo	% New Visits	Chg from Prev Mo
December	1223		880		2898		2.37		0:02:21		51.76%		58.87%	
January	1623	32.71%	1165	32.39%	3741	29.09%	2.3	-2.95%	0:02:23	1.42%	60.14%	16.19%	60.63%	2.99%
February														
March														
April														
May														
June														
July														
August														
September														
October														
November														
December														



ITEM F

ATTACHMENT C

NCSD Outreach Summary February 2013

Date Started	Outreach	Description	Status	Date Completed
1/3/2013	District Newsletter	First quarter newsletter for Feb 15th distribution	Sent to printing	2/1/2013
2/5/2013	Press Release	Committee Develops Initial Ranking of Supplemental Water Alternatives	Complete	2/5/2013
2/11/2013	Website Updates	Updating/adding information and clean-up of District website	In Progress	
2/14/2013	Press Release	Board Authorizes Bidding for Supplemental Water Project Phase 1	Complete	2/14/2013
2/14/2013	Press Release	Board Approves Financing Plan for Supplemental Water Pipeline Project	Complete	2/14/2013
2/14/2013	Press Release	Committee Presents Preliminary Findings on Supplemental Water Alternatives	Complete	2/14/2013
2/14/2013	Press Release	Board Approves an Increase to District Trash Rates	Complete	2/14/2013
2/14/2013	Press Release	Board Awards Contract for Auditing Services to The Crosby Company	Complete	2/14/2013
2/14/2013	Press Release	Board Considers Revising Policy on New Water Service Applications	Complete	2/14/2013
2/14/2013	Manager's Column	Article 1 for Manager's Column in Adobe Press, pub date 2/22	Complete	2/15/2013
1/3/2013	District Newsletter	First quarter newsletter for Feb 15th distribution	Complete	2/15/2013
2/19/2013	Washer Rebate Banner	Revision of District's Washer Rebate banner	In Progress	

ITEM F

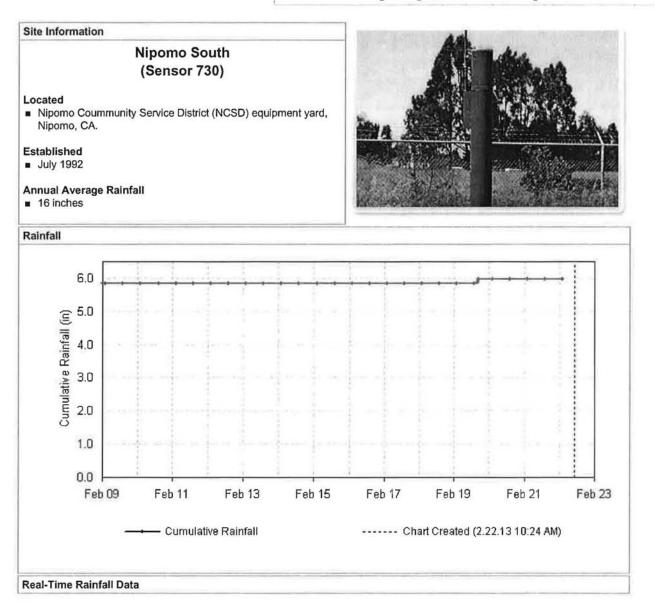
ATTACHMENT D

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 4 Water Quality Lab Water Resource



DIADvisor™ Web Reports

Nipomo South Precipitation

(Sensor 730)

Period: 2/8/2013 10:20:06 AM to 2/22/2013 10:20:06 AM

Date/Time	In for Report	Accum Inch	Pd Accumulated Rain
02/22/13 01:55:47 AM	0.000	5.984	0.197
02/21/13 01:55:45 PM	0.000	5.984	0.197
02/21/13 01:55:43 AM	0.000	5.984	0.197
02/20/13 01:55:42 PM	0.000	5.984	0.197
02/20/13 01:55:41 AM	0.000	5.984	0.197
02/19/13 04:54:20 PM	0.039	5.984	0.197
02/19/13 04:26:35 PM	0.039	5.945	0.157
02/19/13 04:19:16 PM	0.039	5.905	0.118
02/19/13 04:13:53 PM	0.039	5.866	0.079
02/19/13 01:55:39 PM	0.000	5.827	0.039
02/19/13 01:55:38 AM	0.000	5.827	0.039
02/18/13 01:55:36 PM	0.000	5.827	0.039
02/18/13 01:55:34 AM	0.000	5.827	0.039
02/17/13 01:55:33 PM	0.000	5.827	0.039
02/17/13 01:55:32 AM	0.000	5.827	0.039
02/16/13 01:55:31 PM	0.000	5.827	0.039
07/16/12 01.EE.20 AM	0 000	E 077	0 020

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.

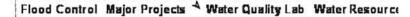
© 2008 San Luis Obispo County E-mail the Webmaster Many of these pages require Adobe Acrobat Reader to view their contents. If your do not already have this software, please download the latest version for free!

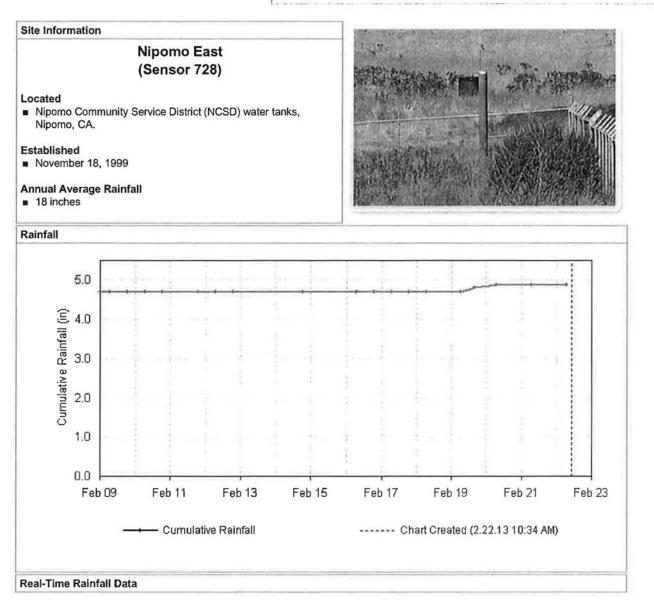


SLOCountyWater.org San Luis Obispo County Water Resources

Division of Public Works

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





DIADvisor™ Web Reports

Nipomo East Precipitation

(Sensor 728)

Period: 2/8/2013 10:30:09 AM to 2/22/2013 10:30:09 AM

Date/Time	In for Report	Accum Inch	Pd Accumulated Rain
02/22/13 06:40:29 AM	0.000	4.882	0.354
02/21/13 06:40:26 AM	0.000	4.882	0.354
02/20/13 06:40:23 AM	0.079	4.882	0.354
02/19/13 04:18:36 PM	0.118	4.803	0.276
02/19/13 06:40:21 AM	0.000	4.685	0.157
02/18/13 06:40:19 AM	0.000	4.685	0.157
02/17/13 06:40:17 PM	0.000	4.685	0.157
02/17/13 06:40:16 AM	0.000	4.685	0.157
02/16/13 06:40:14 PM	0.000	4.685	0.157
02/16/13 06:40:14 AM	0.000	4.685	0.157
02/14/13 06:40:10 PM	0.000	4.685	0.157
02/12/13 06:40:06 PM	0.000	4.685	0.157
02/12/13 06:40:04 AM	0.000	4.685	0.157
02/11/13 06:40:03 PM	0.000	4.685	0.157
02/10/13 06:40:00 PM	0.000	4.685	0.157
02/10/13 06:39:59 AM	0.000	4.685	0.157
07/00/12 06.20.57 DM	0 000	1 COE	0 157

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.

© 2008 San Luis Obispo County E-mail the Webmaster Many of these pages require Adobe Acrobat Reader to view their contents. If your do not already have this software, please download the latest version for free!



ITEM F

ATTACHMENT E

Seawater desalination plant might be just a drop in the bucket

In Carlsbad, the nation's largest desalination facility will require lots of energy — and money. It is expected to provide no more than a tenth of San Diego County ratepayers' overall water supply.

By Bettina Boxall, Los Angeles Times *February 17, 2013 7:40 p.m.*

CARLSBAD, Calif. — Dreamers have long looked to the Pacific Ocean as the ultimate answer to California's water needs: an inexhaustible, drought-proof reservoir in the state's backyard. In the last decade, proposals for about 20 desalting plants have been discussed up and down the coast.

But even with construction about to begin on the nation's largest seawater desalination facility, 35 miles north of San Diego, experts say it is doubtful that dream will ever be fully realized.

"While this Poseidon adventure may work out, I don't look for a lot of that," said Henry Vaux Jr., a UC Berkeley professor emeritus of resource economics who contributed to a 2008 National Research Council report on desalination.

The reasons boil down to money and energy. It takes a lot of both to turn ocean water into drinking water, driving the average price of desalinated supplies well above most other sources.

The purified water produced by the Poseidon Resources plant will cost the San Diego County Water Authority more than twice what it now pays the Metropolitan Water District of Southern California for supplies from Northern California and the Colorado River. Over the authority's 30-year contract with Poseidon, San Diego County ratepayers will pay between \$3 billion and \$4 billion for the desalted water, which is expected to provide no more than a tenth of their overall supply.

Seawater desalination is not new to California. There are number of small coastal plants, used mostly for research or industrial purposes, and a few, such as one on Catalina Island, that provide municipal supplies.

For reasons unique to the region, San Diego County will be the first to stick a big straw into the Pacific. It is at the end of the line for imported water, doesn't have much local groundwater and is perennially battling with Metropolitan, Southern California's wholesaler of imported supplies.

"I do believe it is worth it," said Tom Wornham, board chairman of the county water authority. "I would rather be apologizing to people in 10 years for the rate than the fact they would have no water."

Up the coast, other places have taken a pass on the Pacific. Los Angeles and Long Beach recently shelved seawater desalting plans after concluding that other water sources, such as conservation or recycling, are cheaper and easier to pursue.

Poseidon, a small, privately held company based in Stamford, Conn., started talking about developing a desalination plant in Carlsbad in late 1998. The road to construction has been so long and twisting that Global Water Intelligence, which covers the international water industry, last year listed the project among the "Top 10 Desalination Disasters" of all time.

It took years for the company to get the necessary state and local permits. Environmentalists filed multiple legal challenges, the last of which was only recently resolved in Poseidon's favor. A deal with a number of local water agencies in San Diego County fell apart.

In the end, the Poseidon supplies — up to 56,000 acre-feet a year — will sell for roughly 2,000 an acre-foot, more than double the company's 2004 estimate. (One acre-foot is enough to supply two average homes for a year.) The price will rise with inflation; if energy costs go up, so will the price of water.

On the other side of the Pacific, Australia offers a sobering lesson in the perils of diving too deeply into desalination.

When years of withering drought emptied the country's reservoirs, Australia commissioned six big coastal desalting plants, including some of the world's largest. Then the rains returned. Just as some of the operations were coming on line, they were no longer needed.

Four of the six plants are being idled because cheaper water is available. Australian politicians are bemoaning the desalination binge, complaining that it saddled ratepayers with "hyper-expensive" white elephants they have to pay for regardless of whether the plants are used.

"That's certainly the risk — that we build them when they're not necessary or we build them, frankly, too soon," said Heather Cooley of the Pacific Institute, an Oakland think tank.

Santa Barbara had a similar experience in the early 1990s, when it built a desalination plant during a severe statewide drought that ended before the facility was finished. The \$34-million plant, with a tenth of the capacity of the Carlsbad facility, was never used beyond the testing phase, though it could still be brought into service in an emergency.

The \$954-million Carlsbad project is being financed with \$781 million in tax-exempt construction bonds sold by Poseidon and the water authority. The balance is coming from investors who anticipate a return of about 13%. IDE Americas Inc., the subsidiary of an Israeli firm that runs some of the world's largest coastal desalination facilities in the Middle East, has been hired to design and operate the plant, slated for completion in 2016.

The fresh water will be produced through reverse osmosis, an energy-intensive process that separates salts and contaminants from seawater by forcing it through sand filters and tightly coiled, synthetic membranes peppered with billions of tiny holes a fraction of the width of a human hair. The water will then be pumped inland for distribution — the opposite direction that drinking supplies are usually moved — requiring construction of a 10-mile underground pipeline that the water authority will own and operate.

Poseidon chose the Carlsbad location, next to the Encina Power Station, so it could draw from the power plant's cooling water discharge — thus avoiding the environmental harm of operating its own ocean intake.

But new federal and state environmental regulations are pushing coastal power plants to phase out the use of huge volumes of ocean water for cooling, thwarting that strategy. Poseidon expects the Encina station to be replaced within the decade with a new generating facility employing a different cooling system.

That will mean the desalter will have to pump directly from the ocean, sucking 300 million gallons a day. Of that, 100 million gallons will go through the reverse osmosis process, with half converted to fresh water and half to a concentrated brine. The brine, twice as salty as the sea, will be diluted in a mixing pool with the other 200 million gallons of intake and discharged to the ocean.

Destruction of marine life is a major environmental concern of ocean desalination. Raw seawater is full of tiny organisms, including plankton that form a critical part of the food chain and the young stages of fish and invertebrates. When the water they live in is pumped into a plant, they die.

The Coastal Commission is requiring Poseidon to restore 55 acres of marine wetlands in south San Diego Bay to compensate for the plant's projected effects. The State Water Resources Control Board is also developing new seawater desalination regulations that could force Poseidon to change its intake and discharge systems.

"They took a big risk in building this before the rules are finalized," said Joe Geever of the Surfrider Foundation, which tenaciously fought the Carlsbad proposal in court and argues that water agencies should turn to the ocean only as a last resort — after more environmentally benign sources such as recycling and storm-water capture have been aggressively pursued.

Poseidon, which is trying to line up customers for a similar-size desal plant proposed in Huntington Beach, says it is peddling more than water. "What we're selling is ... a reliability premium that's locally controlled, drought-proof," said Carlos Riva, the company's chief executive.

But even Poseidon doesn't predict that the Pacific will become California's dominant water supply. The state has too many other sources.

"We have quite a bit of water to move around," said Peter MacLaggan, the Poseidon executive who is overseeing the Carlsbad project. "I don't think it's ever going to be a majority of supply or anywhere close to that."

bettina.boxall@latimes.com

ITEM F

ATTACHMENT F

Drought forecast to persist in much of U.S., especially the West

A NOAA report predicts drought conditions will persist in much of the U.S., especially in the West.

By Neela Banerjee, Washington Bureau

February 21, 2013, 6:50 p.m.

WASHINGTON — Much of the West continues to struggle with unusually dry conditions, raising the prospect of another year of wildfires, stunted crops and unnavigable stretches of river in various parts of the country, according to a federal assessment.

More than two-thirds of the country is under abnormally dry to exceptional drought conditions, "which, although serious, is a slight improvement since fall 2012," said the National Drought Early Warning Outlook.

While the report said the drought was over in most of the nation east of the Mississippi River, the portion of the country still facing drought — most of the West and Florida — should expect it "to persist or intensify."

"The 2012-2013 drought has serious implications for agriculture, navigation, recreation and municipal water supplies, costing the nation at least \$35 billion in economic losses," said the outlook, which was developed by a federal interagency group and issued by the <u>National Oceanic and Atmospheric</u> <u>Administration</u>.

A growing body of research suggests that extreme weather patterns such as drought are being driven by climate change. As a result, federal, state and local agencies are trying to prepare for protracted drought in different parts of the country.

There are "webinars" for Great Plains ranchers to raise livestock in drought conditions, and handbooks for cities to make them "drought-resilient." In Thebes, III., <u>the Army</u> Corps of Engineers is blowing up rock formations in the Mississippi River to make it navigable when the water is low. Emergency management staff members in Texas are readying for the possibility that some communities might run short of water, said Veva Deheza of NOAA.

NOAA predicted that most of the United States would have higher-than-usual temperatures over the next three months and that much of the West, down through Texas, the Gulf Coast and the Southeast would have below-normal precipitation.

Snowpack in several river basins in Colorado, Wyoming and Mew Mexico is "less than 50% of normal," the outlook said. If the snowpack does not recover in the next two months, farms and municipalities in California and other Western states could face considerable challenges this summer.

The Interior Department identified areas of concern for greater wildfire risk, including Upper Plains states like the Dakotas and Montana; the Southwest; Florida; and eastern Colorado down into Oklahoma and Texas.

Easing of the drought in much of the corn belt east of the Mississippi suggests that the corn yield could rise this year. The outlook projects 163.5 bushels per acre, weather-adjusted, compared with 123.4 last year. But the most critical factor for the country's corn harvest will be the weather during early planting in the spring and in July, the report said.

Still, most of the country's cattle lands and hay and winter wheat fields are experiencing drought.

Efforts to monitor and respond to the drought might be complicated if deep spending cuts under a federal budget "sequester" go into effect in a week, contributors to the outlook said. Federal agencies are looking at the kind of monitoring and data collection they might have to mothball if the automatic, across-the-board budget cuts take effect.

neela.banerjee@latimes.com